

32nd Annual Australian & New Zealand
Academy of Management Conference

MANAGING THE MANY FACES OF SUSTAINABLE WORK

CONFERENCE
PROCEEDINGS

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ANZAM

AUSTRALIAN & NEW ZEALAND
ACADEMY OF MANAGEMENT



**MASSEY
UNIVERSITY**
TE KUNENGA KI PŪREHUROA

UNIVERSITY OF NEW ZEALAND

2018 PROGRAM

STREAM		STREAM CHAIRS
CONTH	Conference Theme	Prof Tim Bentley, Massey University Assoc Prof Bevan Catley, Massey University
ESSB	Entrepreneurship, Start-Ups and Small Business	Dr Martina Battisti, University of Portsmouth Dr Tanya Jurado, Massey University
GDI	Gender, Diversity and Indigeneity	Dr Diane Ruwhiu, University of Otago Dr Dimitria Groutsis, University of Sydney
HMO	Health Management & Organisation	Dr Ann Dadich, Western Sydney University Dr Louise Kippist, Western Sydney University
HRM	Human Resource Management	Dr Beni Halvorsen, RMIT University Dr Paula O’Kane, University of Otago
INT	International Management	Prof Pi-Shen Seet, Edith Cowan University Dr Shea Fan, RMIT University
L&G	Leadership and Governance	Assoc Prof Herman Tse, Monash University Dr Marie dela Rama, University of Technology Sydney
MED	Management Education and Development	Dr Peter McLean, University of Wollongong Dr Christa Wood, University of Wollongong
MKT	Marketing & Communication	Dr Sujana Adapa, University of New England Dr Sandra Smith, University of Auckland
OB	Organisational Behaviour	Dr Andrei Lux, Edith Cowan University Dr Joe Jiang, Deakin University
PRO	Project Organising	Assoc Prof Erica French, QUT Assoc Prof Beverley Lloyd Walker, RMIT University
PSNFP	Public Sector Management and Not-for-Profit	Dr Wayne Fallon, Western Sydney University Dr Warren Staples, RMIT University
SM	Strategic Management	Dr Conor O’Kane, University of Otago Prof Felix Arndt, Demontfort University
SSM	Sustainability and Social Issues in Management	Dr Melissa Edwards, University of Technology Sydney Assoc Prof Gabriel Eweje, Massey University
TISCM	Technology, Innovation & Supply Chain Management	Assoc Prof Arun Elias, Victoria University of Wellington Dr Matthew Pepper, University of Wollongong
DEL	Delivered paper session	
INTER	Interactive paper session	
WS	Workshop	

TUESDAY 4 DECEMBER 2018

0800-0830	Doctoral Workshop Registration	AUT University
0830-1730	Doctoral Workshop (Doctoral Workshop Delegates only)	AUT University
	Indigenous Workshop	AUT University
1730-1800	First time Delegates Welcome	Great Room Prefunction
1800-1810	Welcome from LOC Chair	Great Room Prefunction
1810-2000	Conference Welcome Reception and Registration	Great Room Prefunction
	JMO Dinner	

WEDNESDAY 5 DECEMBER 2018

From 0800	Registration opens											Great Room Prefunction
0900-0920	Mihi Whakatau											Great 1
0920-0930	Massey Business School Dean, Professor Stephen Kelly											Great 1
0930-0950	ANZAM President's Welcome: Official Opening of the 32nd ANZAM Conference											Great 1
0950-1000	Local Organising Chair, Associate Professor Bevan Catley											Great 1
1000-1100	ANZAM Keynote Address: Cecilia Robinson Chair: Professor Stephen Kelly											Great 1
1100 -1120	MORNING TEA											Great Room Prefunction
1130-1310	CONCURRENT SESSION ONE (100 MINS/40 PAPERS/3 WORKSHOPS)											
	Delivered Sessions					Interactive Sessions			Workshops			
Room	Great 2	Great 3	Great 4	Crystal 1	Crystal 2	Greys	Chandelier	Gallery 4	Gallery 3	Gallery 1	Great 1	
Stream	CONTH DEL 1	ESSB DEL 1	INT DEL 1	L&G DEL 1	HMO DEL 1	GDI INTER 1	PSNFP INTER 1	HRM INTER 1	WS1	WS2	WS 3	
Chair	Tim Bentley	Stephanie Macht	Pi-Shen Seet	Julie Wolfram Cox	Shane Scahill	Diane Ruwhiu	Geoff Plimmer	Paula O'Kane				
1130	<i>Managing the emotional face of sustainable work in scrutinized occupations: The example of bushfire emergency practitioners.</i> Dwyer, Graham; Hardy, Cynthia; Tsoukas, Haridimos	<i>Understanding the Role of Social Media for Youth Entrepreneurial Ventures in Developing Nations.</i> Ranasinghe, Gayathri; De Klerk, Saskia	<i>Positive Consequences of Language Asymmetries in MNC Subsidiaries.</i> Sliwa, Martyna; Ciuk, Sylwia	<i>Great Leaders Do Everything: Indirect Effect of Transformational Leadership on Helping Behavior and Moderating Role of I-Deal.</i> Kwok, Man Lung Jonathan; Wong, Macy; Duan, Jingyun	<i>Comparing the Australian and Italian nurses' safety practices.</i> Trincherio, Elisabetta; Farr-Wharton, Ben; Xerri, Matthew; Brunetto, Yvonne	<i>How does the Social Status of Single Women Shape their Experiences in the Professional Workplace?</i> Raji, Maryam; Metz, Isabel; Sojo, Victor	<i>Emergency medical services Response: Fire Department involvement and resource utilisation.</i> Godfredson, Jeff; Winchester, Max; McGrath, Michael; Griffin, Joe	<i>Preliminary investigating the challenges in the operationalization of HRM practices within the Kingdom of Saudi Arabia Higher Education Sector.</i> Al-Qahtani, Mohammad; Ayentimi, Desmond; Dayaram, Kantha; Pedigo, Kerry	<i>Emotions and Cognitions in the Rough - Project/ Paper Development Workshop.</i> Herman Tse, Neal Ashkansay, Peter Jordan, Kevin Lowe, Ashlea Troth	<i>Co-operative and Mutual Enterprises (CMEs) Research Frontier: Profiling Leading-Edge CME Research.</i> Delwyn Clark, Tim Mazzarol, Sophie Reboud, Geoff Soutar, Elena Mamouni Limnios, Sandy Malherbe	<i>Getting published from your PhD: How to make it into international journals.</i> Minas Kastanakis, Sarah Robinson	
1150	<i>Understanding and Preparing for the Societal Impacts of Process Automation.</i> Hedges, James; Bandara, Wasana; French, Erica	<i>The Influence of External Finance on SME Internationalisation.</i> Wright, Joanne; Fiedler, Antje; Starr, Richard; Fath, Benjamin	<i>Psychological contract across cultures: A comparison between expectations in New Zealand and South Korean organizations.</i> Kim, Hee Sun; Obushenkova, Elena	<i>Funny Leader or "Funny" Leader? The influence of a humorous reputation on leadership.</i> Cheng, David; Amarnani, Rajiv; Chan, Xi Wen (Carys)	<i>Nurse Manager as Employee Champion: Results from a Scoping Review Examining Retention in Healthcare.</i> Crewe, Sandra; Girardi, Antonia	<i>Organised Subjectivity: The game of 'shift arrangement' and labour controls of international student workers.</i> Guo, Hongbo	<i>Can integrating workplace health and wellbeing initiatives into existing leadership programs provide a sustainable solution for improving the health, wellbeing and performance of managers?</i> Onnis, Leigh-ann; Tsey, Komla; Hakendorf, Marcia; Moylan, Robyn	<i>International business visits and firms' knowledge edge.</i> Tani, Massimiliano				
1210	<i>Sustainable management control - capturing the dynamics of the management control field.</i> Westelius, Alf; Westelius, Ann-Sofie	<i>Determinants and Outcomes of Intrapreneurship: A Review and Ways Forward.</i> Wickramaarachchi, Deepthi	<i>M&A Motives and Home Country Development: Evidence from Asian-Pacific Acquisitions in Europe.</i> Larsen, Matthew; Zamborsky, Peter	<i>Towards a Distinct Identity for Critical Leadership Studies: From Relational to Relationist Leadership.</i> Wolfram Cox, Julie; Hassard, John	<i>Increasing capacity in the Community sector: Using Positive Organisational Scholarship to inform and implement Emotional Resilience Training.</i> Brunetto, Yvonne; Xerri, Matthew; Farr-Wharton, Ben	<i>Career progression of workers with an Asian cultural background to senior leadership positions in Australia: A review of the literature using a multi-level approach.</i> Choi, Amy; Van Den Broek, Diane; Groutsis, Dimitria		<i>A contextualised approach to selection in Lebanon: Exploring the particularities in different types of organizations.</i> Hankache, Alissa; Festing, Marion; Muratbekova-Touron, Maral				

WEDNESDAY 5 DECEMBER 2018

1230	<i>Disruptive technology, job insecurity and turnover: A three country study.</i> Brougham, David; Haar, Jarrod	<i>Hear it straight from the horse's mouth: Entrepreneurs and government policies.</i> Arndt, Felix; Daiqi, Wei	<i>Developing a nuanced understanding of foreign language competence in MNEs and its implications for global talent management.</i> Ciuk, Sylwia; Sliwa, Martyna	<i>On the Implicit Leadership Theories of Children.</i> Escobar, Claudia; Billsberry, Jon; Molineux, John	<i>Examining Australia's extended retirement policy and the health implications.</i> Dayaram, Kantha; McGuire, Alistair	<i>Career advancement and lifestyle balance strategies of senior executives in the South Australian Public Service.</i> Ibrat, Syeda Nuzhat	<i>The Role of Volunteers in Social Innovation: A Research Overview</i> Liang, Xiaoyan; Amarakoon, Upamali; Bird, Susan; Pearson, David	<i>Performance Appraisal Practices and Enactment of Managerial Values.</i> Neher, Alain; Maley, Jane			
1250	<i>Sacrificing for meaningful work: NGO workers' resilience in the pursuit of meaning.</i> Serghini-Idrissi, Aicha; Siegert, Steffi	<i>Emancipation through tourism entrepreneurship for women in Nepal - 'Empowerment Entrepreneurship'.</i> Radel, Kylie; Hillman, Wendy	<i>Do foreign investors need the advice of local experts despite international experience?</i> Brindlmayer, Karl; Fisch, Jan Hendrik; Gudergan, Sigg	<i>Responsible Followership: Tenets of A New Construct.</i> Lowe, Kevin; Riggio, Ronald	<i>How to promote brilliant renal care.</i> Kippist, Louise; Fulop, Liz; Dadich, Ann; Smyth, Anne	<i>Lost Voices, Lost Careers. How Sustainable are Skilled Migrant Women's Careers in their Host Country?</i> Odedra, Nimeesha	<i>Does split up of a mega city help achieve sustainable urbanisation objective? Evidence from Dhaka.</i> Murad, Md Wahid; Alam, MD; Shahriar, Shawon; Abdullah, ABM; Ahmed, Ezaz	<i>HRM practices in Palestine.</i> Irshaid, Farid			
1310-1400	LUNCH										Great Room Prefunction
1400 -1500	ANZAM Educator of the Year Workshop										Gallery 3
1400-1540	CONCURRENT SESSION TWO (100 MINS/39 PAPERS/3 WORKSHOPS)										
	Delivered Sessions					Interactive Sessions			Workshops		
Room	Great 2	Great 3	Great 4	Crystal 1	Crystal 2	Greys	Chandelier	Gallery 4	Gallery 3	Gallery 1	Great 1
Stream	OB DEL 1	ESSB DEL 3	GDI DEL 1	HRM DEL 1	MED DEL 1	SSM INTER 1	TISCM INTER 1	OB INTER 1	WS 4	WS 5	WS 6
Chair	Bichen Guan	Tanya Jurado	Kylie Radel	Ruth McPhail	Peter McLean	Melanie Bryant	Arun Elias	Peter Jordan			
1400	<i>Behavioural disengagement: A mechanism for managing emotional labour outcomes.</i> Wijeratne, Aaron; Kirk-Brown, Andrea; Van Dijk, Piete	<i>Is training and development associated with employees' affective commitment and propensity to enact innovative behaviours in small professional services firms?</i> Susomrith, Pattanee; Coetzer, Alan; Ampofo, Emmanuel	<i>The impact of top management team gender diversity on performance.</i> Luanglath, Nalongded; Ali, Muhammad; Akter, Kohinur, Matthews, Judy	<i>Mediated effect of harm of work on work intensification and occupational health outcomes: A Sustainable HRM Perspective.</i> Mariappanadar, Sugumar	<i>Work-integrated Learning Design for Undergraduate Business Degrees: Perspectives of Students and Academics.</i> Rook, Laura; McManus, Lisa	<i>Proposing a 'Holistic Value-Addition' (HVA) Framework of Sustainable Investment.</i> Talan, Gaurav; Sharma, Gagan	<i>Determinants for the organizational configuration of manufacturing companies offering data-based services.</i> Osterrieder, Philipp; Friedli, Thomas	<i>Why and When Servant Leadership Spurs Leaders and Followers to Speak Up: A Conservation of Resources Perspective.</i> Lin, Xiaoshuang; Wu, Chia-Huei; Hirst, Giles; Chen, George	<i>Teaching Leadership: Holistic Leadership Development Program Using the Servant Leadership Framework. (60 mins)</i> Sen Sendjaya	<i>Energising senior faculty: Keeping a spring in your step between your last promotion and retirement.</i> Leisa Sargent, Alison Sheridan, Kate Kearins, Judith Pringle, Glenda Strachan, Neal Ashkanasy, Kerr Inkson.	<i>Health Management and Organisation Special Interest Group Workshop: Doing research for engagement and impact.</i> Anne Smyth Ben Farr-Wharton Ann Dadich Katrina Radford Shane Scahill

WEDNESDAY 5 DECEMBER 2018

1420	<i>An Exploratory Study of Employees' Lived Experiences, Emotions and Paradoxes within the Paradoxical Open-Plan Office.</i> Manchha, Asmita; Ayoko, Oluremi	<i>Making trouble or contribution? A pilot study and future research framework of entrepreneurs' roles in managing intragroup conflict.</i> Lin, Xiao Song; Mu, Zhi Rong; Wu, Wen Hua; Bao, Hai Zhou	<i>Review and Recommendations: Challenges of Indigenous research in Vietnam.</i> Alang, Tho; Stanton, Pauline; Trau, Raymond	<i>Nursing Nurses' Emotions: The Coping Strategies of Sri Lankan Nurses.</i> Wanninayake, Shalini	<i>Career outcomes among Business and Creative Arts graduates.</i> Jackson, Denise; Bridgstock, Ruth	<i>Mapping the evolution of relevance in climate change research.</i> McCabe, Angela; Osegowitsch, Tom <i>Understanding the complexity of resilience: the case of BTS.</i> Rose, Teresa; Thomas, Janice	<i>Formal and Informal Innovation Strategies in Chinese Family Firms.</i> Gurd, Bruce; Cui, Xuegang; Zhou, Jlanghua; Deng, Xin; Tucker, Basil <i>International Comparative Research on IoT-based Supply Chain Risk Management.</i> Cui, Yu; Idota, Hiroki; Ota, Masaharu	<i>How to reciprocate non-standard work arrangements? The mediating role of voice behaviour and moderating role of job enlargement on i-deals and helping behaviour.</i> Wong, Macy; Kwok, Man Lung Jonathan; Duan, Jingyun <i>Influence of Overall Justice on Pro-environmental Behaviors: The Role of Prosocial Motivation and Moral Identity.</i> Loi, Raymond; Liu, Yan; Chow, Wing Chi <i>Moderating Role of Blame Attribution between the Relationship of Psychological Contract Breach and Employee Outcomes in the South Asian Context.</i> Ahmed, Ezaz; Abdullah, ABM; Murad, Md Wahid <i>Student gender and service quality ratings: A cross-national comparison in Asia Pacific region.</i> Ong, Wee; Nankervis, Alan
1440	<i>Managing workplace humor: Yes, we're serious about this!</i> Plester, Barbara; Inkson, Kerr	<i>The journey from novice to expert: How microfinance-funded entrepreneurs gain business expertise.</i> Ranabahu, Nadeera; Barrett, Mary	<i>The influence of tribal aspirations on outcomes in iwi organisations.</i> McCurdy, Lyn	<i>Burnout / Engagement Experiences in Australian and Malaysian Academics.</i> Chan, Shirley; Biggs, Amanda; Troth, Ashlea	<i>Business research methods education on the MBA programme, Victoria Business School, Aotearoa New Zealand.</i> Fleming, Racheal; Cavana, Robert	<i>Unloved, unwanted, misunderstood, or just forgotten? Exploring the mystery of qualitative secondary data in management research.</i> Macht, Stephanie; Chapman, Geoffrey	<i>Understanding Sustainable Procurement: An Innovation Adoption Conceptual Framework.</i> Etse, Daniel; McMurray, Adela; Muenjohn, Nuttawuth	
1500	<i>The Moderating Role of Gratitude on the Relationship between Emotion Regulation and Burnout.</i> Guan, Bichen; Jepsen, Denise	<i>Understanding Entrepreneurial Opportunity from the Muslim Entrepreneurs' Perspective: A Process Approach.</i> Sidek, Farhana	<i>Individualised versus standardised approaches to career development in the AFL: A diversity lens.</i> Ferrer, Justine; Turner, Paul; Khatibi, Mahsa	<i>Work-life programs and performance in Australian organisations: The role of organization size.</i> Akter, Kohinur; Ali, Muhammad; Chang, Artemis				
1520	<i>Dissociating Self-perception from Perceptions of Organization: Effects of Post-Merger Conflicts on Employee Identification During Post-Merger Integration Process.</i> Vu, Minh; Ozdemir, Salih	<i>Entrepreneurial Learning and Fear of Failure: An Empirical Investigation in the Context of International Opportunity Evaluation.</i> Dong, Kechen; Muzychenko, Olga	<i>Māori responsiveness: What it means, why mainstream organisations do this and what differentiates those that do it well?</i> Mika, Jason; Toulson, Paul; Barnett, Shirley; McCurdy, Lyn; Bentley, Tim	<i>An Exploration of Personal Values, Self-development and Job Performance in the Catholic Church.</i> Thomas, Ismoyo; Newton, Cameron	<i>The effect of social support and learning style differences between mature age and younger students on overall engagement with university.</i> Chapman, Geoffrey; Radford, Katrina; Halvorsen, Beni			

1540-1600 **AFTERNOON TEA** Great Room Prefunction

WEDNESDAY 5 DECEMBER 2018

Room	Great 2	Great 3	Great 4	Crystal 1	Gallery 3	Greys	Chandelier	Gallery 4	Crystal 2	Gallery 1	Great 1
Stream	OB DEL 2	ESSB DEL 2	PSNFP DEL 1	CONTH DEL 3 MED DEL 2	GDI DEL 2	HRM INTER 2	SSM INTER 2	L&G INTER 1	WS 7	WS 8	WS 9
Chair	Neal Ashkanasy	Martina Battisti	Michael McGrath	Nimeesha Odedra	Eddy Ng	Beni Halvorsen	Sara Walton	Herman Tse			
1600	<i>Political skill and career success: Exploring the mediating role of mentoring and moderating role of career adaptability.</i> Usman, Muhammad; Anwar Ul Haq, Muhammad	<i>How SME Owners and Managers Leverage their Personal Social Resources for Wellbeing and Performance.</i> Gibb, Jenny; Ho, Marcus; Teo, Stephen; Singh, Smita; Thien, Georgie	<i>The Role Stressors, Participation, and Supportive Leadership on Non-profit Employee Wellbeing.</i> Thomas, Ismoyo; Newton, Cameron	<i>The unboxing experience: What do customers expect beyond the core product? - A study of fashion product packaging in online retail.</i> Sahni, Harleen; Gadhavi, Priti	<i>Work-family conflict and work engagement: A Chicken- Egg question?</i> Farivar, Farveh; Yaghoubi, Mohsen	<i>Green HRM practices, transformational leadership, and personality attributes as antecedents of employee engagement with environmental initiatives: A conceptual framework.</i> Ababneh, Omar	<i>Integrating Mindfulness and Social Sustainability: A Critical Review.</i> Sajjad, Aymen; Shahbaz, Wahab <i>Businesses' Response to Workplace Sustainability: Institutional Perspective.</i> Balakrishnan, Shanggari; Sandhu, Manjit; Tjiptono, Fandy	<i>Silence in the boardroom: A discourse analysis approach.</i> Ward, Carolyn <i>The relationship between leader-member exchange and employee creativity: The art of making workplace innovative.</i> Aslam, Quratulain; Choudhary, Ali; McMurray, Adela; Muenjohn, Nuttawuth; Ali, Rabia	<i>Using qualitative methods to reimagine future work and workplaces.</i> Sara Walton, Paula O'Kane, Diane Ruwhiu.	<i>Examining Mediation and Moderated Mediation in Management Research.</i> Gordon Cheung	<i>Using Positive Organisational Scholarship (POS) to identify strategies and skills for building resilience leadership in public, private and NFP healthcare middle managers to ensure high wellbeing.</i> Yvonne Brunetto, Ben Farr-Wharton, Anneke Fitzgerald, Rona Beattie, Katrina Radford, Ivano Bongiovanni, Elisabetta Trincherro, Rod Farr-Wharton
1620	<i>Why do powerful leaders feel less lonely?</i> Lam, Hodar; Shemla, Meir; Giessner, Steffen	<i>Getting by with help from the family: The impact of family-to-business support on entrepreneurial stress and creativity of informal sector women micro-entrepreneurs in Sri Lanka.</i> Wijewardena, Nilupama; Samaratunge, Ramanie; Sisira Kumara, Ajantha; Newman, Alex; Abeysekera, Lakmal	<i>Do reflective practitioners deliver successful organisational change? Evidence from public sector in Australasia.</i> Ahmed, Hafsa	<i>Using Social and Emotional Learning to Improve Ph.D. Student Well-being and Performance: A Review and Proposed Training Program.</i> Edwards, Marissa; King, Jemma; Nichols, Elizabeth; Gallagher, Erin	<i>Diversity, equity and employees from non-English speaking backgrounds in the Australian public service.</i> Opore-Addo, Joyce	<i>Connecting the dots between Transformational Leadership and Innovative Work Behaviour among Hotel Employees: The role of Organisational and Community Embeddedness</i> Amankwaa, Albert; Susomrith, Pattanee; Seet, Pi-Shen	<i>Challenges for Implementing Sustainable Supply Management: Evidence from Bangladeshi Multi-tier Apparel Suppliers.</i> Nath, Shobod; Eweje, Gabriel; Bathurst, Ralph <i>Why are management scholars missing from urban ecology?</i> Collins, Eva	<i>The benefits of leaders trusting their followers: A CEO's perspective.</i> Henfling, Otto <i>Sustaining the Nursing Workforce through Transformational Leadership: A Tasmanian Perspective.</i> Moon, Sarah; Van Dam, Pieter <i>Responsible Machiavellianism.</i> Liyanagamage, Nilupulee; Fernando, Mario; Peltokorpi, Vesa			
1640	<i>Understanding Job satisfaction and turnover intentions: Do we really know the relationship?</i> Junaid, Fatima; Haar, Jarrod	<i>Sustainable entrepreneurship: What do sustainable tourism SMEs teach us about business model?</i> Reboud, Sophie; Ballereau, Valerie	<i>Resilience at work: An explanatory framework for resilience-enabling leadership behaviours.</i> Franken, Esme; Plimmer, Geoff; Malinen, Sanna; Bryson, Jane	<i>Indigenous arts practice: Promotes health and wellbeing, keeps culture alive, sustains cultural heritage and provides sustainable work.</i> Daniels, Carolyn; Fredericks, Bronwyn	<i>Determinants of Migrant Career Success: A Study of Recent Skilled Migrants in Australia.</i> Rajendran, Diana; Ng, Eddy; Sears, Greg; Ayub, Nailah	<i>Challenging Experiences: How Do They Create Positive Developmental Impact in the Context of Transitioning Leaders.</i> Srinivasan, Kalpana; M.G., Jomon					

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1700	<p><i>Workspace Territoriality in the Context of Organisational Change.</i> Kromah, Momo; Ayoko, Oluremi; Ashkanasy, Neal</p>	<p><i>The Role of Sociomateriality in Coworking-Spaces on Entrepreneurship.</i> Aslam, Muhammad; Bouncken, Ricarda; Nagel, Eckhard; Arndt, Felix</p>	<p><i>The future of continuous improvement in Local government - an agenda for future research.</i> Davidson, Janelle</p>	<p><i>Perceptions of gender diversity initiatives - A case study of a Japanese hotel chain.</i> Hosoda, Masahiro; Toyosaki, Hitomi; Hayakawa, Miyu; Suzuki, Kenichi</p>	<p><i>You've got a friend in me: Importance of leadership in employee career management.</i> Hess, Narelle; Jepsen, Denise</p> <p><i>Interview (Content and Process) Transparency: Effects on Interview Outcomes.</i> Hyatt, Edward</p>						
1720	<p><i>Workplace Ostracism, Knowledge sharing and Task Performance: the moderating role of task interdependence.</i> Zhao, Yiran; Wang, Xing-chao; Chen, Chen; Guo, Hui-dan; Shi, Kan</p>	<p><i>Entrepreneurial anger, fear and sadness: Identifying antecedents of negative emotion from entrepreneurs' anonymous online posts.</i> Williamson, Amanda; Ferri, Cèsar; Battisti, Martina</p>	<p><i>Psychosocial safety climate and leadership as antecedents to prevent bullying: Their importance in high emotional labour jobs.</i> Plimmer, Geoff; Teo, Stephen; Nguyen, Diep</p>	<p><i>How does self-identity influence the experiences of floating populations? An examination of the Lao Piao group in Australia.</i> Wang, Yan; Dadich, Ann; Fan, Youqing</p>							
1730-1930	Co-operative and Mutual Enterprises (CME) SIG Event (Registered Attendees only)										Crystal 1
1730-1830	Centre for Cross-Cultural Management (CCCM, UOW) Launch (All Delegates welcome)										Gallery 2

THURSDAY 6 DECEMBER 2018

0800-0850	Registration											Great Room Prefunction
0900-1000	ANZAM Keynote Address: Volker Kuntzsch Chair: Associate Professor Gabriel Eweje											Great 1
1000-1030	ANZAM Stream and Excellence Awards Presentation Ceremony											Great 1
1030-1100	MORNING TEA											Great Room Prefunction
1100-1240	CONCURRENT SESSION FOUR (100 MINS/35 PAPERS/3 WORKSHOPS)											
	Delivered Sessions				Interactive Sessions			Workshops			Event	
Room	Great 2	Great 3	Great 4	Crystal 1	Crystal 2	Greys	Chandelier	Gallery 3	Gallery 4	Gallery 1	Great 1	
Stream	HRM DEL 2	L&G DEL 2 SSM DEL 3	OB DEL 3	CONTH DEL 2	GDI INTER 2	HMO INTER 1	MED INTER 1	WS 10	WS 11	WS 12	SIG Convenors Forum	
Chair	Joanne Mutter	Jeff Shao	David Cheng	Lisa Bradley	Dimitria Groutsis	Sharon Williams	Christa Wood					
1100	<i>High Performance Work Systems and Employee Creativity Behaviors: Testing a Moderated-Mediation Model.</i> Ghafoor, Azka; Haar, Jarrod; Daellenbach, Urs; Davenport, Sally	<i>Cognitive and affective ramifications of leader anger in Asian and Western Cultures.</i> Shao, Jeff; Martin, Lee	<i>Different Voicers: A LPA of Voice Behavior in Organization.</i> Lam, Wing; Tang, Yipeng; Zhijun, Chen; Chen, Ziguang; Law, Raymond	<i>An exploration of how Australian universities are improving the health of their employees.</i> McDonald, Hayden; Gould, Ryan	<i>Progress in Affirmative Action: How Backlash is Holding us Back.</i> Lam, Andrew; Ng, Eddy <i>Feeling the knowing: Indigenous epistemologies that go beyond cognition.</i> Dell, Kiri <i>Moving from the fringe of economic existence - innate challenges for Aboriginal and Torres Strait Islander businesses in Australia.</i> Jones, Mark; Rose, Mark <i>Mātauranga-a-wāhine: Māori women's knowledge reconstructing the Māori economy.</i> Ruwhiu, Diane; Carter, Lyn; Amoamo, Maria; Staniland, Nimbus	<i>Reputation management in public healthcare organisations.</i> Kosiol, Jennifer <i>Can professional identity be changed via an intervention? A systematic review.</i> Dadich, Ann; Best, Stephanie; Beech, Christian; Robbé, Iain; Williams, Sharon <i>How emotion promotes multidisciplinary healthcare: An examination of palliative care.</i> Hodgins, Michael; Dadich, Ann; Bye, Jayne <i>The Awareness, Knowledge, Understanding and Choice Behaviour Regarding Sugar in Food and Beverage among Australian Consumers: A Protocol for Action.</i> Shafei, Ingy; Rasul, Tareq; Khan, Huda; Wijeratne, Aaron	<i>The good leader: Exploring students' learning experiences of an arts-based experiential activity for ethical leadership development.</i> Pouthier, Vanessa; Roberts, Victoria <i>Sustaining Large Teaching Teams: Exploring Best Practice for Managing Casual Academic Staff.</i> Nichols, Elizabeth; Strong, Ross <i>Knowledge transfer: A practice-based perspective.</i> Zhang, Kun; Zhu, Yunxia; Liesch, Peter; Jiao, Hao <i>Factors inhibiting university-industry collaboration (UIC) in Australian Business Schools: A view from the trenches.</i> Holland, Peter; Nyland, Christopher; Liang, Xiaoyan; Tham, Tse Leng	<i>The Future of Work - Unleashing the Potential of Small Business.</i> Tui McKeown, Geoff Soutar, Tim Mazzarol, Sujana Adapa, Jason Mika	<i>Student classroom friendships: Impacts and educator responsibilities.</i> Rachel Morrison, Helena Cooper-Thomas, Nimbus Staniland, Steffi Siegert, Barbara Plester	<i>Management Research for Sustainable Impact - Using the UN Sustainable Development Goals (SDG) to Drive Our Research Programs.</i> Ross Chapman, Anneke Fitzgerald		
1120	<i>Newcomer person-job misfit, turnover and performance: Roles of person-group and person-mentor fit.</i> Fang, Li-Chun; Chi, Nai-Wen; Shen, Chi-Tai; Fan, Hsiao-Ling	<i>Family Control and Corporate Innovation in Bank-dominated Corporate Governance: Evidence from Japan.</i> Sakawa, Hideaki; Watanabel, Naoki	<i>The Effect of Voice Behavior on Work Bullying and Employee Well-Being: A Mediating Role of Leader-Member Exchange.</i> Tsai, Chia-Chen; Hsu, Ya-Chi; Liang, Huai-Liang	<i>Mindfulness and Sustainability: An Occupational Health and Safety Perspective.</i> Shahbaz, Wahab; Sajjad, Aymen								
1140	<i>Examining multilevel effects on turnover intentions in aged care.</i> Farr-Wharton, Ben; Xerri, Matthew; Brunetto, Yvonne	<i>Think leader, think male: The role of gender on the relationship between supervisor negative affect and subordinate self-efficacy to regulate work and life.</i> Chan, Xi Wen; Kalliath, Thomas; Cheng, David	<i>Standing on the shoulders of others: A moderated mediation model of tie strength and individual creativity.</i> Wang, Yuanyuan	<i>Ethical Leadership, Ethical Climate and Workplace Negative Acts: A Meta-Analytic SEM Study.</i> Teo, Stephen; Nguyen, Diep; Mcghee, Peter; Grant, Patricia								

THURSDAY 6 DECEMBER 2018

1200	<i>If high performance work practices are so effective, why isn't everyone using them?: An exploratory study of the adoption of HPWP in Australian workplaces.</i> Harley, Bill; Choi, Daejeong; Gahan, Peter; Theilacker, Max	<i>[Re]framing change outcomes: Examples from a smart farming technology change program.</i> Bryant, Melanie; Higgins, Vaughan	<i>Exploring how and when employee daily positive and negative moods relate to daily promotive and prohibitive voice.</i> Chi, Nai-Wen; Yang, JiXia; Achyldurdyeva, Mayya	<i>Exploring the 'employment' dimension of decent work among cleaners in Mauritius.</i> Lukea Bhiwajee, Soolakshna; Ramseook Munhurrun, Prabha; Naidoo, Perunjodi		<i>Hospital in the Home (HITH) Practices in the New Zealand Healthcare System: An analysis of websites of the district health boards.</i> Lowe, Kevin; Bathula, Hanoku	<i>Learning from Student Experience of a Business Capstone Course.</i> Chew, Yin Teng; Jogulu, Uma; Tong, Jane L.Y. Terpstra				
1220	<i>Perceived overqualification and turnover intentions: Examining the roles of perceived organizational support and internal / external work experience.</i> Kubovcikova, Annamaria; Chan, Xi Wen (Carys)		<i>The relationship between work engagement and career commitment: The mediating effects of role innovation and the moderating effects of team conflict.</i> Mudannayake, Buddhika; Bhanugopan, Ramudu	<i>Constructs of business sustainability from top Australian and New Zealand corporate leaders' communications: conceptual and empirical.</i> Imam, Tasadduq							
1240-1340	LUNCH										Great Room Prefunction
1340-1520	CONCURRENT SESSION FIVE (100 MINS/39 PAPERS/2 WORKSHOPS)										
	Delivered Sessions					Interactive Sessions			Workshops		Event
Room	Great 2	Great 3	Great 4	Crystal 1	Crystal 2	Greys	Gallery 1	Gallery 3	Gallery 4	Chandelier	Great 1
Stream	GDI DEL 3	PRO DEL 1	OB DEL 4	MKT DEL 1	SM DEL 1	HRM INTER 3	CONTH INTER 1	OB INTER 3	WS 13	WS 14	
Chair	Justine Ferrer	Erica French	John Molineux	Stream Participant [TBC]	Manfred Schwaiger	Ruth McPhail	David Brougham	Jennifer Ann Lajom			
1340	<i>Managing Intersectionality for Sustainable Work: Cracking the Glass Cultural Ceiling.</i> Groutsis, Dimitria; O'Leary, Jane; Remedios, Rose	<i>Entrepreneurial and improvisational capabilities in project-based organizations.</i> Biesenthal, Christopher; Gudergan, Siegfried; Maghzi, Atefeh	<i>Psychological empowerment and employee proficiency.</i> Farivar, Farveh; Ayentimi, Desmond; Yaghoubi, Mohsen	<i>A Duck Talking to a Goose? Sales and Marketing Collaboration in China.</i> Ho, Hedy; Burton, Suzan; Nesbit, Paul	<i>Tracing the value circuit in a contemporary economic context: a consumer unmet-needs approach.</i> Pain, Ralph; Munoz, Albert	<i>A Proposed Theoretical Model for the Business Intelligence Interface for Human Resource Practitioners.</i> Schultz, Cecile; Nel, Pieter	<i>Embodied Leverage Practices for Sustainable Development in Organisation.</i> Kuepers, Wendelin	<i>Performing Well by Behaving Good: Investigating CEO Altruism and Employee Attitudes at Small and Medium Enterprises.</i> Siddiq, Dedi; Jepsen, Denise; Muhidin, Salut	<i>Award winning teaching and impactful management education research - How to attain success?</i> Sujana Adapa, Tui McKeown, Damian Ruth, Mario Fernando, Subba Reddy Yarram	<i>Managing a Sustainable Volunteer Workforce - New Trends and Insights from the Volunteering Sector.</i> Djurje Holtrop, Megan Paull, Darja Kragt, Mina Askovic, Patrick Dunlop	<i>Ask an ANZAM mentor. ANZAM Mentors will be available to provide Career Coaching, Inspiration, and Advice. Small groups and an informal setting will give you the chance to ask the questions you really want answered.</i>

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1400	<i>Woman on the Top Level: Shattering the glass ceiling.</i> Sunaryo, Sinto; Sukoco, Badri; Ratmawati, Dwi; Ekowati, Dian	<i>Is there a 'project myopia'? Revisiting the project stakeholder perspective.</i> Ahmed, Hafsa	<i>Stuck in a rut - Can I try something different? The role of intrinsic motivation and mood in the creative performance of ICT professionals.</i> Piplani, Rohit; Bentley, Tim; Taskin, Nazim	<i>Brands, branding and branding professionals: an exploration of the practice of branding work.</i> Johnston, Allannah	<i>The Impact of Press Releases on Corporate Reputation.</i> Eberhardt, Johanna; Schwaiger, Manfred	<i>The Effect of Workplace Bullying on Work-Family Conflict: A Mediating Role of Emotional Exhaustion.</i> Liang, Huai-Liang; Li, Zhi- huei	<i>The mediating role of employee based-brand equity in an environmental orientation and organisational performance relationship: A comparative study.</i> Wisker, Zazli; Kwiatk, Piotr; Ersoy, Ayse	<i>Teammates with four legs: Exploring the construct of psychological safety and team learning in human-animal work teams.</i> Alexander, Elaine			
1420	<i>The Māori Identity and Financial Attitudes Survey: Background Methodology and Response Rates.</i> Houkamau, Carla	<i>Managing knowledge across project boundaries: A holistic approach.</i> Tywoniak, Stephane; Galvin, Peter	<i>Transformational leadership and public service employees' growth satisfaction in job, job stress and burnout: the mediating role of interpersonal communication satisfaction.</i> Rajesh, J.I; Prikshat, Verma; Saeed, Muhammad	<i>Analog Representations of 'Place' in Destination Branding Campaigns: Creative Executions from India.</i> Joshi, Amrita; Sharma, Kamal	<i>The Effect of Top Management's Age on a Firm's Digital Innovativeness and Efficiency from a Metastructuring Perspective.</i> Pesch, Robin; Bouncken, Ricarda; Nagel, Eckhard	<i>Work Readiness and Career Resilience of Project Graduates: Essentials in the Face of Global Skills Shortages.</i> Borg, Naomi; Borg, Jessica; Scott-Young, Christina	<i>Sustainable HRM - Is it just rhetoric without employee voice?</i> Paulet, Renee; Holland, Peter	<i>Gaze and Posture in Collaborative Building: A multimodal video analysis of emergent shared knowledge.</i> Pirini, Jesse; Geenen, Jarret			
1440	<i>Australian women's career transitions: Leveraging time for sustainable work.</i> Daniels, Carolyn; Radel, Kylie; Hillman, Wendy	<i>Sustainability of Off-Grid Community Energy Projects: A Case Study of the Management of Micro-Hydro Projects in Nepal.</i> Poudel, Bharat; Parton, Kevin; Maley, Jane	<i>"You need to sell the university": International-branch campus lecturers' orientations toward supporting marketing activities.</i> Swenddal, Heather; Nkhoma, Mathews; Gumbley, Sarah	<i>Impulsive betting behaviour: The impacts of food and substance consumption.</i> Li, En; Hing, Nerilee; Russell, Alex; Vitasart, Peter	<i>"Environmental Concerns, Resource-Redundancy, Dependence, and Network Reconfigurations."</i> Lukacs de Pereny Martens, Sandor	<i>Future of Work and its Perceived Impact on Mid-Career Professionals - A Conceptual Study.</i> Mahapatra, Gopal; Dash, Sadhna; Londhe, Amruta	<i>Developing collective leadership for sustained advantage in tourism destinations.</i> Fang, Marcela; Armstrong, Anona; Nguyen, Thu	<i>A Model for Change Management for the Australian Construction industry.</i> Hubscher, Darren; Cameron, Roslyn; Kalendra, Diane			
1500	<i>Transformations of women in tourism work: A case study of emancipation in rural Nepal.</i> Hillman, Wendy; Radel, Kylie	<i>Understanding the Role of Communication in Transforming the Project Management World.</i> Acharjee, Raj; Lockhart, Pamela; Bi, Rui	<i>The Flourishing of School Principals: An Action Research Study.</i> Molineux, John; Fraser, Adam; Willets, Bob		<i>Forces and obstacles of family firm's digital transformation: Insights from a qualitative study.</i> Bouncken, Ricarda; Nagel, Eckhard; Pesch, Robin; Cesinger, Beate	<i>Creating the environment: relational contexts for sustainable work.</i> Parkinson, Ann	<i>Trusting Friend or Complacent Foe: Perceptions of Automation within the Human Agent.</i> Hubbard, Patricia	<i>Dominance vs. strategic deference: theoretical propositions identifying how structurally equal task experts may form legitimacy perceptions and react to claims for power by peers.</i> Wickramasinghe, Gayathri			
1520-1550	AFTERNOON TEA										Great Room Prefunction
1550-1730	Heads of School of Management (HOSOM) Network Meeting (For HOSOM Members only)										Great 1

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1550-1730											
CONCURRENT SESSION SIX (100 MINS/36 PAPERS/2 WORKSHOPS)											
	Delivered Sessions					Interactive Sessions			Workshops		Event
Room	Great 2	Great 3	Great 4	Crystal 1	Crystal 2	Greys	Chandelier	Gallery 3	Gallery 4	Gallery 1	Great 1
Stream	HRM DEL 3	SSM DEL 1	ESSB DEL 4	INT DEL 2	TISCM DEL 2	OB INTER 2	SM INTER 1 ESSB INTER 2	SSM INTER 3 MED INTER 2 MKT INTER 1	WS 15	WS 16	
Chair	Paula O’Kane	Valerie Dalton	Tanya Jurado	Shea Fan	Matthew Pepper	Lisa Bradley	Stephanie Macht	Eva Collins			
1550	<i>Giving Children their Due Voice in Management Research.</i> Mutter, Joanne	<i>Corporate approach to human sustainability: Integrating human sustainability initiatives into CSR strategy in large Japanese companies.</i> Kobayashi, Kazunori; Eweje, Gabriel; Tappin, David	<i>The Moderating Role of Risk Taking, Innovativeness and External Barriers on Indonesian SME.</i> Dhewanto, Wawan; Herliana, Sri; NurRizqi, Vania; Williamson, Ian; Yunita, Fera	<i>Self-certainty and unethical behaviour across three culture types: The mediating roles of moral self concept.</i> Harati, Hamidreza; Ashkanasy, Neal; Kouchaki, Maryam	<i>Surviving on markets for standardized products.</i> Herzog, Valerie; Fisch, Jan Hendrik	<i>The Effect on Organizational Citizenship Behavior and Leader-Member Exchange Relationship: Gossip as a Moderating Effect.</i> Zhao, Kai-Zhen; Ma, Xiao-Qin; Liang, Huai-Liang	<i>Verticals: Is it old wine in a new bottle? Or a new wine in old bottle?</i> Tiwari, Shalini; Dugal, Mohinder	<i>Do the Four mmeasurables impact on Employee Ethical Decision-Making in Organisations in Sri Lanka?</i> Jayawardena-Willis, Thushini	<i>Publishing Research-Based Books for Practicing Managers.</i> Kerr Inkson, Barbara Plester	<i>The Older Face of Sustainable Work: Late-Career Experiences & Transition to Retirement.</i> Prashant Bordia, Carol Kulik, Ayeesha Abbasi, Christina Cregan, Patrick Garcia, Micharl Milkovits, Sanjeewa Perera, Lee Sarandopoulos	<i>Empowering and Creating a Sense of Belonging for Sessional Staff.</i>
1610	<i>Managing sustainable careers: The challenge for dual-career professionals.</i> Clarke, Marilyn; Scurry, Tracy; Smith, Mark	<i>Social Responsibility of Airports.</i> Dhakal, Subas; Mahmood, Muhammad; Wiewiora, Anna; Brown, Kerry; Keast, Robyn	<i>Gender matters: Unleashing the potential of professional agribusiness services.</i> Sheridan, Alison; Newsome, Lucie	<i>An Integrated Framework for Strategic International Human Resource Management: Combining Internationalization Strategies and the 5-P Model of Strategic Human Resource Management.</i> Weng, Nana; Olsen, Jesse	<i>Conceptualizing (multiple) stakeholder engagement(s) at early stages of the innovation process.</i> O’Kane, Conor; Haar, Jarrod; Daellenbach, Urs; Davenport, Sally	<i>Personality traits and burnout: Emotional contagion as a moderator in service oriented organisations.</i> Elevarasi, Anitha; Suganthi, L; Rajesh, J.I; Prikshat, Verma	<i>A New Look at Strategy Absence and a Framework for Future Research.</i> Venter, Petrus	<i>Gender effect on university students’ alcohol expectancies and self-esteem.</i> Sharma, Bishnu; Kotey, Bernice; Reinhard, Karin; Graham, Wayne			
1630	<i>Having Entrepreneurial Friends and Following Them? The Role of Friends’ Displayed Emotions in Students’ Career Choice.</i> Zhu, Fei; Fan, Shea	<i>Humanistic Management Performativity ‘in the Wild’: The Role of Performative Bundles of Practices.</i> Laasch, Oliver; Dierksmeier, Claus; Livne-Tarandach, Reut; Pirson, Michael; Fu, Ping; Qu, Qing	<i>To what extent does digitization impact the business models of SMEs in a low-tech sector? Lessons from a traditional sector of the French economy: The agri-food sector.</i> Reboud, Sophie; Lequin, Sonia; Tanguy, Corinne; Ballereau, Valerie	<i>Controlling third-party recruiter behaviour in Australian and New Zealand export education industries.</i> Nikula, Pii-Tuulia; Kivistö, Jussi	<i>R&D outsourcing partner selection: Factors influencing firms to use contract research organisations in commercialising biotechnology innovations.</i> Moore, Monique; Mazzarol, Tim; Soutar, Geoffrey	<i>Exploring the interactive role of work engagement and harmonious passion on recovery experiences and emotional exhaustion.</i> Lajom, Jennifer Ann; Stanway, Alicia; de Carvalho Filho, Moises Kirk	<i>Coopetition as a small firm strategy: Review and Future Research.</i> Letcher, Brett; Scheepers, Margarietha; Graham, Wayne	<i>The Role of Cultural Exposure at Pre-Study Period in Cultural Intelligence development: Exploratory Study of International Students.</i> Iskhakova, Marina			
						<i>To the (Not so) Bitter End: Termination or Re-defining of Leader-Member Exchange Relationships.</i> Baugh, Gayle		<i>Consumer Incivility: A Control Restoration Mechanism.</i> Singh, Gurbir; Mishra, Abhishek; Tripathi, Sanjeev; Tewari, Shruti			

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1650	<i>Employee Skills in 2040.</i> O’Kane, Paula; Walton, Sara; Ruwhiu, Diane	<i>Modern slavery: Exploring exploitations of slaves.</i> Nazir, Omer; Alakavuklar, Ozan; Prichard, Craig	<i>Agripreneurs and Agriventures in India - Interplay of Contextual Dimensions.</i> Adapa, Sujana; Yarram, Subba	<i>Patterns of coping in expatriate spouses: A longitudinal study.</i> Collins, Heidi; Bertone, Santina	<i>Dynamic capabilities and firm performance: A supply chain perspective.</i> Kalubanga, Matthew; Gudergan, Siegfried; Oloruntoba, Richard	<i>The importance of co-workers as well as supervisors for feeling and acting positively towards our organisations.</i> Bradley, Lisa; Newton, Cameron; Sedaghati, Navid						
1710		<i>A Buddhist View of Managers’ Moral Development in Ethical Decision-Making in Organisations in Sri Lanka.</i> Jayawardena-Willis, Thushini; Pio, Edwina; Mcghee, Peter			<i>Perception gap vs. performance gap: An integrative performance management framework for service supply chains.</i> Asian, Sobhan; Lu, Dawei; Ertek, Gurdal; Sevinc, Mete							
1900-2300	CONFERENCE DINNER											Great Room

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0800	Registration opens										Great Room Prefunction
0900-1040	Institutional Members' Meeting (ANZAM Institutional Heads/Reps only)										Great 1
0900-1040	CONCURRENT SESSION SEVEN (100 MINS/40 PAPERS/2 WORKSHOPS)										
	Delivered Sessions					Interactive Sessions			Workshops		Event
Room	Great 2	Great 3	Great 4	Crystal 1	Crystal 2	Greys	Chandelier	Gallery 3	Gallery 4	Gallery 1	Great 1
Stream	MKT DEL 2 PSNFP DEL 2	HRM DEL 4	TISCM DEL 1	GDI DEL 4 HMO DEL 3	SSM DEL 2	HRM INTER 4 PSNFP INTER 2	HMO INTER 2	GDI INTER 3 OB INTER 4	WS 17	WS 18	
Chair	Sujana Adapa	Beni Halvorsen	Matthew Pepper	Jesse Olsen	Gabriel Eweje	Xiaowen Hu	Jane Banaszak-Holl	Diane Ruwhiu			
0900	<i>Effect of hotel green service encounters: Evidence from India.</i> Mishra, Abhishek; Gupta, Ansh	<i>The creation of open theory – Bridging the theoretical divide between academia and practice.</i> Hoppe, Magnus; Siegert, Steffi	<i>The relationship between social capital, knowledge acquisition, product innovation, and firm performance in Malaysian manufacturing firms.</i> Saha, Ripan; Singh, Sharan	<i>Developing and understanding of equality within business schools.</i> Dyer, Suzette; Hurd, Fiona	<i>Impact of ethical climate on codes of conduct, ethical leadership and willingness to report ethical behaviours.</i> Nguyen, Diep; Chuah, Swee Hoon; Teo, Stephen; Pick, David	<i>The evolution, use, and effectiveness of public provisions for workplace mediation: A comparative study of Ireland and New Zealand.</i> Curran, Deirdre; McAndrew, Ian	<i>The impact of training effectiveness on employee attitudes of Nurses in Australian Hospitals.</i> Carlisle, Joanna; Bhanugopan, Ramudu; D'Netto, Brian	<i>A gender critique of liberal feminism and its impact on remedial techniques to eliminate the glass ceiling effects.</i> Tran, Thao	<i>What constitutes a (theoretical) contribution in management learning and education research?</i> Tine Köhler, April Wright, Martyna Silva	<i>Neurodiversity. How it is changing the way researchers and practitioners approach talent management.</i> Anna Krzeminska, Charmine Härtel, Christina Anthony	<i>Academic Integrity in the Digital Age</i>
0920	<i>The Relationship between Product Consistency and Consumer Brand Attitudes: The Moderating Effect of the Avatar.</i> Yeh, Che-Yuan; Chen, Hui-Hua; Liang, Huai-Liang	<i>Development of Interest Based Assessments for Effective Talent Management.</i> Cherian, Kelitha; T.J, Kamalanabhan	<i>Factors Influencing Instagram Adoption among Malaysian Small and Medium Enterprises (SMEs).</i> Harun, Zuraini; Tajudeen, Farzana Parveen	<i>Integration-and-Learning or Something Else?: An Exploration of the Diversity Perspective Underpinning an Autism Employment Program.</i> Spoor, Jennifer; Hedley, Darren; Canton, Emily; Bartram, Timothy; Dissanayake, Cheryl	<i>Introducing family engagement in organizational practices for attaining the common good.</i> Mishra, Pavitra	<i>Individual performance: Do we measure it accurately?</i> Palipane, Tharindu; Amarakoon, Upamali; Macht, Stephanie	<i>The influence of individualised interventions on adherence in long-term pediatric treatments: Understanding the mediating role of primary caregiver perceived value of physician.</i> Venkatraman, Krithika; Sudarsanam, Nandan; V, Vijayalakshmi	<i>Do entitlement perceptions matter.</i> Langerud, Dan Henning; Jordan, Peter; Biggs, Amanda; Xerri, Matthew	<i>Menopause and work: The moderating effects of self-care on social-identity based impression management (SIM) strategies and work.</i> Lim, Vivien; Teo, Thompson; Chan, Vivian		
0940	<i>Effect of Rumors on Purchase Intention and Brand Attitude: Using Endorser as a Mediator.</i> Lee, Chung-Xuan; Liang, Huai-Liang	<i>Measurement of the amount of change experienced by employees in three countries.</i> Brazzale, Paulette; Cooper-Thomas, Helena; Haar, Jarrod; Smollan, Roy	<i>Managing Terminal Service Performance: In the Context of Indonesian Container Ports.</i> Laksmiana, Teddy; Shee, Himanshu; Thai, Vinh	<i>Flexible work for the Inclusion of People with Disability and Carers of People with Disability.</i> Olsen, Jesse; Sojo, Victor; Vargas-Sáenz, Adriana; Schachtman, Rebecca; Köhler, Tine; O'Neil, Adrienne; Holland, Elise	<i>What compels elites to speak out against a disgraced peer? Findings from a natural experiment in Hollywood.</i> Wohlgezogen, Franz; Roberts, Victoria; Wheeler, Melissa	<i>How HPWS enhance manager's innovative behaviors? The mediating roles of manager ambidexterity.</i> Uen, Jin-Feng; Teng, Shan-Kuei; Wu, Li-Chang	<i>Addressing workplace bullying amongst healthcare staff by cultivating organizational compassion competencies.</i> Simpson, Ace; Reddy, Prasuna; Farr-Wharton, Ben	<i>The Impact of Group Silence on Group Outcomes.</i> Zettina, Nate; Wang, Karyn; Nguyen, Helena; Johnson, Anya			

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1000	<i>Communication to mobilise consumers to reduce waste: A pilot study in Australia.</i> Pearson, David; Mitsis, Ann	<i>The importance of people behaviour in project governance.</i> Lo, Saide; Quifors, Stefan; Cusack, Brian	<i>Sustainable Higher Education: A First, Systematic Literature Review on Information Security Management.</i> Bongiovanni, Ivano	<i>Challenging masculinity in business education - The case of Maya and Susanna.</i> Lindell, Eva; Siegert,	<i>Making sense of sustainability work.</i> Williams, Tim; Edwards, Melissa; Angus-Leppan, Tamsin	<i>Delivering Clinical Care in Aged Care Facilities: Contract Failure or Something more Sinister.</i> Xerri, Matthew; Brunetto, Yvonne; Farr-Wharton	<i>Leadership in Victorian Clinical Directorates: An insider's perspective.</i> Keenan, Marina; Wilson-Evered, Elisabeth; McGrath, Michael <i>Who are the key-informants in health management research? Developing a sampling technique using stakeholder theory.</i> Cully, Ashley; Bartels, Peter; Fitzgerald, Anneke				
1020	<i>Four Arenas of Public Value Creation: A Core Typology.</i> Joyner, Kate	<i>Work-life programs and outcomes in Australian organisations: The role of the human resource system.</i> Akter, Kohinur; Ali, Muhammad; Chang, Artemis	<i>Enterprise IS implementations from A CSF Perspective.</i> Ahmed, Zafor	<i>Managing nurses absenteeism in a context of budget cuts: An approach based on LMX relationships.</i> Achmet, Veronique	<i>The emergence of organisational learning for sustainability at Sydney Theatre Company.</i> Dalton, Valerie; Cooksey, Ray						
1040-1110	MORNING TEA										Great Room Prefunction
1110-1210	ANZAM Keynote Address: Professor André Spicer Chair: Associate Professor Bevan Catley										Great 1
1210-1300	Australian and New Zealand Academy of Management – Annual General Meeting (All Delegates)										Great 1
1300-1350	LUNCH										Great Room Prefunction
1315-1345	Stream Chairs Debrief										Crystal 2
1350-1530	CONCURRENT SESSION EIGHT (100 MINS/37 PAPERS/3 WORKSHOPS)										
	Delivered Sessions					Interactive Sessions			Workshops		
Room	Great 2	Great 3	Great 4	Crystal 1	Crystal 2	Greys	Gallery 1	Chandelier	Gallery 3	Gallery 4	Great 1
Stream	TISCM DEL 3	HMO DEL 2	OB DEL 5	GDI DEL 5 SM DEL 2	HRM DEL 5	CONTH INTER 2	TISCM INTER 2 INT INTER 1	ESSB INTER 1	WS 19	WS 20	WS 21
Chair	Arun Elias	Yvonne Brunetto	Jarrood Haar	Ryan Perry	Lee Di Milia	Tim Bentley	Matthew Pepper	Tanya Jurado			
1350	<i>Challenges in forecasting uncertain product demand in supply chain: A systematic literature review.</i> Abou Maroun, Elias; Zowghi, Didar; Agarwal, Renu	<i>Caring for the Aged Care Workers in Western Australia.</i> Dhakal, Subas; Nankervis, Alan; Burgess, John; Connell, Julia; Sutcliffe, Jacinta	<i>Empowering leadership and knowledge sharing behavior: Test of a parallel mediation model.</i> Anwar Ul Haq, Muhammad; Ahmed, Ashfaq; Khalid, Shaista; Usman, Muhammad	<i>#heto: Exploring the role of expectancy violation and workplace gender ratio in perceptions of male targets of sexual harassment.</i> Zacharko, Michelle; Murray, Duncan; Vilkinas, Tricia	<i>Mentor Autonomous Motivation and the Quality of Mentoring Relationship.</i> Ayoobzadeh, Mostafa; Boies, Kathleen	<i>Detecting and managing the risk of dementia-related cognitive impairment among registered doctors and licenced pilots in New Zealand.</i> Barney, Andrew	<i>The internationalization of Knowledge-intensive Business Services Firms (KIBS): A review of the literature.</i> Wu, Mian; Forsyth, Darryl; D'Souza, Natalia	<i>A Systematic Review of the Literature on the Growth of Small Firms in BRIC Economies.</i> Najmaei, Arash; Sadeghinejad, Zahra; Petrov, Leonid	<i>Asia Academy of Management</i> Wayne Macpherson, Chi Sum Wong	<i>Sustainable HRM: A Disruptive Change in the Field of HRM</i> Sugumar Mariappanadar, Robin Kramar	<i>Mixed Methods Research SIG: Advanced Data Integration and MMIRA Update.</i> Roslyn Cameron, Bob Cavana

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1410	<i>Mass customization in the supply chain in the era of the Fourth Industrial Revolution.</i> Szozda, Natalia	<i>Development and validation of the Patient-centred Compassionate Care Scale.</i> Johnson, Anya; Fairbrother, Greg; Pidial, Kreshma; Yu, Nickolas; Nguyen, Helena; Wang, Karyn	<i>Social network and innovation ambidexterity: The mediating effect of adaptive capability.</i> Wang, Zhimin; Li, Honggui; Kwek, Choon Ling	<i>Addressing motivations behind diversity backlash by framing workplace policies as low-threat and low-competition.</i> Perry, Ryan	<i>Operationalisation of Mindfulness at Workplace.</i> Shahbaz, Wahab	<i>Exploring the cognitive schemas of traditional business models as barriers to uptake of sustainable business models.</i> Olesson, Erica	<i>Research Status of Supply Chain Digitalisation.</i> Seyedghorban, Zahra; Tahernejad, Hossein; Meriton, Royston; Graham, Gary	<i>Entrepreneurial ecosystem development: Consolidating theory into a testable model.</i> Lux, Andrei; Macau, Flavio; Brown, Kerry			
1430	<i>Facilitating Network Operations Planning Framework Implementation: A Case Study of the VicRoads SmartRoads Framework.</i> Hussain, Sairah; Sohal, Amrik; Delbosc, Alexa	<i>Retaining a Skilled Healthcare Workforce in Regional Public Hospitals: The Role of Personal and Organisation based Job Resources.</i> Almeida, Shamika; Fernando, Mario; Munoz, Albert; Cartwright, Susan	<i>Spiritual values Effecting Employee's Helping Behavior: The Moderating Role of Islamic Work Ethic.</i> Ahmed, Adeel; Arshad, Mohd Anuar; Mahmood, Arshad; Akhtar, Sohail	<i>Mothering the manager: The ageing material body in organizations.</i> Cutcher, Leanne	<i>Exploring the fluid boundary between robust management and workplace bullying: An experimental simulation.</i> Timming, Andrew; French, Michael; Fan, David; Preston, Alison	<i>Exploring the paradoxes faced by social enterprises.</i> Pendse, Maithily	<i>Returns Management: Implications for Omnichannel Environments.</i> Reefke, Hendrik; Guesalaga, Rodrigo	<i>Developing new entrepreneurial business models for small charities: A case study of the UK.</i> Urwin, Gerry			
1450	<i>Dynamics of Stakeholder Interaction and Perception in Project Management.</i> La, Van; Elias, Arun; Brocklesby, John	<i>Delivering and sustaining change through implementation of a Management Operating System (MOS): The case of "Lean Thinking" in a New Zealand Hospital Pharmacy.</i> Winstone, Tim; Scahill, Shane; Edwards, Margot	<i>Influence Mechanisms of Calling on Proactive Behaviours: Self-determination Theory Perspective.</i> Gao, Xueyuan; Xue, Xiaozhou; Zhou, Wenxia; Jepsen, Denise	<i>Toward a theory of reference group determination: Longitudinal influences of organizations' historical performance comparisons.</i> Wang, Jingyi; Shinkle, George		<i>Digitization and Servitization in SME Manufacturing.</i> Matthews, Judy; Le Dain, Marie-Anne	<i>The Effects of Manufacturer Structural Embeddedness on the Network Rent: The Mediating Role of Supply Chain Governance.</i> Swierczek, Artur	<i>Entrepreneurial ventures in the contemporary business environment: Integrating Work value ethics, organisational culture and design leadership.</i> Choudhary, Ali; McMurray, Adela; Muenjohn, Nuttawuth			
1510		<i>Using Conservation of Resources Theory to Examine the Link Between Work Harassment, Employee Well being and Safety Outcomes.</i> Brunetto, Yvonne; Xerri, Matthew; Farr-Wharton, Ben; Trincherro, Elisabetta; Bongiovanni, Ivano; Beattie, Rona	<i>Intellectual humility and decision making: The role of need for cognition, prosocial motivation, and time pressure.</i> He, Changqing; Ou, Amy Y.; Wang, Long	<i>Customer heterogeneity and innovation: A systematic review of the literature.</i> Wijekoon, Amali; Salunke, Sandeep		<i>Women in Ensuring the Urban Food Security for Sustainability: A Case of Sri Lanka.</i> Kalansooriya, C.W; Jayarathne, P.G.S.A; Gunasekara, W.G.V	<i>Factors Affecting Enactment of Technology by Individuals in Organizations.</i> Mumtaz, Mohammad	<i>Unfolding the Role of Marketplace Resources in Forming Entrepreneurial Narratives.</i> Abarashi, Jamal; Ferguson, Shelagh			

1530-1600 **CONFERENCE CLOSE AND DRINKS** Great Room Prefunction

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Interactive Session

Proposing a 'Holistic Value-Addition' (HVA) Model of Sustainable Investment

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Proposing a ‘Holistic Value-Addition’ (HVA) Framework of Sustainable Investment

ABSTRACT: *Broad-based concerns of investors, in recent times, have led to the emergence of sustainable investment as an upcoming form of investment. ESG approach has remained the most common approach to evaluate the companies on sustainability. ESG strategies have led to an inconsistency in the world of sustainable investment due to disagreements among investors. This paper argues that ESG approach needs to evolve into a more holistic approach encompassing all the dimensions of sustainable development rather than looking at those in isolation. Based on the proposition that ‘Holistic value’ is the desired outcome of business, the paper proposes a ‘Holistic Value Addition’ framework of sustainable investment, based on five pillars of sustainable development namely – individuals, families, society, nature and governance.*

Keywords: sustainable investment, ESG, holistic value addition, sustainable development

1. BACKGROUND NOTE - SUSTAINABLE INVESTMENT

In recent times, financial markets, in addition to their typical role of providing the platform for corporations to raise capital from the public, have also started pressing the companies towards adopting more sustainable policies and practices (Figge & Hahn, 2008). There have been examples of corporations like Idacorp, JP Morgan Chase, Qualcomm, and Sysco, where major decisions involving global warming, illegal logging, and protection of habitats were prompted by engagement of their investors (USSIF Foundation, 2016). Sensitivity of investors towards such broad-based concerns has led to the emergence of sustainable investment or socially responsible investment as a form of investment, which can be further classified as ESG based investment, responsible investment and impact investment. Even though there are inherent divergences among these types of investments, the investors in all these cases vie for some broader environmental benefits than just financial returns. The market share of sustainable investments has been growing in recent times and this growth is expected to increase with a further push from institutional investors like pension funds and mutual funds (Eurosif, 2012). The most common approach adopted by the institutional investors to evaluate the companies on sustainability is based on the Environment, Social, and Governance (ESG) related screening strategies. While some investors rely on the negative screenings by excluding certain companies or industries from their investment portfolios based on ESG criteria, others integrate the ESG factors to select the best-in-class companies to invest (Busch,

Bauer, & Orlitzky, 2015). Global Sustainable Investment Alliance (2014) defines sustainable investing as “an investment approach that considers environmental, social and governance (ESG) factors in portfolio selection and management”

2. THE CURRENT APPROACH – ESG

Galbreath (2013) maintains that the global financial crisis (GFC) of 2008 has changed the way the world does business. More importantly, it has changed the way investors look at the businesses. The economic crisis triggered by GFC has raised concerns over the organizations’ risk oversights, ethical behavior and their ability to manage a broad array of stakeholders. Rattled by the unsustainable business practices, strategies like ESG have gained confidence among the new age intuitional and individual investors (Galbreath, 2013).

The integration of ESG strategies is the most popular approach of sustainable investment in United States of America where a number of investors evaluate whether a company meets a variety of ESG criteria in order to include it in their portfolio. Globally also, ESG is one of the fastest growing strategies of sustainable investment (Global Sustainable Investment Alliance, 2014). The impact of ESG based investing has been plausible. The companies with high ESG ratings are found to have a lower cost of capital in terms of debt and equity (Clark, Feiner, & Viehs, 2015). The markets recognize these companies to be inherently less risky and reward them accordingly. In addition to lower risk, studies have shown that such companies outperform on market-based returns along with accounting outperformance (Fulton, Kahn, & Sharples, 2012). Socially responsible investments have often exceeded the returns as compared to the traditional comparable investments both on absolute and risk adjusted basis (Morgan Stanley, 2015). As a result, not only ESG based funds are getting popular as investment options but stock markets have started creating separate indices like MSCI KLD 400 Social Index which includes large-, mid- and small-cap US companies, Dow Jones Sustainability Index (DJSI) which evaluates the sustainability performance of companies listed on the Dow Jones Global Total Stock Market Index, and STOXX Global ESG Leaders Index which represents the leading global companies on the basis of ESG (USSIF Foundation, 2013). However,

the growth of ESG or SI based investments has been fragmented geographically. While it has grown considerably in markets like United States, Europe and Australia, it has remained slow in the Asian markets primarily due to limited scope for promotion of protected values of the investors, growth imperatives in such markets and lack of ESG related disclosures (Sreekumar Nair & Ladha, 2014). Sustainable investing has evolved significantly in recent times. The first generation of sustainable investors relied on the negative screening strategies where industries or companies are excluded from the portfolio based on the ethical criteria. It progressed to positive or best-in-class screening strategies by including top performing organizations within a permissible sector. Today, sustainable investment is based on the ESG strategies, which are believed to enhance financial performance in addition to the social benefits (UNEP Mercer, 2007). A unique methodology adopted by Deutsche Bank Group states that even CSR is evolving into ESG (Fulton et al., 2012). However, even after the ESG strategies are designed as a ready guide for sustainable investors, determining a universal approach of sustainable investment is considered to be impossible due to different needs and categories of investors. Moreover, ESG strategies have led to an inconsistency in the world of sustainable investment due to different emphasis on ESG by different investors. Supporting this, Czerwińska & Kaźmierkiewicz (2015) argue that each pillar of ESG framework has unequal impact on the overall corporate sustainability while reporting inconsistent interrelations among the pillars. This argument is further supported by Bengtsson (2008) who maintains that inconsistency exists across different geographical areas in terms of practice as well as principle. The relationship between ESG and financial performance is also found to be inconsistent and depends on the geographical location due to societal, and cultural differences (Ortas, Álvarez, & Garayar, 2015). In addition, governance in ESG is not seen as a fundamental but just other criterion like environment and society. The inconsistency of ESG based investments and the view that ESG is just a side component of sustainable investing can lead to a collapse in the legitimacy of sustainable investing (Cadman, 2011). Galbreath (2013) opines that though Australian firms have shown an improvement in their overall ESG scores between 2002-2009, the

improvement was inconsistent across the pillars. The performance of the reference firms improved a greater rate on the governance front as compared to environment and social performance. S&P 500 companies also vary in the level of disclosures across the three pillars of ESG (Tamimi & Sebastianelli, 2017). Furthering the argument, Hickman, Teets, & Kohls (1999) acknowledge that not all ESG strategies are equally effective, and the bias of asset manager plays a key role in determining the focus of the organization towards one or more ESG pillars. The European and American fund managers use the ESG strategies primarily as a tool for risk management purposes, rather than any specific commitment towards sustainability and social values (van Duuren, Plantinga, & Scholtens, 2016). ESG related investment is often seen a valuable source of risk reduction, even when the investor is not driven by sustainability and social values. Przychodzen, Gómez-Bezares, Przychodzen, & Larreina (2016) strengthen this argument by reflecting that the fund managers are often motivated by herding and include ESG stocks into their portfolios only to mitigate risk and ESG is of less importance when it comes to additional value creation. Even when all the three pillars of ESG are studied separately, Humphrey, Lee, & Shen (2010) observe that a firm's financial performance remains the same irrespective of its performance in either environmental, social or governance front. This discussion indicates that the ongoing behavior of fund managers with respect to the ESG strategies may render the ESG movement deviated from its original goal of responsible investing. This is mainly due to the fact that ESG consolidation has triggered a process of institutional retrogression and ESG rating industry now follows the norms of the traditional rating industry (Avetisyan & Hockerts, 2017).

The notion of long-term and short-term has not been explicitly established from the sustainable investment strategies (Eurosif, 2012). The sustainability of such investment strategies including ESG depends on the approach and understanding of the individual investor. The investors and bankers are seen as key drivers or obstacles in sustainable development. In order to ensure a reorientation of investors towards the long term effectiveness of sustainable development, further

broadening of ESG measurements is vital (Busch et al., 2015). The pillars and themes forming part of the ESG framework are displayed in figure 1

Insert Figure 1 about here

FTSE Russell (2016) has designed and implemented a new ESG assessment methodology in September 2014 which includes 3 pillars, 14 themes and 300 indicators. The pillars and themes of the framework have been exhibited in figure 1. The screening process of the organizations through this methodology is based only on the publically available data. The data provided privately by the organizations is avoided. This strategy ensures transparency and credibility of the output. The ESG ratings implemented by FTSE are also regularly scrutinized by experts from the investment world, NGOs, companies, unions and academia.

3. FRAMEWORK PROPOSITION

The idea of global citizenship develops the understanding of inducing businesses to work towards enrichment of a larger society and environment as a whole rather than focusing on corporate success in isolation (Derickson, Henley, Campbell, Connors, & Negash, 2007). When businesses focus on a single stakeholder in isolation from the others, it ends-up causing damage to all stakeholders in the long run including the one in focus (Derickson et al., 2007). The need for ESG strategies to be revisited because of investors considering E, S and G as isolated components with no or less connection between them has already been highlighted in section 2 of this paper. We observe two major issues with the current ESG framework and its application – (a) the framework has been applied in isolation for environment, society and governance; and (b) the ESG framework straightaway jumps on to environment, society and governance without addressing the case of individuals and families in the system. Therefore, the three ESG pillars seem to be discrete and disconnected. The framework also fails to appreciate that society, on one hand comprises of individuals and families, and on the other hand is itself a part of the broader natural ecosystem.

Besides, governance is only a medium to integrate other pillars into the overall strategy of business, thereby ensuring attainment of objectives with respect to other pillars of sustainable investment. Nagraj (2008) argues that the essence of all human activities (including business activities) is continuous happiness and prosperity, which cannot be achieved without addressing human needs as an individual self and as a part of family, society and natural ecosystem. This argument is furthered by Defrain & Brand (2008); and Peterson & Green (2009), who maintain that families are made up of individuals and individuals have both contributory and effective roles to play in a family. In addition, family relationships have a considerable impact on the economic behavior and family can be seen as a socio-economic unit in the overall society (Alesina & Giuliano, 2007). The inconsistency in the ESG framework can be overcome by redesigning the framework in a way that its pillars remain inseparable. Even though the ESG framework well covers the aspect of society and environment, a broader framework may be proposed to also address the needs of individuals and families before graduating to society and nature.

In this paper, we propose a holistic framework of sustainable investment (figure 2) as an alternate to ESG strategies. The framework is based on five pillars of sustainable development: individuals, families, society, nature and governance. Each of these pillars is subdivided into themes which can be quantified in terms of variables. The proposed Holistic Value-Added (HVA) framework is based on the proposition that 'Holistic value' is the desired outcome of business (Sharma, 2015). Holistic value is the sum total of value added by a business to its stakeholders in terms of individuals, families, society and nature, where individuals include consumers, employees, investors, suppliers and other individuals (Sharma, 2015).

Researchers often discuss the stakeholder theory of business (that serves the interest of stakeholders) vis-à-vis the shareholder theory (that aims only at serving the interest of shareholders). The companies that seek to serve the interests of all the stakeholders by establishing a connection between ethics and the strategy will create more value over time (Phillips, 2003).

However, several recent arguments in the literature have begun to undermine the importance of the stakeholder theory. Over the time, stakeholders have been divided into the groups of legitimate or important stakeholders claiming a greater portion of the economic pie and less important stakeholders getting less attention in return (Freeman, Harrison, Wicks, Parmar, & Colle, 2010). The proposed HVA framework for sustainable investment brings all the stakeholders on board, classifying them into five pillars, thereby creating long term sustainable value for the business which can be shared by the future generations.

Material order, plant order, animal order and human order are the four orders of existence (Nagraj, 2012). Mutual enrichment of these existential orders is one of the important human objectives. The objectives of human also transform into the objectives of business. Therefore, one important objective of the business is to ensure mutual enrichment of these existential orders. These orders may further be consolidated into human order (the fourth) and rest of the nature (comprising of the first three). The human being can be understood at three levels – individual, family and society while rest of the existential happenings take place at the level of nature.

The process of mutual enrichment at four orders (material, plant, animal, and human) can be achieved with realization of harmony at four levels (individual, family, society and nature). Nagraj (2012) also explains that the harmony in the individual can be attained with the harmony in the self and harmony with the body which are seen as two coexisting parts of the individual. While harmony in the body can be achieved through correct assessment and arrangement of physio-chemical facilities; establishment of right understanding within the self coupled with fulfillment of relations plays an important role in attaining harmony within the self. Harmony in the family can only be achieved if there is harmony in the individuals (in the family) and harmony in society can be achieved if there is harmony in the families. The understanding of the flow from the individual level to family and then the society level and its interconnectedness brings harmony in the nature as well. The process of “mutual enrichment” at all the four orders can be achieved only with the

“right understanding” about the four levels comprising the holistic coexistential system (Gaur, Sangal, & Bagaria, 2009; Nagraj, 2008).

Individuals, families, society and nature compose four out of the five pillars of the proposed HVA framework. Rightly utilizing these four pillars in a mutually enriching way such that value gets added to each one of these, is the function of governance. Hence, governance makes the fifth pillar of the framework. The framework is exhibited in figure 2.

Insert Figure 2 about here

The proposed HVA framework of sustainable investing as shown in the figure 2 is based on 5 pillars as compared to 3 pillars of the ESG framework. The framework is designed to measure the extent of mutual fulfillment of individuals, families, society and nature through good governance. Each of these pillars is assigned with themes which shall be quantifiable with the help of multiple variables which are elucidated as follows;

3.1 Individuals: The term individual under this framework may be understood as a person directly related to the business including the investors (shareholders and debt holders), employees, customers and business partners. Mutual fulfillment of these individuals shall be measured with the help of 4 themes; namely - monetary benefits, product, relations and education. Monetary benefits to individuals shall be measured by the financial returns to the investors, payment lag to the suppliers, average annual income and other monetary benefits to the employees, directors’ remuneration, parity of income at different levels of employees and value for money derived by the products offered to consumers. Product/service shall be measured in terms of its relevance, innovation, quality and affordability. The relations shall be measured in terms of trust and cordiality between various sets of individuals namely company-employee, employee-employee, company-consumer, company-investor, employee-investor, employee-consumer, investor-investor,

consumer-investor and consumer-consumer. Finally, the education aspect shall be measured with the help of efforts made by the organization for (a) getting the individuals understand their needs with respect to relations with other human beings, and physio-chemical facilities; and (b) enabling them to fulfil those needs.

3.2 Family: As discussed in section 3, the integration and prosperity of families is important for an integrated and prosperous society. Providing the employees with job locations such that their family lives do not get disturbed, ensuring that the work pressure on the employees doesn't disturb their families, allowing them to have leisure time measures the integration aspect of the family. Facilitation of prosperity to the family shall be measured with the information on growth opportunities and wealth creation. Further, care and affection of a family is measured with the provision of comfortable work environment, assistance in contingencies and assurance against uncertainty.

3.2 Society: Building 'trust' among society is the most important theme under the pillar of society. 'Trust' is defined as the feeling that the other intends to make me happy (Nagraj, 2008). Businesses need to ensure that the society as a whole realizes that the business is working in societal interests and not against those. While on one hand, this confirms that the business and society mutually fulfil each other, on the other hand, the establishment of trust leads to lower costs on marketing and publicity as trust helps meet that end in a natural way. Fulfilment of 'trust' also warrants that businesses provide equitable treatment to all segments of society ranging across active and passive stakeholders in business, leading to respect, justice and equality. The commitment towards mutual fulfilment leads the businesses to carry out the production in a safe way so that no segment of the society is adversely affected due to it. This leads to attainment of safety, and health and wellness for the society.

3.4 Nature: Mutual fulfillment or enrichment of nature shall be measured with the help of the company's actions related to preservation, climate change, water usage, forest cover, air pollution, water pollution and solid waste management.

3.5 Governance: The governance is looked at as a catalyst to achieve mutual fulfillment of rest of the pillars of individual, family, society & nature and not as a stakeholder in itself. However, the governance aspect of a company shall also be measured with the help of multiple variables to deliberate on the efforts made by the companies to achieve this goal. The production process and storage-exchange process of the produce shall be measured as per the real (not perceived) needs of the consumers and it shall be checked that production does not disrupt the cycle of mutual fulfillment. Honesty of a company shall be measured in terms of transparency, anti-corruption systems and tolerance towards illegal and unethical behavior. Corporate governance shall be measured in terms of reliability, integrity, compliance and board of director requirements. Risk management shall be measured separately for financial risk and operational risk.

Similar to the ESG methodology implemented by FTSE Russell, the data for Holistic Value Addition framework shall be collected from the public domain only in order to maintain transparency and reliability. However, the framework can be discussed beforehand with academia of India and abroad, representatives of companies listed on the stock exchanges, representatives of various NGOs and experts from investment world.

4. Conclusion

Investors have an important role to play in the ever-changing business dynamics and have often instigated changes by bringing businesses on the path of sustainable development. Sustainable investment has emerged as an important form of investment for those investors who wish to “express values” through their investments (Landier & Nair, 2009). ESG in the recent times has become the most admired framework of sustainable investment as a ready reference for investors seeking to add long term value.

Is ESG an effective framework to measure sustainable investment? Is there a further scope of improvement in the ESG methodology currently adopted by value-based investors? This paper attempts to answer these questions. The paper also proposes a ‘Holistic Value Addition’, which is based on the holistic value created by the business for its stakeholders in terms of individuals,

families, society and nature. Governance acts as a driver to ensure mutual enrichment of the four stakeholders. These five pillars (individuals, families, society, nature and governance) of the proposed HVA framework are not distinct or separable as the pillars of the ESG framework but entirely interconnected with each other. Individual forms part of the families which again form part of the society and society is seen as a part of nature. Therefore, the value addition of nature begins with the value added to an individual. The quantification of themes under five pillars of the HVA framework and evaluating the framework on different markets of the globe sets an extensive agenda for future research. A business for a world to be shared by the future generations needs to be raised by the investors who believe in the holistic value addition to all its stakeholders.

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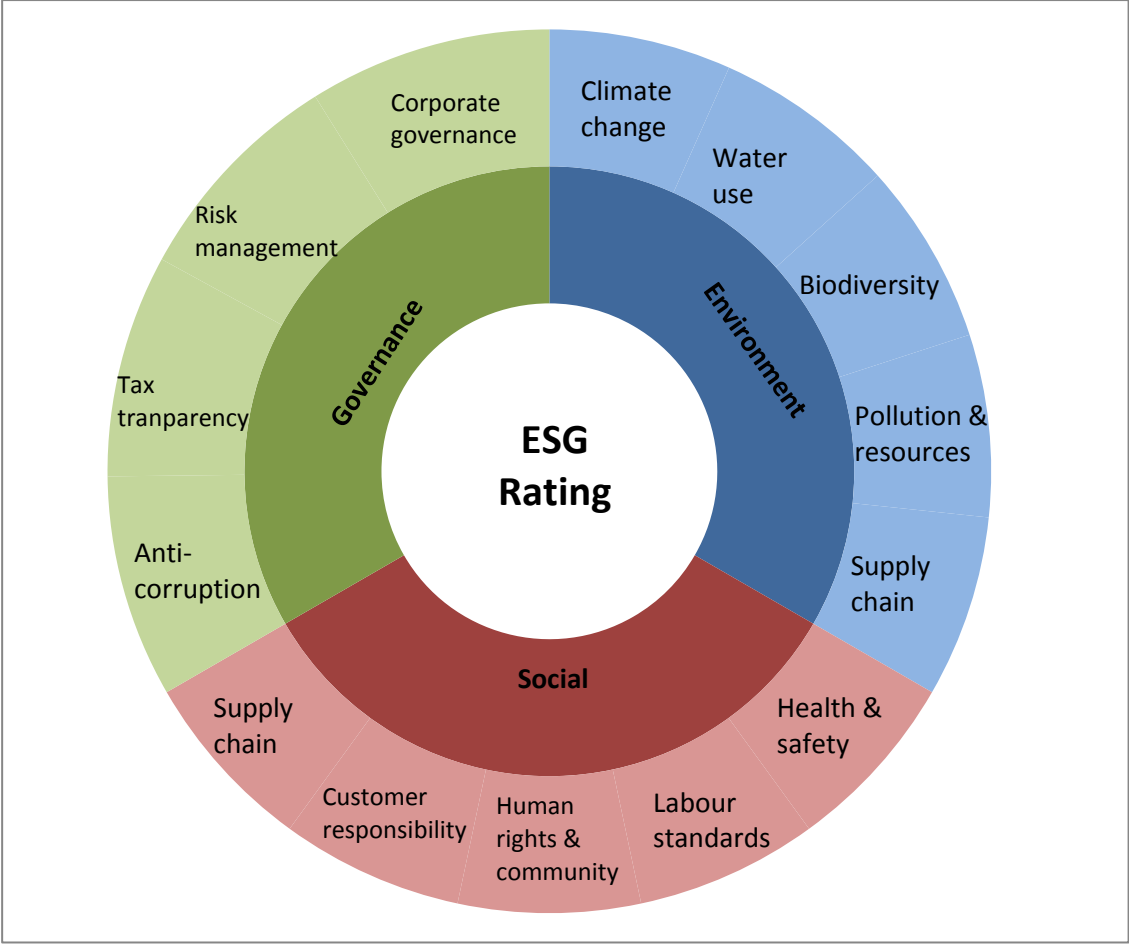
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Figure 1

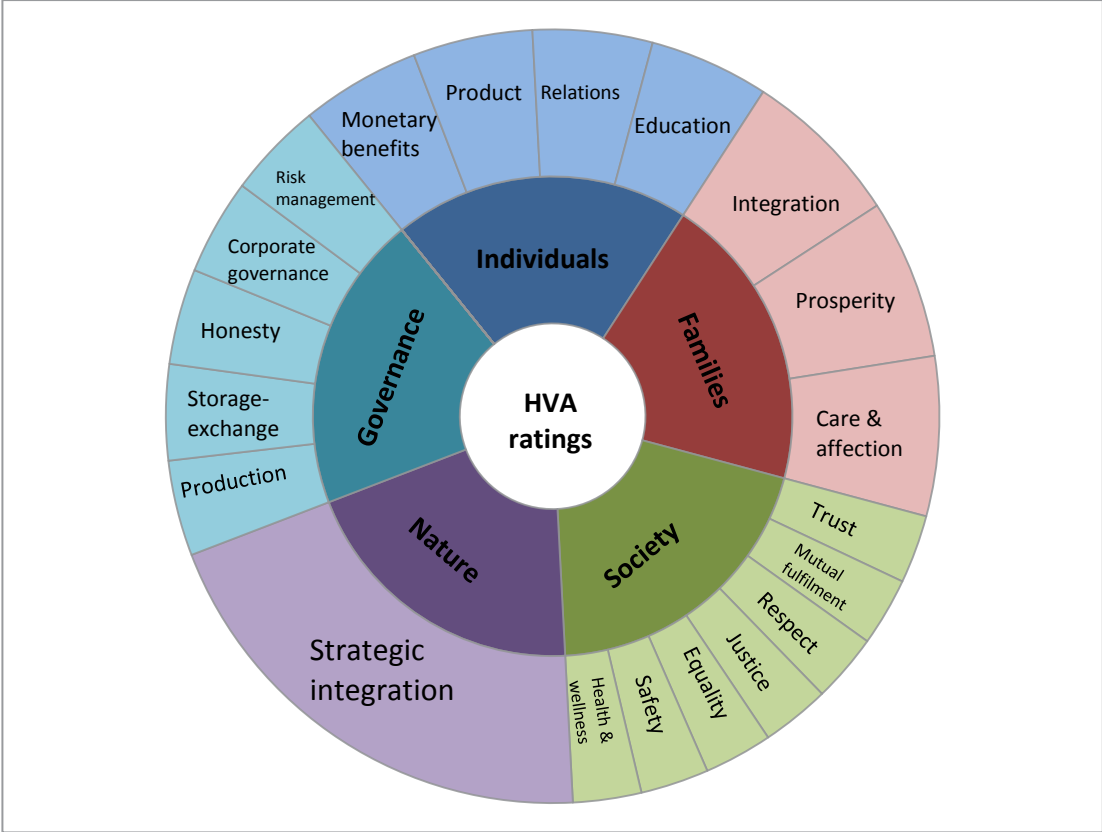
Pillars and themes of the ESG framework



(Source: FTSE Russell)

Figure 2

Holistic Value-Added framework of sustainable investing



Stream 15. Technology, Innovation and Supply Chain Management
Refereed Delivered

**Determinants for the organizational configuration of manufacturing companies
offering data-based services**

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Stream 15. Technology, Innovation and Supply Chain Management Refereed Delivered

Determinants for the organizational configuration of manufacturing companies offering data-based services

Creating a service business as a manufacturing company is commonly known as servitization. While research provides a solid foundation in many sub-areas of servitization, it concentrates on traditional after-sales services. In the realm of organizational structuring, scholars mostly discuss whether to integrate or separate the service business. Focusing on data-based services, literature remains silent on their effects on the organizational structure. Thus, we enlighten this topic by collecting determinants from literature influencing the organizational design of a manufacturing company. Following a systematic approach, we qualitatively assessed the impact of 14 factors on their tendency to favor separation or integration. While a clear tendency cannot be stated, this work is a first step to clarify organizational configuration problems in this area.

Keywords: Service industries; Organisational performance; Operations management; E-business

Imagine a general manager of a manufacturing company searching for future growth and profit opportunities. A pure product orientation would most probably lead to the development of new and innovative products, or the penetration of additional markets with existing technology. Some managers might anticipate the potential of adding services to their product business, directing their company into a process commonly known as servitization (Baines, Lightfoot, Benedettini, & Kay, 2009; Vandermerwe & Rada, 1988). While the described situation is known for decades in academia, it is still a recurring phenomenon in practice. For instance, Hewitt (2002) describes a growing interest in the realm of servitization across scholars, practitioners and policymakers, while Baines et al. (2007), Baines et al. (2009), Lightfoot, Baines, and Smart (2013) and Baines et al. (2017) document the progress in this research field repeatedly and thoroughly.

When manufacturing companies decide to invest resources into the servitization of their organization, they are confronted with a series of barriers (Gebauer, Fleisch, & Friedli, 2005). To name a few, these include the change of the business model (Oliva & Kallenberg, 2003), articulating and pricing the benefits (Grubic, 2014), or transforming the organizational arrangement (Cyert & March, 1963; Goedkoop, van Halen, Te Riele, & Rommens, 1999). Focusing on the organizational configuration, two main perspectives exist (Gebauer, Pütz, Fischer, & Fleisch, 2009). On the one side, there is the market

rationale (Drucker, 1974) supporting the view and empirical evidence of Neu and Brown (2005) that products and services should be integrated when serving the same market (Oliva, Gebauer, & Brann, 2012). On the other side, several scholars (e.g. Gebauer et al., 2005; Oliva & Kallenberg, 2003) highlight the need for a separated service unit demonstrating the internal rationale (Bowen, Siehl, & Schneider, 1989; Oliva & Sterman, 2001).

Consequently, Baines et al. (2017) noticed that literature in the sphere of organizational configuration, structures and processes of servitized manufacturing companies still requires clarification. This argument is especially valid when considering new, advanced services relying upon connected devices and the exchange of data (cf. Grubic, 2014). These data-based services are likely to require a strong inter-firm collaboration during development and bear the potential to impact product development, in contrast to traditional after-sales services. Beside the insufficient knowledge about the organizational integration of data-based services at manufacturing companies, a thorough discussion of factors influencing the decision about the organizational design in this area is lacking (Baines et al., 2017).

Thus, we want to answer the question, *what determinants exist deciding upon the organizational configuration of manufacturing companies offering data-based services.*

To reach a scientifically sound basis, we build upon the organizational configuration theory of Mintzberg (1980) and adopt the literature search process of Webster and Watson (2002). In summary, the procedure revealed 54 articles assessed as particular relevant, in turn leading to a final list of 14 factors deemed to influence the organizational configuration of manufacturing companies offering or intending to offer data-based services. These determinants include inter alia the strategic orientation, market volatility, age and size of the company and the human resources.

The result demonstrates a high multi-variability and complexity of designing an organization, since the responsible manager has to keep all relevant factors and their interdependencies in mind. To handle this complexity, we now contribute with an enumeration of important aspects practitioners have to assess and scholars may use to investigate in-depth. Additionally, our paper contributes to the literature of organizational design by qualitatively discussing potential effects of each derived factor with the focus on service units in manufacturing companies.

The remainder of the article is structured as follows: First, we elaborate on the theoretical background of our research before presenting the applied method and results in Chapter 3. Afterwards, we discuss the findings and implications for theory and practice, as well as conclude with hints for future research.

2. THEORETICAL BACKGROUND

In the past, numerous scholars discussed the phenomenon of servitization in general terms and with different perspectives (e.g. Gebauer, Bravo-Sanchez, & Fleisch, 2007; Grubic, 2014; Oliva & Kallenberg, 2003; Vandermerwe & Rada, 1988). Only few focused on implications on the structure and processes of the organization of manufacturing companies offering or intending to offer data-based services (e.g. Biege, Lay, & Buschak, 2012; Kowalkowski, Kindström, & Witell, 2011; Oliva et al., 2012). Yet, before going into details, we first delineate the theoretical background.

2.1 Theoretical Framing

Setting a theoretical layer underneath the own research feels somehow like choosing the hole through which we are looking at the problem on the other side of the wall.

While the contingency theory seemed appropriate on the first sight, (cf. Fiedler, 1964; Lawrence & Lorsch, 1967), we selected the organizational configuration theory proposed by Mintzberg (1980), discussing approaches on how to design organizations and suggesting five typologies of configurations. Mintzberg (1980) describes two hypotheses an organization should reflect. The congruence hypotheses explains that a purposeful configuration is tightly interlinked with contingency factors and so called “design parameters” (Mintzberg, 1980, p. 327), whereas the configuration hypotheses states that these parameters need to be consistent among each other. Based on his publication, Figure 1 sketches the interrelation between several crucial aspects of this theory and shows the interdependence of multiple factors influencing the realization of an effective organization with the structure at its heart.

Insert Figure 1 about here

We adopted this lens due to its distinct adherence to configuration problems and their underlying factors, closely reflecting our research problem. Additionally, Mintzberg (1980) identified several

factors, which we added to the final list. However, we first clarify the difference between certain service types, since, depending on the services a company may implement, the list of determinants affecting the organizational structure could possibly alter.

2.2 Service Types

Classification schemes

A typology of services that is often referred to was introduced by Mathieu (2001). She differs between two generic sorts of services: (1) services supporting the actual good sold and (2) services supporting the customer. The first case encompasses all traditional after-sales services, such as spare parts, repair and maintenance. Contrary, the latter case depicts elaborated services, exemplarily trainings or optimization services, for its execution deep process knowledge from the customer side is required (Mathieu, 2001).

Nonetheless, all named examples share the characteristic being independent from the product the company is actually selling. Independent in a sense that the services (repair instructions, training plans, etc.) are adapted and built upon a final product, but aspects of the service itself do not shape the product predominantly (Brown & Eisenhardt, 1995; Zirger & Maidique, 1990). Insights from some services may shape future product development. However, inter alia customer and performance requirements reflect the main influences for it (Ernst, 2002).

Traditional vs. data-based services

The servitization phenomenon describes the transformation of product-oriented manufacturing companies investing into and performing supporting services with the goal to generate higher profits by offering product-service bundles (Goedkoop et al., 1999; Tukker & Tischner, 2006; Vandermerwe & Rada, 1988). Most articles treating this topic only discuss services as the ones described above (e.g. cf. Gebauer, Friedli, & Fleisch, 2006; Kindström, 2010). Yet, we consider data-based, data-driven, or also known as smart services, going beyond the traditional services (Allmendinger & Lombreglia, 2005). In line with Allmendinger and Lombreglia (2005), we define data-based services as services requiring connected products at the customers' site, able to send, or even send and receive, data and making use of this data to generate benefits for the customer (cf. Bullinger, Meiren, & Nägele, 2015).

Compared to traditional services, data-based services are likely to require new or additional sensors and actors within the goods sold, bearing the potential to impact product development more than before (Allmendinger & Lombreglia, 2005; Bullinger et al., 2015). Hence, scholars agree that the implementation and development of (data-based) services within manufacturing companies leads to changes of the organizational structure (Gebauer et al., 2009; Turunen & Toivonen, 2011).

2.3 Separation or Integration

Introducing services within a formerly product-oriented company will require other capabilities and processes, thus lead to organizational change (Bustinza, Vendrell-Herrero, & Baines, 2017). As consent many scholars are about the fact that servitization, either with the premise to offer traditional or data-based services, necessitates a change of the organizational structure, as opposed they are in their view, which configuration an organization should adopt (Kowalkowski et al., 2011).

Transforming a configuration in this sense is commonly related to the creation of a service organization that may be integrated or separated, in turn, being in control of the service development, defining the revenue model, selling the service and providing it to the customer (Gebauer et al., 2009). While some authors assessed potential benefits of externalizing the service as a whole, the internal provision of services and the according research focus stays in a major role (Kowalkowski et al., 2011). Hence, scholars describe the internal provision of services largely with two extremes: one party highlights the positive effects of a separated service organization (e.g. Oliva et al., 2012), while the other party underpins the advantages of an integrated organization (Neu & Brown, 2005). Therefore, we briefly summarize key arguments of each side in the subsequent paragraphs.

Main representatives advocating the separation of the service from the product business by calling it vital to successfully drive the service business are Oliva and Kallenberg (2003). After them, companies are usually entering new markets when enforcing a service strategy favoring a separated department to handle the uncertainties autonomously and to address the specific requirements (Drucker, 1974). Enlarging the service portfolio is as well connected with a transition to a separated service organization, since the personnel is expected to orient themselves better towards a service philosophy (Turunen & Toivonen, 2011), leading to an increased concentration on and preservation of a service culture

(Bowen et al., 1989). According to the theory that an optimal information flow is different for an organization developing products (centralized information is favored) and for one innovating services (decentralized information is preferred), Kim, Park, and Prescott (2003) propose that these two conflicting positions should be pursued in different business units.

These arguments result in the perspective that a separated service unit achieves higher organizational distinction, going hand in hand with management attention when being executed as a profit center and higher visibility towards the customers (Oliva et al., 2012).

Yet, a distinct separation between service and product business was also found to have a negative effect on the overall motivation to execute the service strategy (Gebauer et al., 2009). Besides effects on the thinking and orientation of the employees, the underlying logic of the group of scholars defending the view of an integrated solution is reflected by the market rationale (Drucker, 1974). Assuming that the focal firm is serving certain markets with their connected products, the firm is likely to develop data-based services for the same customers possessing the appropriate hardware on-site, hence, serving the same market. This means in line with Neu and Brown (2008) and Drucker (1974) that a company should cluster their products and services with respect to the markets they are delivering to. Consequently, when products and services serve the same customers, the company should pursue a mutual development in order to increase synergies and to address a broader customer need (Biege et al., 2012). While the point of views we presented afore depict extreme positions, it is apparent that these perspectives increasingly blur. For instance, Turunen and Toivonen (2011) explain that despite the former emphasis on a separate service organization, the separation per se does not ensure success. A successful commercialization of services is rather achieved with a consistent service orientation, feasible in both configurations (Gebauer et al., 2009) by concentrating on the right organizational structure for the appropriate service strategy (Auguste, Harmon, & Pandit, 2006; Gebauer, Fischer, & Fleisch, 2010).

That said, what should be pursued? According to Hax and Majluf (1983), as well as Mintzberg (1980), the final structure is highly individual and should be designed upon the relevant contingency factors. Some of these factors may be obvious; nevertheless, a comprehensive and systematic collection of

factors influencing the organizational configuration of a manufacturing company introducing data-based services has not been done before and is thus executed in the following.

3. FINDINGS

So far, in practice one cannot recognize a dominant strategy on how companies design their organization to serve their customers a portfolio of products and services as good as possible. This gave us the impetus to investigate determinants affecting an optimal structure depending on the unique contingencies of manufacturing companies offering or intending to offer data-based services.

3.1 Method

14 factors, summarized and clustered in Table 1, were collected from literature following the literature search process of Webster and Watson (2002). Conducting a literature review in a systematic manner increases the credibility on the found articles (Denyer & Tranfield, 2009; Tranfield, Denyer, & Smart, 2003) and therefore enhances the validity onto the derived concepts and conclusion of the research (Baker, 2000; Vom Brocke et al., 2009). We thus proceeded by delineating important keywords and search algorithms (e.g. “data-based service” AND organization), while listing the results thoroughly (cf. Webster & Watson, 2002). According to Webster and Watson (2002), we continued with screening the cited references and those articles citing the found artefact. This procedure led to a final amount of 54 publications treating data-based services in the realm of manufacturing companies and organizational structuring. Although searching for relevant literature in a systematic and meticulous way, it may arrive that some articles were not discovered. Nevertheless, we observed theoretical saturation (Corbin & Strauss, 2009) after analyzing the derived sample of artefacts.

3.2 Influencing Factors

Before presenting the factors illustrated in Table 1, we have to state that we explicitly strove to collect the elements in an unbiased manner. Meaning, we are not judging and assessing the significance of each factor related to its impact onto the organizational structure in the first place. The upcoming enumeration is therefore not sorted with a particular logic.

Insert Table 1 about here

Market related characteristics

The first group of factors encompass elements linked to the presence in, properties and diversity of markets a company is handling. As such, fluctuating markets require vast flexibility and dynamic capabilities within organizations enabling them to tackle the altering environmental conditions (Teece, Pisano, & Shuen, 1997). Accordingly, the organizational structure is assessed as being influenced by market volatility (Kowalkowski et al., 2011; Neu & Brown, 2005). Neu and Brown (2005) argue that integrating the service unit favors a concentration on specific markets with certain bundles of services and products. Thus, it may be superior to organize by devotion to market segments to consolidate market knowledge and build upon these particular experiences. Mintzberg (1980) is taking the same line by articulating that an organizations' design should mirror the diversified markets they are operating in. Assuming, a company is serving one or more of its market segments with a portfolio of physical products and data-based services, the maturity of the data-based service business will likely influence the structure as well (Gebauer, Saul, Haldimann, & Gustafsson, 2016). Starting to provide data-based services might be realized by occasionally devoted (e.g. sales staff) and a handful of focused employees (e.g. service innovation), who may work within their current departments. Yet, when the company increases their investment into this field, rising sales and profit numbers to a significant amount, Oliva and Kallenberg (2003), as well as Biege et al. (2012) conclude that a transition to a separated business unit should be pursued.

Offer related characteristics

The second cluster of determinants shows the dependence of the organizational structure on the products and services a company is offering. For instance, depending on the product itself, there may be a shift between resources needed to develop and produce a certain good, whether it is fairly simple or highly complex. Thus, characteristics of the product for which data-based services are designed are likely to affect potential services and the organizational structure as well (Oliva et al., 2012).

The interdependence of physical products and services is dichotomous. As mentioned in Chapter 2.3, most articles treat product-service bundles with no or very few interfaces during the development. Hence, the interdependence is rather low. However, with the rising importance of data-based services new value propositions (complex comprehensive offers) are much more intertwined leading to development cycles, where product and service development teams need to work with each other (Kindström, Kowalkowski, & Alejandro, 2015; Kotler & Keller, 2016). The relation of products and data-based services may thus be described by *the separability of the value proposition*. The term we introduce defines to what extent a product or (data-based) service is able to be sold on its own, or is only able to deliver the desired value when bundled. Transferring this view into the design of an organization, stand-alone products and services are possible to be developed separately from each other, while closely intertwined and complex value propositions create stronger coherence in an integrated form.

Whether a company is selling services as an add-on to products (Oliva et al., 2012) or strive to leverage a higher profit share (Turunen & Toivonen, 2011) will be mainly directed by the strategy (Galbraith, 2002; Gebauer et al., 2010). Already discovered by Chandler (1962) and Mintzberg (1980), strategy is likely to have a significant impact on a firms' structure. Imagine a company pursuing their service business mainly as a marketing tool to promote their competitive products, compared to companies striving to diminish the effect of their commoditized product, thus seeking services as a major income stream. Nevertheless, a clear tendency on which effect the strategy has on the structure does not exist. While separation defenders, such as Oliva and Kallenberg (2003), advocate separation with increasing service focus, we believe it is exactly the other way round. With a strong devotion to data-based services, the product has likely to be modified and adapted. Consequently, adjusting the attention to data-based services requires strong intra-firm collaboration leading to integrated team structures (cf. Neu & Brown, 2005, 2008). Hence, strategy is a multifaceted factor not unequivocally assignable to one or another group of determinants.

Intangible organizational characteristics

Factors being categorized into the third group share aspects developed naturally over time, or are historically practiced in a certain manner. Age and size of a company are two examples that evolved over time and still influences the design of an organization (Mintzberg, 1980). Older companies are often seen similar to rigid and bureaucratic organizations unfolding higher barriers than young and flexible start-ups (Mintzberg, 1991). Thus, introducing services in an established (old) company favors separation, since the changes needed to realize an integrated solution bear friction and high cost.

Another aspect often treated is the culture of such organizations. While we do not want to spread the gates for a philosophical conversation about culture in general, we have to admit that product development and sales staff think and value differently. For instance, the degree to which these employees set the needs and problems of their customers in the center of their work varies a lot (Gebauer et al., 2009; Kindström et al., 2015; Matthyssens & Vandembemt, 1998; Turunen & Toivonen, 2011). Termed customer centricity (Gebauer et al., 2009), the organization is likely to differ concerning its processes and structures, whether its DNA is mainly induced by a technology push or a market pull philosophy. It may be obvious that designing new services requires extensive customer knowledge, especially when these enfold their highest value once being co-created with the customer (cf. Vargo, Maglio, & Akaka, 2008). Separation would ease the incorporation of customers, their knowledge and the transfer within a smaller part of the company, while integration has the potential to change the mindset of all employees.

When increasing the focus on distributed service personnel establishing bonds with customers and transporting the field knowledge back to the company, another effect goes hand in hand: the power structure (Mintzberg, 1980). In traditional product and technology driven organizations the decision-making authority is usually centralized, whereas service organizations favor decentralization (Homburg, Workman, & Jensen, 2000; Neu & Brown, 2005, 2008), similar to information flows.

Tangible structural characteristics

The decentralization of decision-making authority is as well captured in an additional factor coined by Neu and Brown (2005, 2008) and part of the last group of elements. They believe an organization should build up integrated business unit responsibilities for products and the corresponding

services. This covers as well the service development process, the sales process, strategy and channel, described as determinants for the organizational structure by Burton, Story, Raddats, and Zolkiewski (2017) and by Gebauer et al. (2009), Kindström et al. (2015), Kowalkowski et al. (2011) respectively. A distinct service sales department, including the according processes, strategies and channels, clearly prefers separation (Gebauer et al., 2009; Kindström et al., 2015; Kowalkowski et al., 2011). Contrary, it is difficult to state, whether the service development process should be pursued in a separated or integrated form (Burton et al., 2017), referring to the separability of the value proposition.

Further, the technical system, defined by the way of working, is linked to the degree of formalization (Mintzberg, 1980). Thus, highly controlled processes will be rather found in bureaucratic organizations tending to be old in age and large in size, while a higher flexibility is often found in younger companies (Mintzberg, 1980). Considering this, the technical system influences the organizational design, whereas a significant causality between the degree of formalization and the degree of separation cannot be stated. Slightly apart from other factors within this group, the last element concerns people working at the focal organization. Since most companies face limited financial and human resources (Kowalkowski et al., 2011), thinking about a feasible organizational structure depends upon the personnel (Galbraith, 2002; Neu & Brown, 2005, 2008). Meaning, if an organization engages employees being talents in more than one field, it may be possible and viable to integrate the service and product organization. Yet, if the human resources reflect a strong focus on technology and the continuous development of new products, a separated organization with new inputs may promise better performance.

The brief discussion of each factor shows no clear tendency, whether a typical manufacturing company offering or intending to offer data-based services should integrate or separate the service organization. Thus, the upcoming chapter summarizes the findings and sets them into context, before presenting its implications on theory, practice and future research.

4. CONCLUSION

With the impetus to provide a comprehensive overview on factors determining the organizational structure of manufacturing companies on their path to offer data-based services, we dived deep into

literature by following a systematic approach. We captured 14 partly stand-alone, partly interdependent variables, ranging from obvious factors (e.g. service strategy) to ambiguous elements (e.g. degree of customer centricity). Presenting them in an unbiased manner was vital to enhance objectivity and reduce predisposition. The qualitative discussion of each factor revealed no clear tendency, whether a manufacturing company should integrate or separate the data-based service business. Yet, it is likely that not all organizations are influenced by each factor equally. Therefore, a manager has to evaluate carefully, which factor impacts his organization and what the appropriate reaction is going to be.

With the list at hand, managers have now higher transparency onto determinants that might affect the performance of the service business negatively, when the organizational form is not adapted to the new circumstances. While practical relevance is important in our research and mirrors a distinct contribution of this paper, we intertwined the practical gap with propositions of Baines et al. (2017) to clarify the discussion about the organizational structure of manufacturing companies offering data-based services. The contribution of our research is thus twofold. First, we summarize important factors influencing the organizational structure and second, we discuss each factor on its tendency to favor separation or integration. Based on the organizational configuration theory of Mintzberg (1980), we elucidate specific parameters, enriching the initial set of factors and strengthening the validity of his theory.

Yet, presenting and discussing these factors qualitatively is only one-step forward. In the future, our research is led by validating the significance of these factors in real-world case studies with manufacturing companies being in the process of transforming their organization. Once these factors are backed by additional data, further research may also investigate in more depth the impact of each parameter on specific operating models and processes within the focal firms.

To conclude, our research was directed by the distinct effort to enlighten the conversation about organizational configuration problems in manufacturing companies. While the nature of this problem is highly practical, we anticipated the possibility to offer a mean for practitioners and scholars, which can be used in both worlds. Collecting and setting the factors into context was therefore the logical first step to reach clarification within this topic.

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Figure 1: Organizational configuration theory. Own illustration based on Mintzberg (1980)

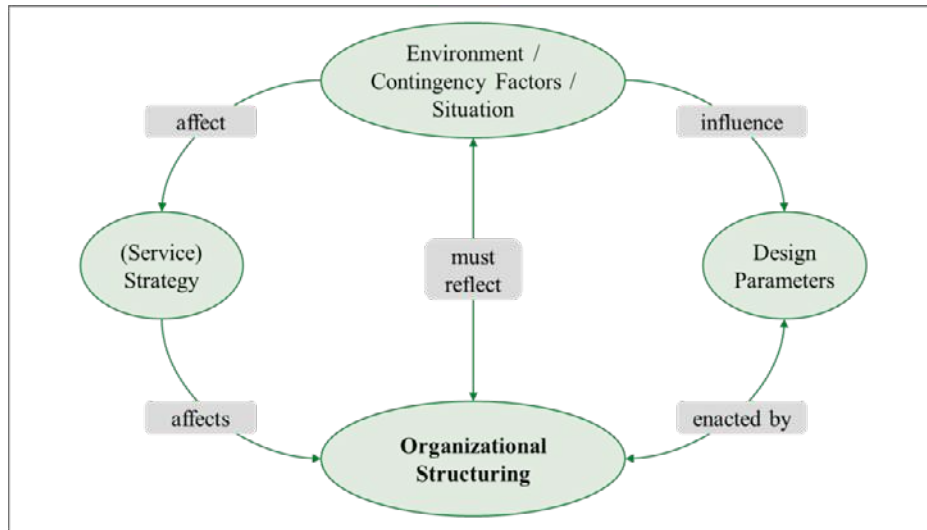


Table 1: Summary of influencing factors. Own illustration.

Factor	Category	Reference
Maturity of data-based service business	Market related characteristics	Gebauer et al., 2016
Diversification of the organization's markets		Mintzberg, 1980
Market volatility		cf. Kowalkowski et al., 2011; Neu & Brown, 2005
Separability of the value proposition	Offer related characteristics	cf. Kindström et al., 2015; Kotler & Keller, 2016; Kowalkowski et al., 2011
Service strategy		Chandler, 1962; Galbraith, 2002; Kowalkowski et al., 2011; Mintzberg, 1980
Product characteristics		cf. Oliva et al., 2012
Degree of centralization of decision-making authority (power structure)	"Intangible" organizational characteristics	Homburg et al., 2000; Mintzberg, 1980; Neu & Brown, 2005, 2008
Age and size		Mintzberg, 1980
Degree of customer centricity		Gebauer et al., 2009; Kindström et al., 2015; Matthyssens & Vandenbempt, 1998; Turunen & Toivonen, 2011
Human resources	"Tangible" structural characteristics	Galbraith, 2002; Kowalkowski et al., 2011; Neu & Brown, 2005, 2008
Integrated business unit responsibilities		Neu & Brown, 2005, 2008
Service development process		Burton et al., 2017
Technical system		Mintzberg, 1980
Sales process – strategy and channel		Gebauer et al., 2009; Kindström et al., 2015; Kowalkowski et al., 2011

12: Public Sector Management and Not-for-Profit
Competitive Session

Can integrating workplace health and wellbeing initiatives into existing leadership programs provide a sustainable solution for improving the health, wellbeing and performance of managers?

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Can integrating workplace health and wellbeing initiatives into existing leadership programs provide a sustainable solution for improving the health, wellbeing and performance of managers?

Abstract: *Health and wellbeing continues to be a workplace issue of global significance. Support for creating healthier workplaces is widespread and largely supported by organisations; however, performance outcomes from health and wellbeing programs are rarely measured. This absence of performance measures, together with poor attendance means that health and wellbeing programs often fall short of their potential impact. This paper uses the findings from two vastly different management and leadership development programs for human services employees living in geographically remote communities to support the notion that integrating health and wellbeing initiatives into existing leadership programs can indirectly support improved health and wellbeing for managers. Ultimately, this contributes to improved health and wellbeing, work performance, workplace culture, and organisational success.*

Keywords: health and wellbeing, performance management, employee participation, culture.

Health and wellbeing continues to be a workplace issue of global significance (Spence, 2015). Workplace health and wellbeing gains momentum, as more organisations recognise the benefits of a healthy productive workforce (Baptiste, 2007). However, the relationship between workplace health and wellbeing, and organisational performance is complex. While many managers may assume that an employee's wellbeing is a result of their actions outside of the workplace; people spend a significant proportion of their time at work. Therefore, the workplace often contributes to the development and sometimes the worsening of the individual employee's health through workplace factors such as organisational change, and job dissatisfaction (Mentally Healthy Workplace Alliance (MHWA), 2014). In contrast, for some employees the significant proportion of time spent at work acts as a protective factor in improving or against the worsening of health and wellbeing (MHWA, 2014).

Health and wellbeing can be viewed as a broad concept encompassing personal satisfaction; work-life satisfaction; and general health (psychological and physical health) (Pescud et al., 2015). The characteristics of 'health and wellbeing' as described in this paper pertain to 'the state of an individuals' mental, physical, and general health, as well as their experiences of satisfaction both at work and outside of work' (Nielsen et al., 2017, p104). Extending on this definition, Wright and Cropanzano (2004, p. 341) describe psychological or emotional wellbeing as being a more systematic

measurement of happiness, saying that wellbeing encapsulates ‘the overall effectiveness of an employee’s psychological functioning’ in regard to life as a whole and is ‘not tied to any particular situation.’ High levels of wellbeing boost performance and are associated more with a positive outlook; therefore, emotional adjustment (or maladjustment) of individual employees should be the focus to improve performance instead of job satisfaction and aspects of the job itself (Wright & Cropanzano, 2004). The positive psychology research reveals the potential workplace benefits of a positive approach to life, particularly when considered in the context of the happy-worker/productive-worker thesis (i.e. happy and healthy employees perform well, and vice versa) (Neilson et al., 2017; Wright & Cropanzano, 2000). This contrasts the traditional approach, often referred to as the disease model, where preventative actions are usually implemented based on individualised therapeutic-type interventions for employees (e.g. Employee Assistance Programs, Mental Health First Aid).

If people have the same basic physical and physiological needs (e.g. social support, physical safety), it follows that given the amount of time spent at work, most employees will have expectations about how their employer should be providing for their health and wellbeing (Baptiste, 2007). Therefore, a commitment to supporting the basic physiological and psychological needs of employees creates a good foundation for fostering wellbeing (Spence, 2015). Psychologically well employees are more resilient to adverse situations, socially connected, proactive, productively effective, and less prone to display the symptoms of stress. These characteristics of healthy people are seen across different contextual situations worldwide and persist over time revealing a distinct competitive advantage for organisations willing to maintain an environment that supports health and wellbeing.

Traditionally, the focus of workplace health and wellbeing has been on reducing sickness, absenteeism, presenteeism, lowering occupational health risks, and reducing accidents and/or injuries. As such, the economic focus has been on lost work time and calculating the cost of poor health based on an estimate of the value of work (Jones, Latreille & Sloane, 2016; MHW, 2014). Contemporary views shift the focus to emphasise that psychologically healthier workforces improve organisational success (Baptiste, 2007; Jones et al., 2016; Loeppke et al., 2009; Spence, 2015). While this view is embraced by many organisations, the responsibilities are somewhat blurred and far more discretionary for activities captured under the broader area of health and wellbeing (Pescud et al., 2015). In fact,

while some organisations see merit in health and wellbeing programs they do not take responsibility to the same level as ensuring legislated workplace safety (Pescud et al., 2015, MHW, 2014).

The relationship between individual wellbeing and workplace performance is established. Some researchers suggesting that wellbeing not only predicts employee performance, it also predicts supervisory performance in the future (Baptiste, 2007; Wright and Cropanzano, 2004). However, the factors influencing performance are both complex and dynamic with differences being sensitive to time, location, and industry (Jones et al., 2016; Pescud et al., 2015). This complexity further complicates the relationship between an individual's health and wellbeing, and their performance suggesting that estimating the 'cost' of ill-health cannot simply be understood through estimates of inputs and perceptions of lost output (Jones et al., 2016). Subsequent efforts to address perceived problems focused on reduced medical and lost time costs without considering the impact of health and wellbeing on productivity (Loeppke et al., 2009). Regardless of whether or not they see it as their responsibility the actions and attitudes of managers influence performance, as well as the health and wellbeing of the individuals they manage (Kelloway & Barling, 2010; Neilson et al., 2017).

Health and wellbeing programs

Health and wellbeing programs generally provide access to low or no cost products, services and/or events (e.g. flu vaccinations, physical fitness activities, subsidised health insurance) (Spence, 2015; MHW 2014). The benefits in implementing health and wellbeing programs include: improved employee morale, reduce health care costs, reduced compensation claims, increased productivity, reduced absenteeism, reduced presenteeism and the positive promotion of the employer's brand (e.g. employer of choice) (Pescud et al., 2015). Further, health and wellbeing programs can improve an employee's life broadly, rather than just their health at work (Spence, 2015).

The success of employer-driven health and wellbeing programs is hindered by the barriers to participation. These barriers include: work pressures, individual readiness for change, employee recognition of value in the program, access to resources; costs, time, logistical issues, and cultural barriers (Pescud et al., 2015; Spence, 2015). In addition, Spence (2015) found that when employees were asked about their needs, very few mentioned support for their own health and wellbeing; however, they did mention communication and social connectivity. It is possible that employees may

not always recognise their needs. Therefore, low participation does not mean that organisations are misguided in efforts to support workforce health and wellbeing, after all social connectivity is associated with wellbeing. Rather, these findings suggest that alternative and complementary approaches are needed.

Costs and Benefits

There are two key aspects of workplace health and wellbeing - healthy employees (individual benefits), and performance (organisational benefits) (Pescud et al., 2015). When the focus is on organisational benefits; investment in health and wellbeing is viewed as a financial return on an investment decision (Pescud et al., 2015). The impact of untreated mental health to Australian workplaces is approximately \$11 billion per year, comprising '\$4.7 billion in absenteeism, \$6.1 billion in presenteeism and \$146 million in compensation claims' (MHW, 2014, p.10-11). While mental health presents substantial costs to organisations; the MHW (2014) suggests that through successful strategies that create healthy workplaces, organisations can expect an average return on investment (ROI) of 2.3 (for every dollar spent there is \$2.30 in benefits). Similarly, Spence (2015) found that while some ROI studies estimate cost savings from \$3 to \$26 for each dollar spent on health and wellbeing programs; others report more modest returns. Benefits are usually derived from the direct costs (e.g. absenteeism, presenteeism and compensation claims) (MHW, 2014). However, there are other costs associated with workplace health and wellbeing that are not always considered, such as the costs for other employees (e.g. workforce shortages, increased workloads, retraining new employees, emotional costs of lost social connections) and intangible benefits (e.g. improved employee engagement, improved retention of skilled employees) (MHW, 2014). Hence, there is the potential to calculate additional benefits through analysis such as social return on investment (SROI) which puts an estimate on the costs of the intangibles and reinforces the business case for organisations to invest in health and wellbeing (MHW, 2014).

Few research studies report empirical evidence about how health and wellbeing initiatives increased productivity and profitability (Rongen, Robroek, Lenthe & Burdorf, 2013; Pescud et al., 2015). Therefore, there is an opportunity for future investigation of the benefits of health and wellbeing initiatives to extend beyond the traditional financial benefits of return on investment and

consider the organisational benefits of improved employee engagement, organisational commitment and job satisfaction (Neilson et al., 2017, Pescud et al., 2015). Furthermore, research into SROI could have a positive social impact for organisations, communities and society more generally. This is consistent with the view that given the range of initiatives implemented with minimal or no cost to the organisation, further research needs to consider the wider benefits (Pescud et al., 2015).

METHODS

This paper used an exploratory research design to gain insights and further understanding about phenomenon associated with improving workplace health and wellbeing for human service workers in geographically remote regions in Australia. This exploratory study, considers the findings from two mixed methods research studies with a view to informing further research activities in this area.

Study one: Remote Management Program

This small group management and leadership development program (hereafter ‘management program’) was piloted in 2016 and implemented in 2017, with approximately 35 participants completing the program during this period. The participants were managers who lived and/or worked in regions of Australia classified as remote or very remote using the ABS remoteness categories (ABS, 2003). The program aims to enhance and broaden the manager’s existing expertise regarding leadership, management, governance, and project management using an action learning approach. In practice, this means that participants have access to four online modules, attend a two-day workshop, are supported in implementing a continuous quality improvement (CQI) project in their workplace, and have the opportunity to be mentored for 6-8 months post program completion.

The content of the program was developed to meet industry needs and included an Advisory Committee and input from two member-organisations who represent the interests of the targeted participant group (remote health and health service managers). The content includes: soft skills training, continuous improvement activities, communication skills, self-care, bullying, resilience, managing change and high performance management.

Study one uses participatory action research (PAR) techniques in a continuous quality improvement (CQI) approach to evaluate the program. The small group program is conducted over a three month period and so the data from several programs is being collated over a two year period to

create a larger dataset for analysis. The research reported in this paper emerged from preliminary analysis of the data (questionnaires and workshop surveys) and observations from the program facilitators. The questionnaire component comprises an online questionnaire distributed pre-commencement and post-completion of the program, and a survey that is distributed at the end of the workshop. Participants were asked to rate their capability for a range of skills and experience on Likert scales at the two different points in time. Similarly, participants were asked to rate their knowledge for the same range of skills and experience on Likert scales. Qualtrics software was used to disseminate the questionnaires.

The program participants worked for different health services and were located in geographically remote or isolated areas of Australia (including Australian territories). Study one was approved by the James Cook University Human Research Ethics Committee (HREC) (#H7034).

Study two: Family Wellbeing Empowerment Program (FWB)

Study two uses PAR methods to evaluate the Family Wellbeing Empowerment Program (hereafter ‘empowerment program’), a leadership program developed by and for Aboriginal and Torres Strait Islander people. This small group program was conducted with a group of human services workers employed by the same organisation with workplaces located many hundreds of kilometres apart. There were seven participants who completed both the pre-program and post-program questionnaires, four of whom lived and worked in very remote Aboriginal communities. Study two was approved by the James Cook University HREC (#H6622).

The participants were all Aboriginal and Torres Strait Islanders and lived in a geographically remote community. The leadership program was implemented over an eight month period with participants travelling from remote communities to the nearest regional centre for a series of three-day workshops. Participants completed a questionnaire at the beginning and end of each workshop. Participants were asked to rate how they were feeling about specific aspects of their life on a questionnaire containing Likert scales, and short answer questions as well as validated measures (e.g. Australian Unity Wellbeing Index (AUWI)).

The empowerment program aims to improve confidence and self-esteem, encouraging the development of life skills that would improve interaction with their clients, families and children, at

both the individual and community level. The content of the program includes topics such as human qualities, basic human needs, understanding relationships, life journey, conflict resolution, understanding emotions and crisis, loss and grief, and beliefs and attitudes. Trained facilitators support participants throughout the program, and can link participants to appropriate services if needed (e.g. Employee Assistance Program (EAP)).

Data Analysis

For both studies the quantitative data were analysed using Excel 2013 for descriptive data analysis, including means, frequencies, proportions and changes in self-assessment ratings for each participant. The sample sizes were insufficient to conduct a statistical analysis with the data for either study. A thematic analysis was conducted to identify the themes that emerged from the open ended questions.

RESULTS AND DISCUSSION

Study one

The analysis revealed an increase in the participants’ self-reported capability for emotional intelligence, reflective journal usage (personal and professional) and in using mentoring for management development activities; however, there was a decrease in the rating for resilience. The facilitators cannot explain the reason for this decrease, which requires further investigation. The findings suggest that the program can support the health and wellbeing of managers who are particularly vulnerable given the nature of their job and the isolating context in which they live and work.

TABLE 1 AND TABLE 2 HERE

The facilitators noted that many participants appeared to be quite emotionally and physically drained on day one of each workshop, with the reasons usually revealing themselves as the program progressed. While unsubstantiated, frequently they reported challenges arising from large workloads being short-staffed, frequent regular oncall duties, workplace bullying, and fatigue associated with the effort needed to be able to leave the remote location, even if for only a few days. The facilitators noted that a reasonable amount of time in the workshops is spent supporting participants with current

health and wellbeing issues, including linking them to CRANAplus' Bush Support Services (24/7 Telephone Counselling for remote health workers, service providers and their families) or suggesting that they contact their organisation's EAP. One facilitator noted that throughout the three-month program, time is often spent providing emotional support as participants tackle the challenges of implementing their workplace project. As the mentoring program has not yet been evaluated, the amount of time that mentors spend supporting mentees personally compared to professional management skill development is unknown. However, analysis of the mentoring program could further inform studies about the health and wellbeing of these managers.

While improving the health and wellbeing of participants is not the aim of the management development program, there are signs that the program has the capacity to improve health and wellbeing through the content and through the skills developed. For example, participants found that writing a reflective journal was a tool that could continue to support their wellbeing, with one participant saying, one aspect of the program that they would implement is the 'Reflective journal – to be mindful of how I work. Mindful of my leadership/management style and ensure positively into the workplace.' The data analysis identified that the themes emerging from feedback about the workshop included: the importance of self-care, self-resilience, and the influence of a person's values, assumptions, beliefs and expectations on the way they perform as managers. When asked about aspects of the program that they would use at work, typical responses were, 'Self care strategies', 'awareness of self', 'self care strategies for my team' and 'Continue to increase the aspects which help me survive as that authentic and resilient person.'

The participants from each program reported benefits in networking and connecting with others from remote regions at the workshop, saying that the benefits included realising 'that I am not alone, [we] all have similar issues', 'understanding that most of us experience similar issues' and 'connecting with others'. It appears that attending the program and connecting with others who can relate to their experience is beneficial in itself (Gardiner, Sexton, Durbridge & Garrard, 2005). Further, Holmberg, Larsson and Bäckström (2016, p.156) suggest that health and wellbeing are indicators of long-term sustainability in management roles, proposing that a disparity in the demands of the role and the capacity of the manager can lead to lower health status and a diminished sense of

wellbeing. This suggests that aspects of management development programs reported by managers as improving their management capacity and wellbeing, may influence the retention of managers in management roles. While this appears highly relevant to performance; health and wellbeing are rarely measured as outcomes of management development programs (Holmberg et al., 2016).

Study two

The empowerment program was implemented with the support of the organisation’s management team and aimed to empower their Aboriginal and Torres Strait Islander human services workforce to improve the health and wellbeing of the families, and the children that they work with, so that they can have the opportunity to make choices about their own lives. However, before a human services worker can help others, they need to heal themselves. The questionnaires completed at the beginning and end of each workshop asked participants to rate how they were feeling about specific aspects of their life on a questionnaire containing Likert scales, and short answer questions from validated tools. One of these validated tools was the Australian Unity Wellbeing Index (AUWI) is a survey that allows individuals to measure their personal wellbeing (Australian Unity, 2018). Six out of the seven participants (all four of the participants living in remote communities) reported that their wellbeing improved at the end of the program (Figure 1). Moreover, two of the participants (WP2 and WP3) assessed their wellbeing at the end of the program at a level higher than the Australian national average of 76.5. In contrast, one participant reported a slightly lower score at the end of the workshop, for reasons currently unknown.

FIGURE 1 HERE

At the end of the program, participants were asked how they would use what they had learned at work and home. The emergent themes were: *personal wellbeing* with one participant saying, ‘Self-care - find time for me; exercise; plan my day; use FWB strategies for stress; seek assistance.’; *wellbeing of others*, with one participant saying ‘I want to share and enlighten people that FWB is good and will benefit everyone in finding themselves’; and *skills/tools they can use to support wellbeing*, with one participant saying ‘write in my life journal and reflective diary each day.’

What can we learn from these studies?

While these two studies look very different on first glance; there are more similarities than differences when the health and wellbeing benefits are considered. They do not specifically focus on workplace health and wellbeing; however, the support mechanisms integrated into the programs to assist participants in completing the program, did just that! That is, the facilitators, peers and mentors that play a role in the group training, are in fact proxies for supporting the participants to implement health and wellbeing strategies into their own lives. This support resulted in improved engagement and performance during the program and subsequently improved participants' health and wellbeing.

The participants from both programs work in geographically remote and isolated regions and have leadership roles. This means that they are vulnerable, as they do not have the same access to peers (i.e. similar role and level) as human services workers in urban areas. Also, being residents of remote Australia, they too form part of the vulnerable subpopulation experiencing poorer health outcomes (Wakerman & Humphreys, 2013; World Health Organisation (WHO), 2010).

Globally, the pressures of competitive markets and changing labour laws, means heavier workloads and increased pressure on individuals as the era of 'getting more from less' extends beyond the traditional boundaries of the workplace and into employees' personal lives (Robertson, Cooper, Sarkar & Curran, 2015). Health and wellbeing initiatives that create positive workplaces will not only improve the health of employees, these initiatives can also lead to improvements in organisational commitment, culture, employee engagement and job satisfaction (Baptiste, 2007; Devonish, 2016).

For human service organisations (e.g. health services, not-for-profits) operating in remote regions globally, there is often a limited pool of skilled applicants. These workforce challenges put further pressure on those in leadership roles who are often prematurely promoted, have limited access to training, and compensate for vacancies and turnover by taking on additional responsibilities (Onnis & Pryce, 2016). As such, although important, it may be difficult to take leave from the community. However, their commitment to their clients, means that they often put their clients' needs before their own which can be quite detrimental to their own health and wellbeing, and to their performance. Therefore, training programs aimed at improving skills and competence; that integrate workplace health and wellbeing at the same time, indirectly assists these leaders to develop the skills needed.

Once leaders see the value in improving their own health and wellbeing, they are more likely to implement initiatives that support the health and wellbeing of their staff. This is consistent with several studies reporting that while employee participation is a critical success factor for improvements; health and wellbeing interventions were more likely to improve both wellbeing and performance if implemented concurrently at the individual, leader and organisational level (MHWA, 2014; Neilson et al., 2017). Further, the MHWA (2014) suggests that initiatives are more effective in smaller organisations or when implemented in groups, supporting the positive findings from these small group training and development programs.

In both studies, there was an assumption that participants would need support throughout the program. Hence, personal support was built into the programs from the start. In both programs this support not only improved the participants learning experience, it influenced their health and wellbeing. Finally, the workshops were integral to the health and wellbeing improvements. While it is costly to bring people together, especially those based in remote areas, the participants and facilitators from both programs commented on the differences that they noticed (e.g. improved confidence, improved communication). For the participants, it appeared that the shared experience and comfort in knowing that their experience was not unique appeared to improve their confidence in sharing stories, their learning through experience, and their health and wellbeing. Hence, management and leadership programs can indirectly improve the workplace health and wellbeing of managers and leaders.

Limitations

There were limitations for both studies arising from the small groups of participants. Therefore, the findings cannot be generalised; however, they did provide data for exploratory studies where insights can inform future research directions. In addition, as health and wellbeing was a program aim for study one the data was limited, and caution was taken about reading too much into the data. The authors also acknowledge that there may be a perceived bias as some of the authors were also facilitators; however, with PAR it is usual for researchers to be part of both the intervention and research, and to work closely with participants during data collection and analysis.

CONCLUSION

This paper described an exploratory research study that used available data from two vastly different studies to explore a perceived health and wellbeing benefit indirectly experienced by leaders undertaking leadership and management training. The findings suggest that there is an opportunity for organisations to gain workplace health and safety benefits through integration into existing programs which is a more cost-efficient method than traditional workplace health and wellbeing programs. The evidence from the two small group programs suggests that embedding personal support mechanisms into existing training and development programs, particularly those aimed at building capacity to improve the client experience, may have positive health and wellbeing benefits for employees. For leaders in not-for-profit or public sector organisations in poorly resourced areas, the focus has to be on their clients, so embedding health and wellbeing initiatives into training and development opportunities focused on improving services for their clients may be a more cost-effective approach that offers multiple benefits. While these indirect positive benefits of attending the programs are consistent with the observations reported by others; it remains difficult to substantiate the benefits of these types of small group programs.

Until further research into alternative strategies for improving workplace health and wellbeing, such as the indirect approach described in this paper are evaluated, health and wellbeing will continue to be a workplace issue of global significance. The benefits of a healthy, productive workforce on performance, workforce sustainability, culture and organisation success is not disputed. The challenge is the complexity and difficulty in measuring and attributing improvements to a particular source (e.g. the program) and providing evidence that the investment is providing an organisational benefit. Hence, if the type of management and leadership programs described in this paper can indirectly improve the health and wellbeing of managers and leaders; further research into measures that can provide the evidence to support this argument through empirical research are imperative.

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Table 1: Self-assessed rating for changes in capability (management program)

How do you rate your level of CAPABILITY to: <i>(1 = Poor ... 5 = Excellent)</i>	Pre-Program	Post-Program
Use emotional intelligence in the workplace	2.4	3.6
Build self-resilience	2.8	3.3
Use a reflective journal for personal development	2.3	3.7
Use a reflective journal for professional development	2.2	3.6
Use mentoring to support management development	2.8	3.4

Table 2: Self-assessed rating for changes in knowledge (management program)

How do you rate your level of KNOWLEDGE about: <i>(1 = Poor ... 5 = Excellent)</i>	Pre-Program	Post-Program
Using emotional intelligence in the workplace	2.55	3
How to develop self-resilience	3.00	2.88
Using a reflective journal for personal development	2.45	3.38
Using a reflective journal for professional development	2.45	3.38
How mentoring can support management development	3	3.75

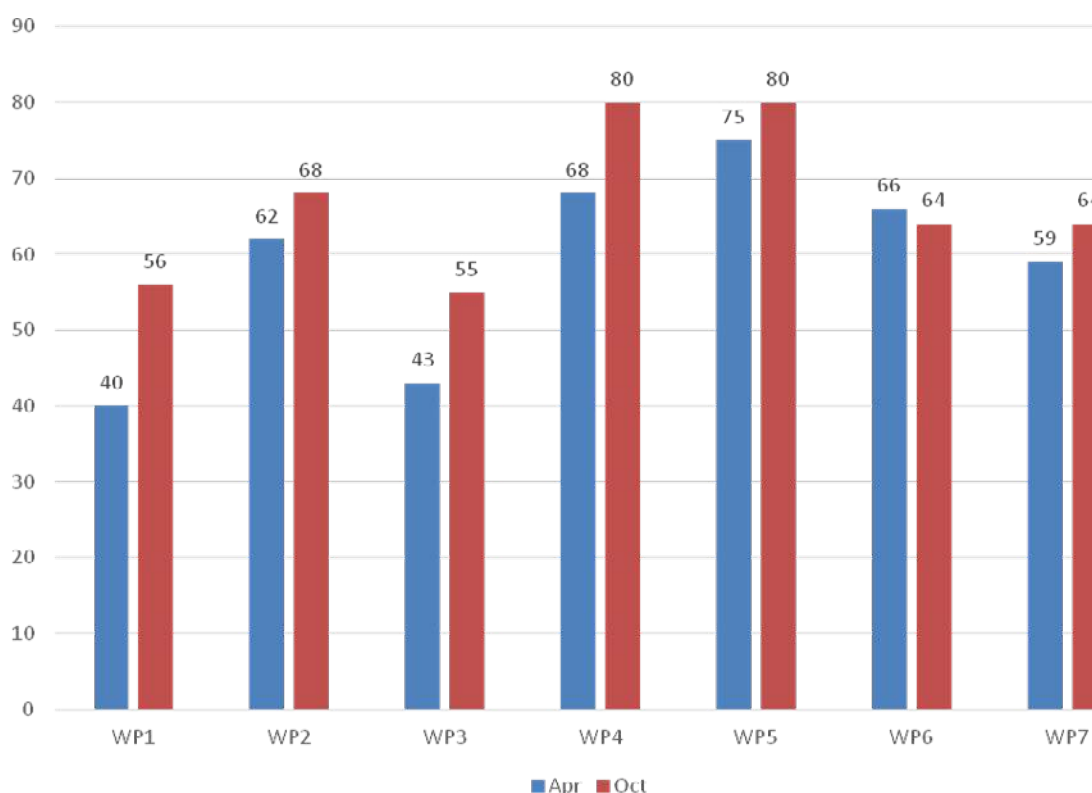


Figure 1: Australian Wellbeing Index pre- and post-program scores (empowerment program)

05 Human Resource Management

Competitive

**An Exploration of Personal Values, Self-development and Job
Performance
In The Catholic Church**

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An Exploration of Personal Values, Self-development and Job Performance In The Catholic Church

Abstract

This study proposes that the personal values-job performance relationship will be strengthened by self-development initiatives. The hypotheses were examined in the Catholic Church where values serve as a major role in performing the ministry. Overall, 100 priests from the Catholic Church in Indonesia took part in the survey. Exploratory factor analyses revealed three personal values and six variables relative to priests' job performance. Regression analyses revealed that higher levels of personal values and a higher level of self-development were associated with the higher levels of priests' performance. The results also found that higher levels of self-development in combination with higher levels of values (altruistic and moral) were generally related to higher levels of several indicators of priests' job performance.

Keywords: personal values, self-development, job performance.

Research has found that personal values are positively related to job performance. However, this relationship deserves more attention, due to the limited understanding of the mechanism identifying the relationship and also that different values might be related to different types of job performance. Further, research has not explored the potential of self-development (self-initiated development activity) to strengthen the values-job performance relationship.

One context where the relationships between values, self-development, and performance is important and under-researched is the Catholic Church. Indeed, even though the presence of the Catholic Church throughout its ministry is well known, formal evaluation of priests' performance is absent in research and practice. In this present study, we propose that priest's job performance (ministry) will be influenced by two factors: personal values and self-development activities. Personal values are important as work of a priest is more related to intrinsic factors (e.g., values) than external factors, such organisational rewards. Meanwhile, self-development initiative is as important because the lack of a regular, systematic and formal training and development for the priests after they ordained. As such, self-development has become the vital source for priests to enhance their

capacities. The present investigation employs a Social Cognitive Theory perspective to explore 1) the relationship between priest's personal values and job performance, 2) the relationship between self-development activities and priest job performance, and 3) the extent that self-development activities affect the relationship between personal values and job performance.

LITERATURE REVIEW

Job Performance

Job performance has been studied extensively in various literature. A review of the literature reveals two key features related to job performance. First, job performance is defined in terms of behaviour that an employee contributes both directly and indirectly to the accomplishment of organisational goals (Rich, Lepine, & Crawford, 2010; Rotundo & Sackett, 2002). Specifically, the behaviours represent scalable actions of outcomes where employees contribute to organisational objectives (Viswesvaran & Ones, 2000). Second, job performance is multidimensional (Campbell, Gasser, & Oswald, 1996; Motowildo, Borman, & Schmit, 1997) which refers to a complex activity containing multiple performance mechanisms. Overall, definitions of job performance focus on behaviours that affect the organisation's goals and are under the control of individuals. In this research, job performance is defined as task performance, comprising behaviours directly involved in producing goods or services or activities that provide direct support for the organisation's technical process (Motowildo et al., 1997).

Interestingly, priests' job performance has not been clearly defined nor distinctively measured. However, the document titled *Lumen Gentium* (1964) mentions three types of priests' roles which is widely known as *Tri Munera Christi*: leader (i.e. performing the role as a shepherd), preacher (i.e. proclaiming the gospel), and sanctifier (i.e. performing the prayer and sacramental ministry). Aligning with the Church's guidelines, previous studies have addressed the needs to assess priests' ministry by mentioning several items relating their role (Krindatch & Hoge, 2010; Rossetti, 2011). With regards to the uniqueness of the population and the context (e.g., no career path in

priest's life, work as a calling and a long-life devotion), we propose that one potential factor which will affect priest's performance is their personal values.

Personal Values

Research highlights that values influence behaviour (Rokeach, 1973; Schwartz, 1992).

Overall, key features relating to values: 1) are beliefs, 2) they refer to desirable goals and action supporting these goals, 3) transcend specific actions and situations, 4) serve as standards to guide the selection or evaluation of behaviour, and 5) are ordered by importance relative to one another (Smith, Peterson, & Schwartz, 2002). In the CC, priests' personal values may potentially affect performance but potentially also motivated priests to join the priesthood (Zickar et al., 2008). As such, there would be a fit between priests' personal values and Church's values. Two official Church's documents have highlighted three main values which drive the ministry of the Church: spiritual, moral, and altruistic (or social) values (Council, 1965; *Gentium*, 1964) which align to the objectives of the church.

Past studies have defined these values in distinctive ways and revealed their positive effect on employee' performance. First, spiritual values ('spirituality') emphasise connectedness with sacred and transcendent meaning which a person brings to their environment and influences their behaviour (Karakas, 2010). Relating to performance, Jurkiewicz and Giacalone (2004) have argued that spiritual values affected one's motivation, commitment, and adaptability. Further, those with higher spiritual values exhibit greater persistence in overcoming job's obstacles (Schulman, 1999), demonstrate a high commitment (Milliman, Czaplewski, & Ferguson, 2001), and show higher employee well-being (Karakas, 2010). Moral values are defined as the criteria by which individuals judge whether the behaviour is morally right or wrong when interacting with other people (Jiang, Lin, & Lin, 2011). Relating to performance, a study conducted by Schwepker and Ingram (1996) found that moral values were positively related to individual job performance, specifically on technical knowledge and sales presentation. Last, altruistic values are defined as a primarily other-regarding orientation, and more specifically as selfless values and act done for the sake of another (Batson, 2002; Post, 2007). In the performance context, Mallén, Chiva, Alegre, and Guinot (2015) found that leaders' altruistic values

positively predicted organisational learning capability which in turn lead to higher level of organisational performance (i.e., customer retention, sales growth, and profitability).

H 1. Personal values (spiritual, altruistic, and moral) will be positively related to job performance (i.e. sanctification (h1a), leadership (h1b), and proclamation (h1c))

Self-Development

This study proposed that the relationship between values and job performance will be strengthened by priests' self-development activities. Self-development is defined in terms of employees having the primary responsibility for taking initiatives, identifying, planning, formulating learning goals, learning, carrying out, and evaluating their own learning experience (e.g., Boyce, Zaccaro, & Wisecarver, 2010). Self-development in the workplace and has been found to predict various job outcomes, particularly with regard to employees' job satisfaction, effectiveness, and engagement. Recently, in a meta-analytic study of 3146 studies related to Informal Learning Behaviour (ILB), Cerasoli et al. (2016) have found that engagement in ILBs explained approximately 18% of the variability in job performance. Theoretically, the relationship between self-development and job performance can be explained using Self-determination Theory (SDT) (Deci & Ryan, 1985) which proposes that individuals are self-determined or intrinsically motivated to engage in activities that are personally interesting (Gagné & Deci, 2005). Such a rationale fits with a key characteristic of self-development which is related to volitional effort. Indeed, underlying most definitions of self-development activities is the notion that they are volitional (i.e., chosen without any pressure) and intentional (e.g., to increase one's knowledge or improve oneself). As such, self-development reflects intrinsically motivated behaviour of a person which is essentially free from external regulations (e.g., external pressure from the organisation to engage in the activity). When individuals are autonomously motivated, they gain self-support through their own actions, which reflects in their self-development activities. Self-development activities are seen as important for priests since once they are ordained, there are no standardised development programs for them in improving their ministry. Therefore, we propose that there will be an interaction between personal values and self-development that will be positively related to higher level of job performance.

H2. Self-development will be positively related to job performance (i.e. leadership (h2a), proclamation (h2b), and sanctification (h2c))

Moderating Effect of Self-development in Values-Job Performance Relationship

In this study, the possible interactions between values and self-development on job performance are explained by Social Cognitive Theory (SCT) (Bandura, 1986) which highlights a dynamic and reciprocal interaction of the person (e.g. values and motives), environment (e.g. social support structure), and behaviour (e.g. skill and complexity) in the learning process. SCT explains the presence of potential interactions between personal values and self-development in two ways. First, SCT posits that there is a person-environment interaction in which human beliefs and values are influenced by the environment (e.g., the values ascribed importance by the CC can influence priest' personal values). Second, SCT identifies a person-behaviour interaction in which individual cognitive processes affect his/her behaviour (Bandura, 1986). For example, a priest's values will influence his behaviour within the CC and in society. Overall, it is proposed that there is an interaction between personal values as a part of the human cognitive process with self-development as a specific behaviour. Both have a reciprocal relationship such that the focus of the self-development will be influenced by values. Further, the engagement of such self-development will emphasize and ascribe more importance to those values.

From an SCT perspective, it is possible that the presence of self-development will strengthen these values. Spiritual values, for example, are developed along with the changing environment. Individuals should actualise their faith to be always aligned with the present context and thus could give guidance for the current challenge (Roxoborogh, 1995). Further, altruistic values are also developed as the society changes. As different social problems such as poverty, migrants, and unemployment emerge, one's values and individual willingness to learn more about the issues are impacted. This represents a process of learning and adjusting which self-development may support. The same reasoning can be applied to moral values which constantly grow and evolve (e.g., same-sex marriage, pro-life and pro-choice) in many cultures as a result of changing societal attitudes, learning, and awareness of consequences of what has been considered morals. Thus, there is a possibility that

the changes tended to make people reviewing their beliefs, learning from many sources in order to have a holistic view and then responding to the recent challenges. Finally, they may strengthen their beliefs or can adapt to other views as a result of the learning process.

H 3. Higher level of self-development will moderate the relationship between spiritual values and job performance (i.e., sanctification (h3a), leadership (h3b), and proclamation (h3c)).

H 4. Higher level of self-development will moderate the relationship between altruistic values and job performance (i.e., sanctification (h4a), leadership (h4b), and proclamation (h4c)).

H 5. Higher level of self-development will moderate the relationship between moral values and job performance (i.e., sanctification (h5a), leadership (h5b), and proclamation (h5c)).

METHODS

Procedure and Sample Demographics

A purposive sampling method was used to assess the priest population. First, a pilot study of 30 priests was conducted to investigate and to review the developed scale. Second, 267 priests in Jakarta were invited to participate in the survey with a total of 100 priests voluntary responded. In the sample, religious order's affiliation was distributed across the sample with diocesan priests were 42% and religious order's priests were 58%. Year of birth included 6% 1925 to 1945, 27% 1946 to 1964, 40% 1965 to 1977, and 27% 1978 to 1990. In terms of tenure 13% were ordained less than 5 years, 38% from 6 until 15 years, and nearly half (49%) for more than 16 years.

Measures.

Focal variables were personal values (spiritual, altruistic, and moral), self-development, and types of priest' job performance (leadership, proclamation, and sanctification). All items were subjected to EFA test and were rated on a Likert scale from 1 (*strongly disagree*) to 6 (*strongly agree*). The Cronbach alpha on these variables is above the cut off score of .6 ranging from .78 to .87.

Personal values. Priest' personal values comprised three types of values: spiritual, altruistic, and moral values. Items adapted from Krindatch & Hoge (2010) and Rossetti (2011). Three items assessed spiritual values (e.g., “*To be a priest is to take part in the movement of God’s proclamation*”). Six items assessed altruistic values (e.g., “*Many things can be expected from my*

presence as a priest to improve the people’s social welfare”). Three items assessed moral values (e.g., *“My message in moral teachings is well-accepted and understood by the people”*).

Self-development. Six items assessing self-development activities were adapted from Noe, Tews, and Dachner (2010), Rossetti (2011), and Tannenbaum (1997). An example item is *“As a priest, I actively follow the development of current situation by watching television, reading newspapers, and using the internet”*.

Job performance. Priest’ job performance covers three main tasks: leadership, proclamation, and sanctification. Overall items were adapted and modified from various documents (Krindatch & Hoge, 2010; Rossetti, 2011). Six items assessed priests’ leadership in handling the church and congregation (e.g., *“As a priest, I give sufficient time to serve the people”*). Eight items assessed sanctification dealing with regular prayer service (e.g., *“I lead the daily Eucharist diligently”*). Lastly, nine items assessed proclamation (e.g., *“My preaching inspires the congregation’s life”*).

RESULTS

Exploratory Factor Analysis.

Several EFAs were conducted to identify latent constructs. Items relating priest’s personal values were more exploratory and therefore was assessed using principal components analysis extraction with a Varimax rotation. While others variables were examined using the principal axis factoring method of extraction with an oblique rotation method given that the items and variables were informed by theory and the expectation the latent factors would be correlated with each other.

Personal values items loaded on three stable factors. The factor solution explained 64% of the total variance. Overall, six items loaded onto a factor labelled altruistic values; three items loaded onto spiritual values, and three items loaded onto moral values. See Table 1.

[Insert Table 1 here]

An EFA of leadership items explained 67% of the total variance and revealed two factors: four items loaded onto shepherd leadership, and two items loading onto accessible leadership (See Table 2). An EFA of sanctification items explained 61% of total variance and revealed two factors: six items loading onto self-sanctification, and two items loading onto ‘access to sanctification’. An

EFA In assessing task of proclamation, 9 items were used to measure priest’ perception of how they conduct the task of teaching-preaching. Results revealed two factors solution explaining 72% of the total variance. The first factor was labelled as the quality of proclamation as the items revolved around teaching and the second was labelled quality of message as the items refer to the content of their proclamation task.

[Insert Table 2 here]

Preliminary Data Analysis

Table 3 shows the descriptive data, reliability scale and the correlation between the focal variables. All scale were internally consistent with correlations ranging from low to moderate

[Insert Table 3 here]

Hypothesis Testing.

The first inspection is on the main effect between values and job performance (H1) and between self-development and job performance (H2) (See Table 4). Partially supporting H1 result revealed that the values as a set accounted for a significant increment in variance on accessible leadership ($Adj. R^2=.18, F(3,96) = 8.163.137, p<.001$), shepherd leadership ($Adj. R^2=.30, F(3,96) = 15.221, p<.001$), quality of proclamation ($Adj. R^2=.37, F(3,96) = 20.684, p<.001$), quality of message ($Adj. R^2=.27, F(3,96) = 135.279, p<.001$), self-sanctification ($Adj. R^2=.34, F(3,96) = 18.294, p<.001$), and on access to sanctification ($Adj. R^2=.18, F(3,96) = 8.058, p<.001$).

Interestingly, spiritual values only significantly and positively predicted the quality of proclamation ($\beta = .19, p<.05$). Altruistic values significantly predicted accessible leadership ($\beta = .35, p<.01$), shepherd leadership ($\beta = .22, p<.01$), quality of message ($\beta = .43, p<.001$), and access to sanctification ($\beta = .22, p=.05$). Lastly, moral values were significantly and positively predict shepherd leadership ($\beta = .43, p<.01$), quality of preaching ($\beta = .44, p<.001$), and self-sanctification ($\beta = .43, p<.001$).

Partially supporting H2, the result also revealed that entry of self-development explained significant increment in variance on accessible leadership ($Adj. R^2=.06, F(1,98) = 6.921, p<.01$), shepherd leadership ($Adj. R^2=.36, F(1,98) = 56.223, p<.001$), quality of proclamation ($Adj. R^2=.33, F(1,98) = 48.867, p<.001$), quality of message ($Adj. R^2=.34, F(1,98) = 51.722, p<.001$), self-

sanctification ($Adj. R^2 = .37, F(1,98) = 58.610, p < .001$), and on access to sanctification ($Adj. R^2 = .12, F(1,98) = 14.167, p < .001$). Self-development was found significantly and positively predicted higher level on every type of priests' performance: accessible leadership ($\beta = .26, p < .01$), shepherd leadership ($\beta = .60, p < .001$), quality of preaching ($\beta = .58, p < .001$), quality of message ($\beta = .59, p < .001$), self-sanctification ($\beta = .61, p < .001$), and access to sanctification ($\beta = .35, p < .001$).

[Insert Table 4 here]

Further, the investigation of the potential moderating effect of self-development on the relationship between personal values and job performance revealed that the entry of the main effect (step 1) have explained a significant amount of variance in the accessible leadership ($Adj. R^2 = .18, F(4,95) = 6.263, p < .001$), shepherd leadership ($Adj. R^2 = .38, F(4,95) = 16.209, p < .001$), quality of proclamation ($Adj. R^2 = .41, F(4,95) = 18.113, p < .001$), quality of message ($Adj. R^2 = .36, F(4,95) = 15.052, p < .001$), self-sanctification ($Adj. R^2 = .41, F(4,95) = 18.772, p < .001$), and access to sanctification ($Adj. R^2 = .17, F(4,95) = 6.088, p < .001$). The entry of the interaction terms (step 2) explained a significant incremental amount of variance on accessible leadership ($R^2 ch. = .07, F(3,92) = 3.114, p < .05$) and quality of proclamation ($R^2 ch. = .07, F(3,92) = 4.044, p < .01$). Result revealed no interaction between spiritual values and self-development on predicting job performance.

Overall, five significant interactions were observed to partially supporting H4 and H5. First, altruistic values and self-development significantly predicted higher level of accessible leadership ($\beta = .36, p < .01$) and quality of proclamation ($\beta = .35, p < .01$). Visual inspection of figure 1 shows that levels of accessible leadership significantly increased for those with high self-development as the altruistic values increase ($B = 0.65, t(96) = 6.44, p < .01$).

[Insert Figure 1 here]

Moreover, figure 2 shows that the levels of quality of proclamation increased for those with high self-development as the altruistic values increase ($B = 0.25, t(96) = 3.25, p < .01$).

[Insert Figure 2 here]

Second, the interaction of moral values and self-development was both a significant and a negative predictor of accessible leadership ($\beta = -.27, p < .05$). Figure 3 identifies that accessible

leadership increased significantly for those with low self-development as the moral values increased ($B = 0.28$, $t(96) = 3.50$, $p < .01$).

[Insert Figure 3 here]

Third, the interaction also revealed that moral values along with self-development significantly predicted higher level priest's quality of proclamation ($\beta = -.24$, $p < .01$). Figure 4 shows that the level of quality of proclamation significantly increased for those with low self-development as the moral values increased ($B = 0.41$, $t(96) = 5.85$, $p < .01$).

[Insert Figure 4 here]

Fourth, the interaction between moral values and self-development were significantly but negatively predicted for levels of priest's access to sanctification ($\beta = -.25$, $p < .01$). Inspection of Figure 5 identifies that the level of access to sanctification significantly increased for those with low self-development as the moral values increased ($B = 0.26$, $t(96) = 3.37$, $p < .01$).

[Insert Figure 5 here]

DISCUSSION

Theoretical and Practical Implications

This study contributes to value literature and job performance by developing a three-factor scale (i.e. spiritual, altruistic, and moral) that is aligned with pre-determined values of the CC. It enables this organisation to conduct the assessment of priests' values. Simultaneously, it also contributes to job performance literatures by developing the related items expected from priest's ministry on their three-main task. This initial finding gives insight for the improvement of human resource management in the CC. Specifically, it will help the church leaders to create a performance appraisal tool for the priest.

In terms of the main effects, personal values were positively related to different types of performance. These findings are consistent with values studies conducted in FBOs linking higher personal values with job performance relationship (e.g. spiritual values and higher level of productivity (Karakas, 2010), altruistic values and higher level of sales growth (Mallén et al., 2015), and moral values and sales presentation (Schwepker & Ingram, 1996)). Overall, while limited in

specific types of performance, results have given insight for the organisation to innovate in many ways concerning promoting and providing policies which may encourage and maintain one's values.

Supporting expectations, the result revealed that higher self-development was significantly related to higher levels of different types of job performance-- self-directed learning had a strong effect on individual job performance. As such, HR practitioners in the CC could ensure that all the priests are encouraged to conduct self-development activities. For example, they can provide access to worldwide news and literatures and also give rewards for priests partaking in such activities. Self-development activities will enable priests to always develop themselves align with the changing environment-society. They can adjust and respond well to the current situation, and finally, such condition will inspire the priests' ministry.

Overall, five significant interactions were revealed differentially involving moral and altruistic values. Two interactive effects were related to altruistic values and job performance (accessible leadership and quality of proclamation). Specifically, for priests reporting high self-development, job performance increased as altruistic values increased. This result supports the notion that altruistic values inherently supports priests with high self-development to always align with their willingness to help others that may benefit the society. This finding supports previous untested suggestions by Cornelio (2012) that priests' willingness to help the poor society (altruistic) is one of the key values which could lead to various attitudes in solving the social problem. Overall, this finding is new to research, regardless of the sector of the organisation. The contribution may also be beneficial for other organisations which focus on social-caring activity as their core operation, such as human service organisations (e.g., orphanage, nursing home).

Inspecting the interaction between moral values and self-development, performance levels did not change for those reporting higher self-development. This suggests that high moral values were important to performance if no self-development is undertaken. This represents a potentially important area of focus for the Church as these priests may be falling back on older less-developed notions which may have changed in the society. New knowledge is not developed because of low engagement in self-development, leading to lower levels of change in beliefs. However, their higher

levels of moral values still become a significant predictor of job performance. Interestingly, those with low moral values and low self-development have the lowest level of job performance. This finding is supported by previous literatures –while it doesn’t measure simultaneously- that high level of moral values and high level of self-development positively related to higher job performance. No interactions were found between spiritual values and self-development possibly indicating that perhaps priests’ spiritual values are already well-developed and received from the unchanged sources (Bible and Catholic tradition taught by the authority).

Limitations and future directions

Several limitations are noteworthy. First, this study is cross-sectional and therefore dispositional variables could make results difficult to interpret (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003). A longitudinal design should be considered to track the perception of job performance over time and reduce CMV. Second, the small sample size limits the power of the analyses. Third, this study explores a unique context of Catholic priests in one geographic region. Hence, the results may be limited in generalisability. Fourth, self-rated perception, especially on job performance, can lead to a biased result. Other methods on measuring performance, such as supervisor and peer-rated will give an advantage on evaluating one’s performance. Last, future research could explicitly test the self-determination theory and P-O Fit theory via the scales developed for these constructs.

CONCLUSION

This study highlights the importance of values and self-development in predicting priests’ job performance: values and self-development were positively related to various dimensions of priests’ performance. This study has provided insight to improve human resources practice within the CC, such as to create a performance evaluation tool for the priest and to develop policies which support the fulfilment of one’s values and to encourage individuals to undertake self-development activities.

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Table 1. Exploratory factor analysis of priest's perception of values

Items	Factor Loadings		
	Altruistic values	Spiritual values	Moral values
Many things can be expected from my presence as a priest to improve the people's social welfare.	.82		
As a priest, I stand for the sufferings (the poor, victims of injustice, the disabled, etc.).	.77		
As a priest, I become an agent of change for common good	.69		
As a priest, I am happy to be sent to serve the poor.	.67		
I actively involved in the effort of poverty reduction.	.63		
My presence as a priest gives positive impacts to reduce poverty within the society.	.62		
To be a priest is to take part in the ministry of human's sanctification.		.89	
To be a priest is to take part in the movement of God's proclamation.		.88	
I am happy as a priest because this way of life is the answer for a divine calling.		.79	
My message in moral teachings is well-accepted and understood by the congregations.			.89
My message in moral teachings is well-accepted and obeyed by the congregations.			.76
As a priest, my presence brings peace and harmony to the wider society.			.73

Table 2. Perceptions of self-rated on Performance (Leadership, Sanctification, Proclamation)

Items	Factor loadings					
	Shepherd leadership	Accessible leadership	Self-sanctification	Access to sanctification	Quality of Proclamation	Quality of Message
I am friendly to the congregation at the church where I am assigned.	.66					
I know my congregation well at the church where I assigned.	.77					
The congregation are enthusiastic with my presence.	.95					
As a priest, my presence makes church's activity becomes lively and active.	.82					
The congregation can easily reach me at any time.		.79				
As a priest, I give sufficient time to serve the people.		.91				
I lead the daily Eucharist diligently.			.49			
I am punctual in leading the Eucharist.			.66			
I prepare the Eucharist well (neat, fresh, and a well-prepared sermon).			.75			
I have a private praying time (daily pray).			.58			
The example of my life (words and action) helps the congregation's spiritual growth.			.58			
I become a good spiritual teacher for the people.			.58			
The congregation can easily ask for my service to give the Sacrament of Penance out of the fixed schedule.				-.70		
The congregation can easily ask my service to give Sacrament of the Anointing of The Sick whenever requested.				-.95		
As a priest, I preach well.					.78	
As a priest, I believe that the congregation understand the relevancy of the message that I preached.					.98	
I preach based on or relevantly with the Gospel's theme of the day.					.64	
My preaching inspires the congregation's life.					.89	
The counselling service that I give help the congregations to overcome their problems or life's challenges.					.49	
The teaching that I give (e.g. marriage preparation course, bible study) is easily understood.					.65	
I have a good comprehension about the teaching of Catholic faith.						-.88
I have a good comprehension about the teaching material of Bible Theology.						-.83
I have a good comprehension about the teaching material of Church's morality.						-.97

Table 3. Descriptive, Cronbach Alpha, and Correlations

	M	SD	Alpha	1	2	3	4	5	6	7	8	9
1 Altruistic values	4.91	.61	.82									
2 Spiritual values	5.67	.45	.87	.41**								
3 Moral values	4.74	.68	.81	.58**	.33**							
4 Self-Development	4.98	.51	.80	.63**	.43**	.60**						
5 Shepherd leadership	5.03	.58	.87	.47**	.36**	.50**	.60**					
6 Accessible leadership	4.98	.57	.83	.44**	.21**	.34**	.28**	.48**				
7 Quality of proclamation	4.98	.55	.88	.47**	.39**	.58**	.58**	.79**	.39**			
8 Quality of Message	5.10	.54	.93	.53**	.29**	.39**	.59**	.66**	.43**	.57**		
9 Self-sanctification	5.16	.43	.80	.45**	.36**	.56**	.61**	.67**	.42**	.63**	.56**	
10 Access to sanctification	5.23	.56	.84	.39**	.29**	.38**	.36**	.37**	.49**	.38**	.40**	.53**

** $p < .01$ * $p < .01$, *** $p < .001$

Table 4. Main Effect Regression Analyses of Independent Variable to Job Performance.

Predictors	Accessible Leadership β	Shepherd Leadership β	Quality of Proclamation β	Quality of Message β	Self-sanctification β	Access to Sanctification β
<i>Main effects 1</i>						
Spiritual Value	.02	.16	.19*	.07	.02	.12
Altruistic Value	.35**	.22**	.14	.43***	.14	.22*
Moral Values	.12	.43**	.34***	.14	.43***	.20
Adj. R ²	.18***	.30***	.37***	.27***	.34***	.18***
<i>Main Effect 2</i>						
Self-development	.26**	.60***	.58***	.59***	.61***	.35***
Adj. R ²	.06**	.36***	.33***	.34***	.37***	.12***

* $p < .05$; ** $p < .01$, *** $p < .001$

Table 5. Two-way moderated hierarchical multiple regression analyses showing main effects and moderated effect on dependent variables

Predictors	Accessible Leadership β	Shepherd Leadership β	Quality of Proclamation β	Quality of Message β	Self-sanctification β	Access to Sanctification β
<i>Step 1 – Main effects</i>						
Spiritual Value	.04	.09	.14	.00	.10	.11
Altruistic Value	.39**	.07	.03	.27*	-.00	.20
Moral Values	.16	.18	.34**	-.03	.30**	.18
Self-Development	-.11	.41***	.29**	.44***	.40	.08
Adj. R ²	.18***	.38***	.44***	.36***	.42***	.17***
<i>Step 2 – Interaction terms</i>						
Spiritual Value x Self Development	.01	-.03	-.03	.21	.17	.06
Altruistic Value x Self-Development	.36**	.22	.35**	-.07	.08	.20
Moral Value x Self-Development	-.27*	-.08	-.24*	-.02	-.05	-.25*
R ² Ch.	.07*	.03	.07**	.03	.03	.04

* $p < .05$; ** $p < .01$, *** $p < .001$

Figure 1. Two-way interaction of altruistic values and self-development on accessible leadership

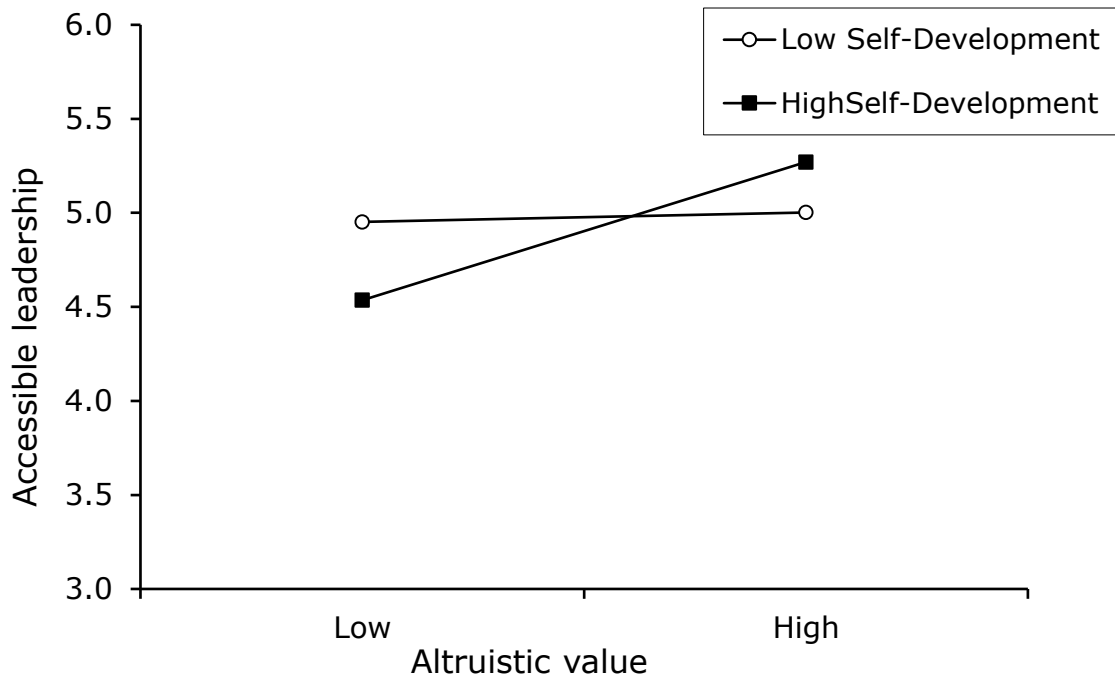


Figure 2. Two-way interaction of altruistic values and self-development on quality of proclamation

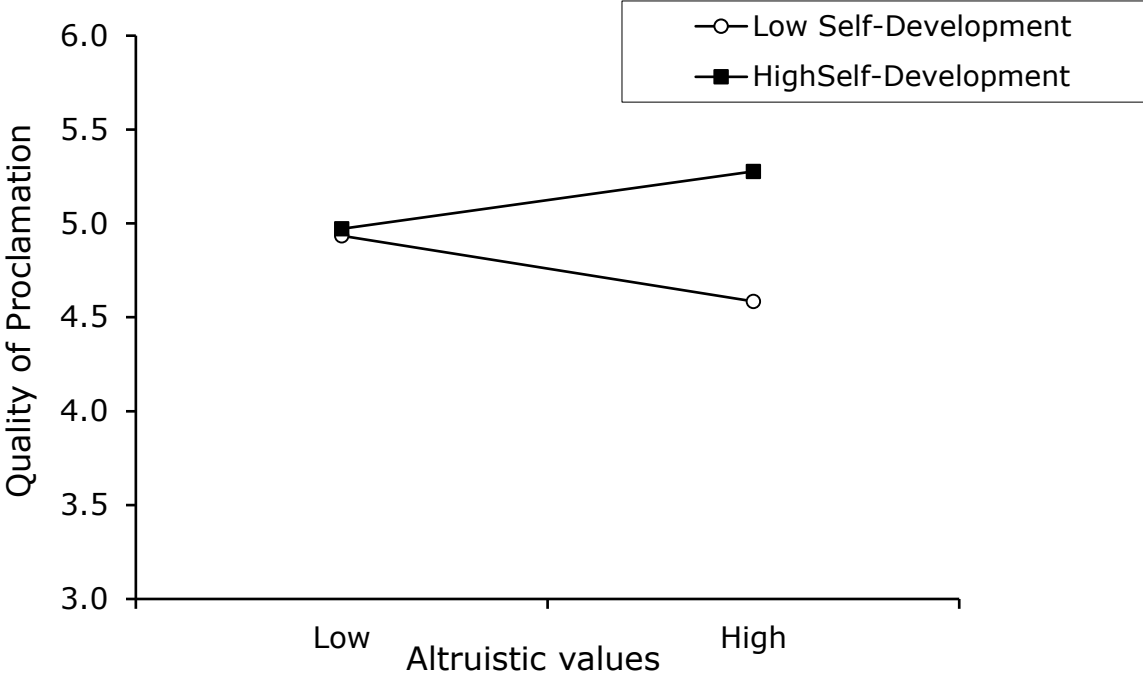


Figure 3. Two-way interaction of moral values and self-development on accessible leadership

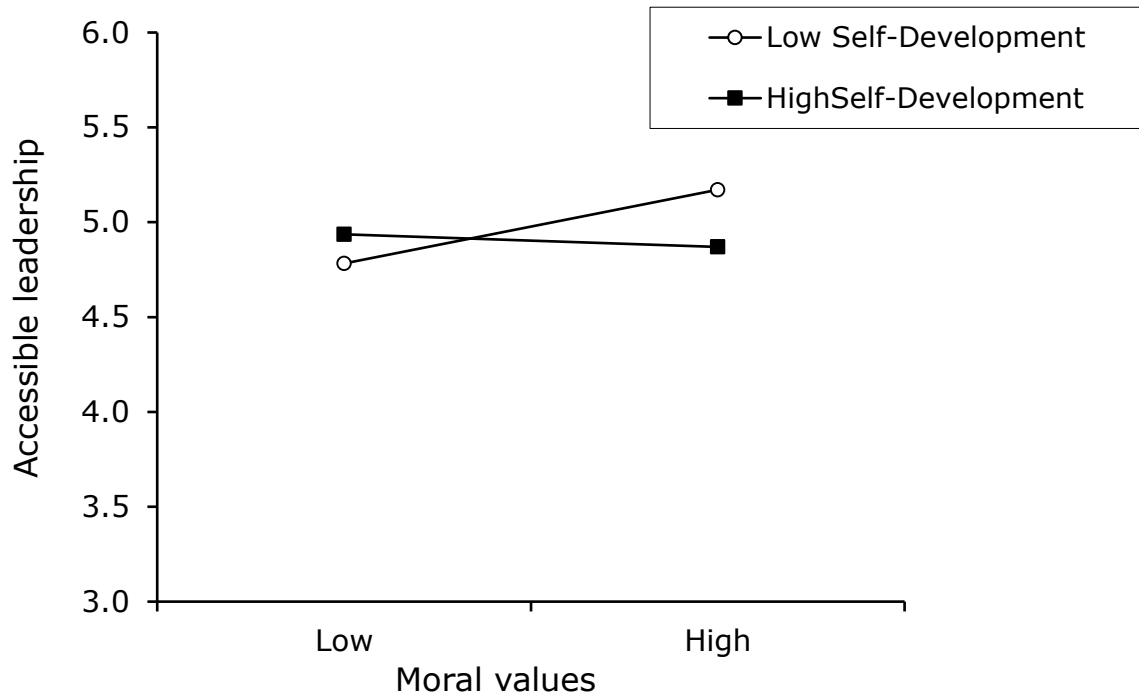


Figure 4. Two-way interaction of moral values and self-development on quality of proclamation

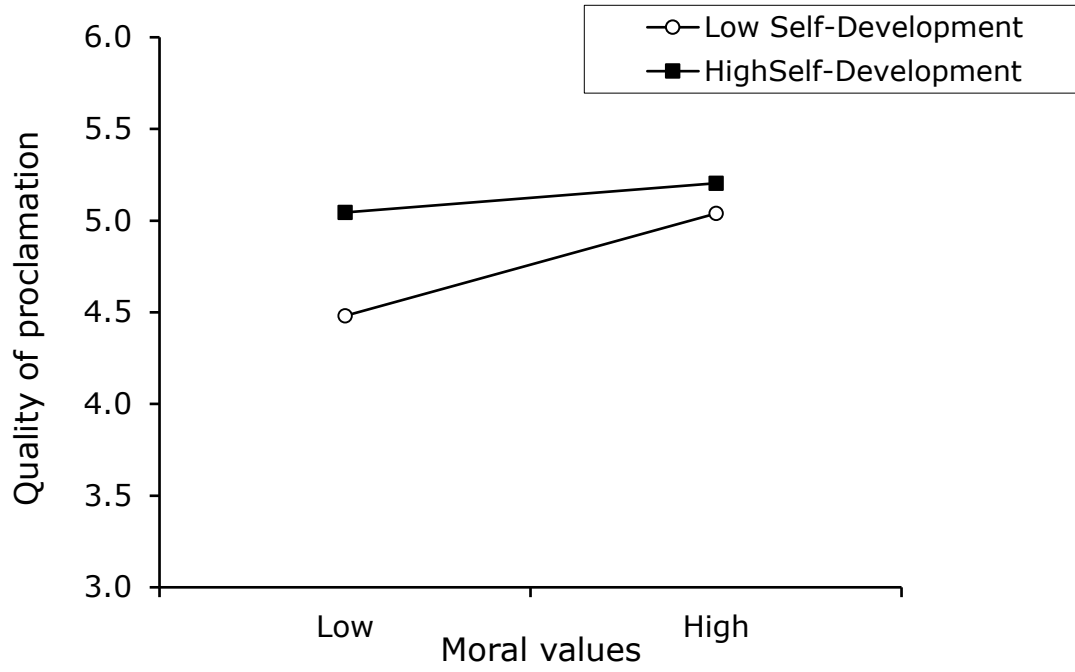


Figure 5: Two-way interaction of moral values and self-development on access to sanctification



11 Project Organising
Competitive

Is there a ‘project myopia’? Revisiting the project stakeholder perspective.

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Is there a ‘project myopia’? Revisiting the project stakeholder perspective.

ABSTRACT:

Scholars in the field of project management are suggesting that it is now time to move away from a project-centric approach towards a more stakeholder-centric approach. In this article we suggest that the field of project management, perhaps, is dealing with a ‘myopia’ and needs to move away from ‘project’ and make ‘stakeholders’ the main unit of analysis as projects need to deliver to continuously growing stakeholder expectations. In this conceptual paper, we examine the existing literature to identify techniques for effective stakeholder analysis in project management. Our proposal for future research is guided by the idea of engaged scholarship which fosters engagement of researchers and practitioners to address any knowledge gaps in the field of project management.

Keywords:

Human capital dimensions in project, reflective practice, project ecosystems, stakeholder management, value generation,

INTRODUCTION

In today's competitive environment, organisations can be seen to initiate various projects to help meet their objectives and often impacts of these projects can be experienced across the organisation. As Drouin and Besner (2012, pg. 176) note ‘projects are seen as venues for mastering business, implementing changes, innovating and developing competitive advantage.’ This has implied that project management has been an area which has seen the most significant development in organisations and management over the past few decades (Winter & Szczepanek, 2008). The goal of projects has been to ensure that projects are doing the right things to fulfill organisational objectives (Martinsuo, Sariola & Vuorinen, 2017). More importantly the strategic management of a project ensures integration and generates value for the organisation; however, this is not the traditional way projects are typically managed and a change is required (Holzmann, Shenhar & Stefanovic, 2017). Drouin, Muller and Sankaran’s (2017, pg. 9) proposes that projects need to deliver in order to meet the ‘continuously growing expectations of stakeholders’ and postulates a need for better stakeholder management in projects. The core task of projects is purposeful interaction with project stakeholders

(Eskerod, 2017) who are significant due to their contribution to the project by establishing criteria of success; hence, impacting the risk and influencing the projects' outcomes. Eskerod (2017, pg. 182) argues that it makes sense to replace the project with stakeholder as the 'main unit of analysis' and hence provides us with useful guidance on how to move to a more 'stakeholder-centric' approach in projects. Eskerod (2017) further argues that focus of project management should now be a 'stakeholder centric approach' as against a 'project centric approach.'

In this conceptual paper we concur with Eskerod's (2017) proposal for a 'stakeholder centric approach' and provide a contribution towards this approach in the field of project management. We identify tools and techniques from the existing academic literature to make this possible. Our research was guided by existing literature on stakeholder management from the field of management. The nature of projects is planned which often leads to change impacting organisations, hence, we also examined literature on planned change to identify key dualities and tensions (Seo, Putnam & Bartunek, 2004) that need to be addressed when implementing planned change initiatives. We build our argument for this 'stakeholder centric approach' by highlighting that the field of project management is currently dealing with 'myopia' – a term 'myopia' we borrowed from the quintessential article of Levitt (1960) which introduced the question for businesses - 'what business are you really in?' We argue that a similar question could be posed to the field of project management to identify what business they really are in? Projects may indicate that their business is to effectively (sometimes efficiently) deliver project outcomes to meet organisational outcomes (Pollack, 2017). We suggest that the purpose of achieving these organisational outcomes is driven fundamentally by the need of the stakeholders. Hence, we contend that the core business project management really is in – to achieve outcomes for the stakeholders – which makes effective stakeholder management a key purpose of project management. We support our argument by noting that the need for managers is to acknowledge the validity of diverse stakeholder interests and hence, attempt to respond to these stakeholders within a mutually supportive framework (Donaldson & Preston, 1995). It makes sense to recognise that understanding stakeholders is of utmost importance to ensure that stakeholders believe they are being dealt with in a satisfactory way.

We believe the ‘stakeholder centric approach’ would emphasise that ‘no project is on an island’ (Engwall, 2003) by making stakeholders the main unit of analysis. Our discussion regarding future research highlights that any research needs to serve dual purposes of applied use and advancing essential understanding. Therefore, we recommend using engaged scholarship so we can build an environment which fosters engagement of researchers and practitioners and create knowledge that solves practical problems while addressing the knowledge gap between theory and practice (Van de Ven & Johnson, 2006). In the next few sections, we provide an overview of existing literature in project management related to stakeholder management. Additionally, we borrow key ideas from the planned organisational change literature to identify how this could be utilised to improve stakeholder analysis in projects. We conclude by providing some directions for future research by using a ‘stakeholder centric approach’ for projects.

CURRENT STATE OF PLAY

Project management is an established discipline since past six decades with well subscribed bodies of practitioners such as PMBOK® and PRINCE2® (Padalkar & Gopinath, 2016). The field of project management has seen the most significant development in organisations and management over the past few decades (Winter & Szczepanek, 2008). More organisations are adopting project management practices across different areas of organisations and now consider it as a strategic discipline within organisations (Bakker, 2010; Winter & Szczepanek, 2008). A project may be considered as the achievement of a specific objective involving a series of activities and tasks and project management is focused on achievement of the project’s objectives (Munns & Bjeirmi, 1996). Hence, research interest in project management has surged over the past 15 years which has led to diversity in the field of project management research (Hall, 2012; Padalkar & Gopinath, 2016). However, Winter, Smith, Morris and Cicmil (2006) suggested that even though there has been significant development in project management practice, the discipline’s current conceptual base still lacks relevance to practices; hence impacting any improvement of performance of projects sectors. This is also echoed by recent works of Padalkar and Gopinath (2016) and Pollack and Adler (2015) who indicate that the field of project management lacks convergence. The central aspect of project management thinking is

‘hard systems model’ which is the rational, universal, deterministic model (Winter et al. 2006) which emphasises the traditional planning and control dimensions. It is important to acknowledge that the issues facing researchers and practitioners go beyond this ‘hard systems model’; thus it has been criticized for failing to give due attention to human issues which are often the most significant (Winter et al., 2006). A key finding of a network of researchers (see Winter et al. 2006 for more details) highlighted the need for more intellectual inquiry in the areas of ‘project complexity, social process, value creation, project conceptualisation and practitioner development.’ Floricel, Bonneau, Aubry and Sergi (2014, p.1091) concur with this and indicate that researchers need to develop better accounts of project phenomenon by examining ‘the specific nature of social relations, structures and processes that occur in projects’. While this does not mean abandoning the project life-cycle concept, there is call for a more all-inclusive representation of the realities of managing projects. This includes acknowledgement towards the reality of projects being complex, unpredictable and multidimensional (Winter et al., 2006). Therefore, the researcher focus in future needs to be on examining the continuously changing events including the complexity of social interaction and human action.

Stakeholder management

A core task of project management, as noted by Eskerod (2017, pg. 172), are ‘purposeful interactions’ with people who can impact or be impacted by a project. This has been the case since ongoing project evaluation and project stakeholder management have been discussed by Cleland (1985, 1986). It is critical for project managers to understand stakeholders to ensure and enhance strategic alignment between projects, portfolios, programmes and overall organisational objectives (Eskerod, 2017). But who are stakeholders and why are they relevant when managing projects? As noted by Eskerod (2017) and Eskerod et al. (2015), project stakeholders are significant because (i) the project needs their contribution (ii) stakeholders’ resistance may cause risks (iii) stakeholders may affect the project and (iv) the criteria established by stakeholders to assess the success of projects.

A stakeholder can be defined as ‘any individual, group, or entity who can affect or be affected by the project process or project outcomes’ (Eskerod, 2017, pg. 172). This definition includes and implies that stakeholder are not necessarily homogenous and human units, but broader than individuals – they

could be groups or entities. Additionally what is more critical to note is that stakeholders might span multiple layers (Eskerod, 2017). This provides us with a clear imperative to explore stakeholder management to enhance project success.

Stakeholder management (SM) is not a new idea – it is well established within management literature (Smith, Drumwright & Gentile, 2010). All organisations have stakeholders and there is extensive literature available on stakeholder management which suggests that management’s acknowledgement of its responsibilities towards stakeholders is essential to develop appropriate responses in order to maximise outputs with minimal disruption (Donaldson & Preston, 1995; Freeman, 2010; Preston & Sapienza, 1991; Mitchell et al. 1997; Oudman, Vos, & Biesboer, 1998; Wheeler & Sillanpaa, 1997). One of the key issues with the evolution of stakeholder theory has been confusion about its nature and purpose (Donaldson & Preston, 1995). We note Donaldson and Preston’s (1995, pg. 85) explanation that ‘stakeholders are identified through the actual or potential harms and benefits that they experience or anticipate experiencing as a result of the firm’s actions or inactions.’ Within project management, Pollock and Algeo (2016) state that project managers consider managing stakeholders to be one of many subsets of larger project management processes. Eskerod and Larsen (2016) suggest there are two key purposes for interacting with project stakeholders - firstly, to reduce the risk to the project by ensuring the stakeholders’ concerns and interests are addressed and second, get the necessary stakeholder contributions for the project. This eventually contributes to the increased likelihood of success (Eskerod, 2017) which makes it important to identify them. However, we echo Smith et al.’s (2010) statement that mapping stakeholders is a more complex task than it might first appear. It is also important to go beyond the generic classifications to ‘identify the salient stakeholders and their interactions’ (Smith et al., 2010). This requires the need to incorporate a view of how different stakeholders might influence any process and contribute to any activities. As suggested by Eskerod (2017, pg. 173) stakeholder behaviour and attitudes are not entirely predictable and often many questions surround project managers: *will they contribute as needed? Will they take any actions against the project? Will they assess the project as successful?*

Eskerod and Jepsen (2013) suggest a viable way for analysing project stakeholders by identifying, assessing and prioritising them. More recent works by Ang and Killen (2016) who have examined how stakeholders perceive value and propose a typology of value perspectives. While their study was based on the non-profit sector, it is important to note that the core idea remains around how value is articulated to stakeholders, which is not different to what has been highlighted in stakeholder theory (Freeman, 1984, 2004). Another suggestion by Eskerod (2017) as a key aspect to exploring stakeholders is by identifying the power dimension. To this end, we believe that the most effective ways of determining stakeholder relevance is based on the *stakeholder salience* framework discussed in the seminal work of Mitchell et al. (1997) who provide the typology of the stakeholder attributes of *power*, *legitimacy* and *urgency*. By identifying stakeholders based on these attributes there is improved possibility of managing them by determining *stakeholder salience*, i.e. helping managers to identify "to whom" or "to what" they should pay attention (Mitchell et al. 1997, pg. 854). This approach to determining *stakeholder salience* is strengthened by Eskerod and Larsen's (2018) claim that stakeholder analysis needs to also include analysis of the *shadow of the past*, *shadow of the present* and *shadow of the future* which all develop a *shadow of the context* and would allow a more complex dataset of stakeholder motivations and behaviours (Eskerod, 2017). Our review of the stakeholder literature has highlighted three key techniques for effective stakeholder analysis for projects which are captured in Table 1.

Insert Table 1 about here

The role of planned change

As Griffith-Cooper and King (2007: 14) state ‘the nature of project management is change’ and researchers (Crawford & Hassner-Nahmias, 2010; Hornstein, 2015) have emphasized that more and more organisations are using projects to institute change in organisations. Often organisational change initiatives are characterized as projects aimed at introducing new changes to improve organisational

performance; hence, we can argue that any change initiated through projects is a type of *planned change*. We note that it may be beneficial to identify how the literature on planned organisational change could benefit project management by identifying mechanisms for better stakeholder management. Planned change tries to improve an existing situation and has a ‘desired end state’ (Van de Ven & Poole, 2004). Often planned change is brought into organisations to achieve various goals and it appears as ‘neat packages or sets of intervention tools’ (Seo et al. 2004, pg. 98). Seo et al. (2004) extend this understanding of *planned change* by offering a deeper analysis of theories discussing *planned change* however, what is critical to note in their analysis are the two dimensions characterising *planned change* – targets and impetus of change and characteristics of change process. The first dimension - targets and impetus of change – focuses on identifying who should receive the change and what/who is the driver for making change (Seo. et al. 2004). The second dimension – characteristics of change process – focuses on how change occurs. A brief explanation and the key questions these dimensions and dualities address is covered in table 2. Each of these dimensions and dualities highlight that implementing a change initiative, projects in this case, requires addressing tensions in order to assimilate new behaviours which may invoke intended and unintended responses (Ahmed, 2014). We believe it is important to acknowledge these dimensions and dualities we identified from Seo et al. (2004) in projects for achieving better outcomes in relation to stakeholders. The next section of our paper addresses how this could assist for better stakeholder management of projects.

Insert Table 2 about here

OVERCOMING THE MYOPIA-FUTURE STATE OF PLAY

The origins of project management from Scientific Management have implied that it is built on a reductionist approach where a core part was to see project management as nothing but a temporary endeavour where the project is considered as a unit of analysis while being conceptualised as a lonely

phenomenon (Engwall, 1995; Eskerod, 2017). This reductionist approach of viewing the project, sometimes seen as happening in ‘vacuum’ has been referred to by Eskerod (2017, pg.180) as the ‘project centric approach’. This approach also sees relationship with the stakeholders as a dual relationship where stakeholder management focuses on communication with honesty and includes empathy (Eskerod, 2017; Strong et al. 2001). Therefore, we believe that project management is currently dealing with what we would like to designate as ‘myopia’. We borrow this term ‘myopia’ from Theodore Levitt’s quintessential article titled ‘The Marketing Myopia’ (1960) which introduced the question ‘what business are you really in?’ We believe a comparable question could be posed to the field of project management to identify what business they really are in? Projects or project managers may indicate that their business is to effectively (sometimes efficiently) deliver project outcomes to meet organisational outcomes (Pollack, 2017). We suggest that the purpose of achieving these organisational outcomes is driven fundamentally by the need of the stakeholders. Hence, we contend that the core business project management really is in – to achieve outcomes for the stakeholders – which makes effective stakeholder management a key purpose of project management. We support our argument through Donaldson and Preston’s (1995) work which highlights that stakeholder theory is basically normative i.e. interests of all stakeholders have intrinsic value which extends the ultimate managerial implications. A moral requirement for the legitimacy of the management function is the need for managers to acknowledge the validity of diverse stakeholder interests and hence, attempt to respond to these stakeholders within a mutually supportive framework (Donaldson & Preston, 1995). Extending this responsibility to the role of project managers is vital in order to acknowledge the differing views of its stakeholders and to develop appropriate responses with least disruption (Freeman, 1984; Preston & Sapienza, 1991; Mitchell et al. 1997; Oudman et al. 1998; Wheeler & Sillanpaa, 1997). We argue that the ultimate goal is of maximising value for the whole organisation and value can be seen as either return on investment from specific project or how the project demonstrates a direct contribution to the overall strategy of the organisation (Ang & Killen, 2016). We concur with Eskerod’s (2017) proposal for a ‘stakeholder centric approach’ of projects as it makes sense to acknowledge that understanding stakeholders is of utmost importance to ensure that stakeholders believe they are being dealt with in a satisfactory way. The new approach

would also emphasise that ‘no project is on an island’ (Engwall, 2003). We propose this could be achieved by first addressing the dualities of planned change presented in Table 2 alongside a combination of stakeholder analysis approaches presented in Table 1. The eight dualities across the two dimensions of planned change pose questions which are comprehensive and important to address. We hypothesize that these questions become the secondary level when designing a planned organisational change effort, i.e. a project. In order to achieve the ‘stakeholder-centric approach’ we content that the combination of stakeholder analyses need to be used not just at the beginning but throughout the lifetime of the project. Often the stakeholder analysis is also needed before any organisational change project could be closed as this may provide a *shadow of context* for the future projects. Moreover, acknowledging the dimensions of *power*, *legitimacy* and *urgency* relating to stakeholders would allow project managers to improve their stakeholder analysis. It is also critical to note that stakeholder relationship are not dual, they exist as networks amongst themselves (Rowley, 1997). As Jones, Hesterly and Borgatti (1997) highlight the nature of social mechanisms that exists in these networks helps in identifying influences and how the attribute of *power* is exercised within this network raises important questions. It is also important to mention that successful projects are delivered by people and not methods or tools - it is intelligent engagement by people that enables management of complexity of projects which is central to the successful management of projects. Hence, there is need for *reflective practitioners* as emphasised by Winter et al. (2006) for successful management of projects.

Future research agenda

We have recognised in Padalkar and Gopinath’s (2016) review of project management literature there exists a lack of substantial research focusing on the issue of stakeholder management. We believe this provides a mandate and, hence, leads us towards the literature on stakeholder management. Therefore, we suggest future research focus needs to be on examining the continuously changing events including the complexity of social interaction and human action, i.e. stakeholders which has been highlighted as a research gap by Padalkar and Gopinath (2016). This will also allow more examination and explanation of how stakeholders make sense of their ‘experiences’ (Donaldson &

Preston, 1995). However, our discussion regarding any future research towards a ‘stakeholder centric approach’ is guided by the impression that management scholars have often struggled with the gap in theory and practice, i.e., the knowledge transfer problem (Van de Ven & Johnson, 2006) and we identify this as a key component to address in any future research. Therefore, at the crux of it all, there is more demand for future research to provide practitioners with concepts and approaches which not only resonate with realities of project management but also align with up-to-date research opinions (Morris, 2000; Winter et al. 2006). Engaged scholarship is defined as a participative form of research for obtaining the different perspectives of key stakeholders in studying complex problems (Van de Ven, 2007). Stakeholders, again, are central to the notion of engaged scholarship in order to produce knowledge that is insightful and powerful (Van de Ven, 2007). The engaged scholarship diamond model by Van de Ven (2007, pg. 10) provides clarity for researchers opting to explore this approach by progressing through the stages of – problem formulation, theory building, research design and problem solving.

We concur with various researchers (Pettigrew 2001; Hodgkinson, Herriot & Anderson, 2001; Van de Ven & Johnson, 2006) who highlight that research needs to serve dual purposes of applied use and advancing essential understanding. Hence, our proposal for using engaged scholarship, a collaborative form of inquiry amongst academics and practitioners, will help produce knowledge that is ‘more penetrating and insightful’ (Van de Ven and Johnson, 2006: pg. 815; Van de Ven, 2007). We believe this approach will be useful in understanding stakeholder interactions and experiences as they occur during the planned change effort, i.e. the lifecycle of the project.

CONCLUSION

Project management as a discipline has seen significant development in the past few decades as many organisations are implementing projects to help meet their objectives. However, often projects are approached as they exist in vacuum and their interdependencies with others are given less attention or ignored. In this we paper argued that the field of project management may be dealing with a myopia. This has also been acknowledged by other researchers who have indicated that there is a need to move from ‘project centric approach’ towards ‘stakeholder centric approach’. We built our argument

throughout the paper by highlighting that stakeholder identification and their motivations are important to address. Our review of the literature helped us provide key questions as tools for project managers – preliminary and ongoing – to do stakeholder analysis. We also note that currently there exists a gap in project management research in the area of stakeholder management and discussed opportunities for future research through engaged scholarship.

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Table 1: Planned change dimensions and dualities (Adopted from Seo, Putnam & Bartunek, 2004)

Planned change: is consciously conceived and implemented by knowledgeable actors to achieve a desired end state.	
<p>Dimension <i>Targets and impetus of change</i> centres on who should receive the change and the drivers for making changes. Key question – what to change and when?</p>	<p>Dimension <i>Characteristics of change process</i> centres on temporal dynamics and the way change is implemented. Key question – how to change?</p>
<p>Duality 1 : Individual/group versus organisational Are the interventions aimed at individuals/groups or at organisational system-wide level?</p>	<p>Duality 1 : Negative versus positive focus Where to centre attention on driving and mobilizing organisational energy to evoke change? Negative focus stresses negative aspects such as various problems whereas positive focus emphasizes opportunities?</p>
<p>Duality 2 : Internal versus external Whether change initiatives are in response to externally driven forces demanding organisational alterations or are they addressing issues and factors arising from inside?</p>	<p>Duality 2 : Continuous versus episodic What are the temporal patterns of change initiatives? Episodic approach is implemented as an occasional divergence from equilibrium whereas continuous approach assumes ongoing modification.</p>
<p>Duality 3 : Human systems versus technical system What type of system is receiving the impact of change? Human refers to needs, motives, interactions of organisational members and technical refers to information and materials?</p>	<p>Duality 3 : Proactive versus reactive Is change occurring as an anticipatory response or reactive response? Proactive refers to change that occurs in advance of problems whereas reactive refers to change occurring as a consequence of unanticipated events.</p>
<p>Duality 4 : First-order versus second order How radical or fundamental are the planned changes? First order changes are aimed at increasing skill or solving problems in an already agreed upon area or second order changes are aimed at changing organisational members’ frames of reference?</p>	<p>Duality 4 : Open versus closed How open or closed the change process is? Open process allow participation and stems from bottom-up whereas a closed change process are secretive with limited access to information.</p>

Table 2: Stakeholder analysis approaches

Stakeholders: any group or individual who can affect or is affected by the achievements of the organisation’s objectives (Freeman, 1984, 2004).	
Stakeholder analysis based on Mitchell, Agle and Wood (1997)	<p>Stakeholders could use either one or a combination of three attributes – power, urgency and legitimacy. Key question: How stakeholders try to get what they need?</p> <p>Power: Stakeholders can exercise influence in their relationship with the organisation through gaining access to coercive, utilitarian, or normative means.</p> <p>Legitimacy: The right of the stakeholder groups to influence the organisation can be described in terms of shared values, common organisationally normative behaviours and understandings of policies and procedures, and belief in the right to express a collective desire for change.</p> <p>Urgency: Urgency exists only when a relationship is of a time-sensitive nature and when a relationship or claim is critical to the stakeholder.</p>
Stakeholder analysis based on Eskerod & Jepsen (2013) specific to project management	<p>Stakeholder identification Key question: Who can affect or be affected by the organisation’s project process or deliverables?</p> <p>Stakeholder assessment Key question: How should each stakeholder contribute to create success? What are the motivations of each stakeholder?</p> <p>Stakeholder prioritization Key question: Which stakeholders are currently in need to most attention?</p>
Stakeholder analysis based on Eskerod & Larsen (2016) & Eskerod (2017)	<p><u>Shadow of context</u> comprises of:</p> <p>Shadow of past Key question: What are the stakeholder’s past experiences, including perceptions and interpretations from past?</p> <p>Shadow of present Key question: What are the stakeholder’s perception(s) of concurrent possibilities and threats? What networks is the stakeholder involved in?</p> <p>Shadow of future Key question: What are the stakeholder’s expectations to the future?</p>

12 Public Sector Management and Not-for-profit
Competitive

**Do reflective practitioners deliver successful organisational change? Evidence from
public sector in Australasia**

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Do reflective practitioners deliver successful organisational change? Evidence from public sector in Australasia

ABSTRACT:

Resistance to change is often indicated as the main reason for failure of an organisational change effort. Researchers are now emphasising that it is important to utilise this resistance rather than treat it as a barrier. Through this research we contribute towards this idea by focussing on the role of change agents. We empirically appraise a proposal that change agents need to act like 'shock-absorbers' and shift between strategies of action, reflection and adaptation. Our research used a process research approach to capture the subtleties associated with an organisational change initiative at a local government agency in Australasia. We identify action, reflection and adaptation as critical strategies for change agents to achieve success by acknowledging who or what really counts.

Keywords:

Change management, collaborations and networking, culture, employee participation, policy, strategy,

CHANGE AGENTS AS 'SHOCK-ABSORBERS'

Studies reveal that leaders consider only about a third of organisational change efforts to be successful (Beer & Nohria, 2000; Meaney & Pung, 2008) and often the failure rates are attributed to a single source – resistance to change from within the organisation (Ford, Ford, & D'Amelio, 2008; Pieterse et al. 2012). Van de Ven and Sun (2011) highlight that change participants frequently resist following proposed change plans which leads to breakdowns and the change process does not often unfold in the expected ways, i.e., it is different to the conceptual model that served as the basis for change (Burke, 2009). However, Downs and Carlon (2012: 780) write that often 'resistance is portrayed as the enemy to change', and we should instead treat resistance as 'an essential element of organisational change rather than something to be squashed'. The complexity associated with organisational change processes is intertwined with resistance to change, which can be seen as a mix of contexts and attitudes (Downs & Carlon, 2012; Macri, Tagliaventi, & Bertolotti, 2002).

Research investigating resistance to change continues to grow (see Ford et al. 2008; Ford & Ford, 2010) and this paper makes a contribution to this stream by focussing on the role of change agents.

The paper specifically contributes towards organisational change literature on reducing breakdowns by focussing on how utilising resistance to change can be a means for achieving successful organisational change (Ahmed & Cohen, 2015). An important contribution of this paper lies in its representation of the different strategies a change agent can utilise. As proposed by Ahmed and Cohen (2015), we apply the metaphor of a ‘shock absorber’ to describe the change agent. This metaphor draws attention to the effects a shock absorber’s response has on reducing breakdowns in the adaptation process (Ahmed & Cohen, 2015). Our empirical research aimed to explore the change agent’s strategies was driven by the key research question: *what strategies does a change agent utilise to achieve successful organisational change?*

Organisational change management researchers have long indicated the need for in-depth examination of organisational change initiatives through use of process research to examine the intricacies associated with change and how change unfolds (see Pettigrew et al. 2001). Hence, we utilised a process research approach to examine an organisational change initiative at a local government agency in Australasia. The data collected for this research was longitudinal and complex; hence, it was analysed using – visual mapping and grounded theory strategy (Langley, 1999). Through our research, we identified that in order to achieve successful organisational change, an effective shock absorber is often shifting through strategies of *action*, *reflection* and *adaptation* as proposed by Ahmed and Cohen (2015). Although *action* and *reflection* were previously discussed in the literature (see Van de Ven & Sun, 2011), we confirmed that *adaptation* based on feedback was an essential strategy for success of the organisational change initiatives (Ahmed & Cohen, 2015).

The next section begins by summarising the literature around organisational change and the role of change agents and highlighting the key model our research aims to appraise. We follow this with details of our research method including data collection and analysis. Our discussion section reflects on the key strategies which we identified were used by the change agent and offer future research ideas.

RESISTANCE TO CHANGE

Organisational change is a phenomenon at the heart of organisational success (Van de Ven & Poole, 2004). However, it is recognised that change is a multifaceted and complex phenomenon, where every attempt to explain it is limited (Poole & Van de Ven, 2004). The literature has continued to grow, offering deeper and more detailed explanations of the dynamics associated with organisational change over the past seven decades. One of the key challenges contributing to low success rate of organisational change initiatives is breakdowns. Breakdowns are discrepancies between our conceptual model of the change process and what we observe unfolding (Ahmed & Cohen, 2015; Burke, 2009; Van de Ven & Sun, 2011). The literature on breakdowns experienced during organisational change and remedies utilised have been covered thoroughly by Van de Ven and Sun's (2011). We note from our analysis of the literature that resistance to change is often a recurring theme in examination of breakdowns in organisational change processes (Cummings & Worley, 2005; Pieterse et al. 2012; Senior & Swailes, 2010; Van de Ven & Sun, 2011).

Why resistance to change?

Our review of the literature aimed at identifying what are the key reasons for resistance to change? One of the key reasons for resistance is a disconnect between 'planners', those who design a change programme, and 'doers', those who do not participate in development but rather, implement it (Ford et al. 2008; Van de Ven & Sun, 2011). Change processes can also breakdown because participants do not recognize the need for change, engendering resistance. Resistance often results from a failure to reach agreement on goals or actions (Burke, Lake & Paine, 2009; Nutt & Wilson, 2010; Van de Ven & Sun, 2011). Following their review of the literature, Ahmed and Cohen (2015) identified three different themes of literature relating to resistance to change which focused on:

Power

A key notion that emerges when linking resistance to power is that suggested by Kärreman and Alvesson (2009) who describe power as a restraining force, where actors make people do things

which they would not have done otherwise. In this context, resistance becomes an unconcealed reaction to the overt use of power (Pietersen et al. 2012).

Identity

When individuals are unable to link their past collective self to present conditions, resistance originates (Mahadevan, 2012) and creates an obstacle to change (Brown, 2006; Gioia & Chittipeddi, 1991).

Setting:

The climate of change, i.e. the setting for change to occur (Binci et al. 2012) has three elements – trust, involvement, and perceived benefits which are important precursors for change, the lack of any leads to resistance to change.

Resistance through a different lens and the role of change agents

Over the years, the change literature has portrayed resistance in a negative manner. However, literature offering an alternative approach to the negative view of resistance is growing. Binci et al. (2012: 879) write, resistance to change is not an ‘*a priori* ...negative signal’ and we are now seeing literature which explains the changing nature of this sort of resistance. Many studies have examined how resistance can be used as a source of positive influence in change initiatives; hence, highlighting to change agents how resistance can be used to successfully manage change (Downs & Carlon, 2012; Ford et al. 2008; Pietersen et al., 2012; Mahadevan, 2012).

As suggested by Van de Ven and Sun (2011), critical to the success of an organisational change initiative is the role of change agents (referring to managers or consultants who direct or manage change in organisations) who need to continually adjust their actions over the course of the change. The argument that change agents are equally responsible for the creation of resistance (Ford et al. 2008) directs organisational change researchers to examine the context behind resistance by change recipients. It also puts emphasis on the point that this resistance is potentially created, and hence, manageable by change agents. Ahmed and Cohen (2015) propose that change agents perhaps need to act as ‘shock-absorbers’ i.e. converting one form of energy into another and dampening shock

impulses. As Van de Ven and Poole (2011) have indicated ‘tensions and oppositions’ are inevitable in any organisational change initiative; hence the shock absorber provides a mechanism for the organisation to reconcile such tensions and oppositions, perhaps restoring a sort of functional balance in situations where change initiatives threaten the equilibrium of the organisation (Ahmed & Cohen, 2015). Moreover, Ahmed and Cohen (2015) note that, this is likely to be through converting unsupportive or negative reactions into opportunities for constructive development, to gain support for the change initiative.

The review of existing literature highlighted that change agents use two different strategies to deal with resistance – *action* or *reflection* strategy. As suggested by Van de Ven and Sun (2011), in the action-oriented problem solving approach, the change agent intervenes to control a change initiative. Control is exercised by playing the role of a problem solver, in order to ensure the change model unfolds as the change agent envisaged it. In contrast, by the reflection strategy a change agent makes sense of and socially constructs understandings of the ‘buzzing, blooming, and confusing’ changes they experience in organisations (Weick, 2011). However, assuming that the effectiveness of action in the absence of reflection is likely to be ‘self- defeating’ (Van de Ven & Sun, 2011: 59), the central challenge in organisational change initiatives is achieving a balance between implementation actions and feedback reflection. Therefore, Ahmed and Cohen (2015) proposed that an additional strategy of *adaptation* can achieve this balance which is indicated in Figure 1. In the change context, *adaptation* is about diagnosing the breakdowns and knowing what treatment strategy to follow. Borrowed from previous research, adaptation can be defined as ‘(a) the action or process of adapting, fitting, or suiting one thing to another... and (b) the process of modifying a thing so as to suit new conditions’ (Rose & Lauder, 1996: 42). Through adaptation, change agents can skilfully revise their mental model of change and ‘go with the flow’, as against ‘swimming upstream’ (Van de Ven & Sun, 2011). However, should change agents respond to all types of resistance? It is critical for a change agent to identify who and what really counts? We concur with Ahmed and Cohen’s (2015) suggestion that change agents not only need to identify the key stakeholders but also determine which ones are key

players by examining them through the attributes of *power*, *legitimacy* and *urgency* (see Mitchell et al. 1997 for details). These can be briefly defined as follows:

Power

Stakeholders can exercise influence in their relationship with the organisation through gaining access to coercive, utilitarian, or normative means.

Legitimacy

The right of the stakeholder groups to influence the organisation can be described in terms of shared values, common organisationally normative behaviours and understandings of policies and procedures, and belief in the right to express a collective desire for change.

Urgency

Urgency exists only when a relationship is of a time-sensitive nature and when a relationship or claim is critical to the stakeholder.

Often change agents utilise the concept of defensiveness to deal with resistance. However, Powell and Posner (1978) argued that the cost of defensiveness is the persistence of resistance. This then leads to a vicious cycle, where resistance begets resistance (Ford et al. 2008). Logically, an escalation to perpetual resistance is unlikely to lead to beneficial change in an organisation. Mitchell et al.'s (1997) classification, when applied to different stakeholder's, may provide assistance in dealing appropriately with such situations, offering insight into stakeholders' motivations for resistance. This then can provide a means for arresting an escalation of resistance.

Insert Figure 1 about here

RESEARCH METHOD, DATA COLLECTION AND ANALYSIS

In order to empirically examine and determine whether *action*, *reflection* and *adaptation* lead to a successful organisational change project, we utilised the process research method. We use the process

approach as it deals with process as a coherent sequence of events explaining how things evolve or change over time (Poole et al., 2000). This concept of process applies a historical developmental perspective by focusing on the sequence of events that unfold over the duration of time of existence of the subject (Poole et al., 2000). As suggested by Poole et al. (2000) this approach provides a strong emphasis on viewing the historical path and the associated incidents or events responsible for organisational change. Poole et al (2000) have stated advantages of using a process research approach which highlight that (i) it is a flexible mode of inquiry which is ideal to explore critical features of change as researchers focus on the details associated with the change process and (ii) it acknowledges the human element in change as it clearly incorporates explanations based on deliberation and purpose. Therefore, it is able to offer general explanations through systematic investigation. The advantages of process research clearly provide a mandate for using a process research approach in this research as it aims to examine the dynamics associated with organisational change initiatives to determine the strategies used by change agents when dealing with resistance.

Research context

Local government plays a crucial role in delivering outcomes for communities in Australasia. Local councils provide local public services and local infrastructure for communities and local government plays a key role in driving economic growth for the country. Hence, it is important that decisions makers (executive team and council members) are provided good information based on thorough analysis to ensure good decisions are made. Often this information and analyses are presented to the decision makers in the form of reports or papers written by the local government agency staff. In August 2014 an external company reviewed the quality of advice provided by a local government agency (the agency) in Australasia to its decision makers. It provided a score for the agency and offered recommendations on how the agency could improve itself. In this research, we examined the organisational change initiative undertaken at this agency following the external review's report with recommendations in order to improve the quality of advice provided to its decision makers. The aim of this organisational change initiative was to build staff capability and hence, improve organisational performance for the next round of external review.

Data collection and analysis

A key requirement of using process research approach is working with event sequence data (Poole et al., 2000) which is longitudinal as process research is grounded on the methodical investigation of a series of events (Poole et al. 2000), it consists of identifying linkages amongst and between “what happened and who did what when – that is, events, activities, and choices ordered over time” (Langley, 1999: 692). The three stages of process research used in this research are discussed here (i) the first stage of process research in this research is using an abduction approach, i.e. we are not relying on existing theories but trying to be data driven and make sense from data (ii) for the second stage of data collection, this research followed Langley et al.’s (2013) suggestion that it is necessary to obtain longitudinal data (whether from archival, historical, or real-time field observation) in order to observe how a process unfolds over time. Hence, this research involved real time observations as recommended by Van de Ven (2007) and data related to the organisational change initiative was collected from late 2014 to early 2017 (iii) the final stage related to how data was measured and analysed as the volume of longitudinal data can get enormous, overloading the information processing capability of the researcher (Van de Ven, 2007). This research utilised a combination of two different strategies – visual mapping strategy and grounded theory strategy. The visual mapping strategy allowed us to develop a chronological presentation of large quantities of event data alongside different dimensions (Langley, 1999). The grounded theory strategy allowed us to stay close to the original data and helped us build a theoretical structure (Langley, 1999).

FINDINGS AND DISCUSSION

By examining the organisational change initiative at the agency in Australasia through process research, our research aimed to answer question: *what strategies does a change agent utilise to achieve successful organisational change?* In Table 1 we offer a detailed chronology of events related to the project from late 2014 to early 2017. The table also links the data to the respective elements identified in Figure 1 by Ahmed and Cohen (2015). Our examination of the organisational change initiative highlighted that organisational change initiatives often face resistance which begins to impact timeline and delivery of deadlines. The methods used by the change agent to focus on outcome

of what the change processes had to achieve and how to navigate tensions by adjusting strategies emphasises the crucial role of change agents and how their implementation strategy needs to be adaptable. In this section we highlight specific situations of how the change agent exhibited the different strategies – *action*, *reflection* and *adaptation* to deal with resistance by taking into account the principle of who or what really counts. This in-turn led to the agency achieving better results in subsequent external reviews demonstrating success of the change initiative.

Insert Table 1 about here

Situation 1: Resistance by staff to the change initiative

When member A had pre-determined an approach for all staff and implemented it following a discussion with the Executive team at the agency experienced staff who wrote advice papers regularly for the decision makers considered this as a challenge to their *identity* as reported by previous research (Brown, 2006; Gioia & Chittipeddi, 1991; Mahadevan, 2012;). Additionally, the coercive use of *power* along with lack of appropriate *climate of change* were also other reasons for resistance. We could suggest that in this case the change agent, member A, was responsible for creating the resistance and, hence, breakdown. As organisational change literature suggests that resistance to change could be linked to unequal power relations (Pietersen et al. 2012) and one such perspectives utilised by Kärreman and Alvesson (2009) described power as a restraining force, where actors make people do things which they would not have done otherwise. In this context, resistance becomes an unconcealed reaction to the overt use of power (Pietersen et al. 2012). This clearly provides a context for the reason why staff at the agency resisted to the new peer review process being enforced on them and being made part of their performance appraisals.

Situation 2: Dealing with resistance – creating the climate for change & who or what really counts

Following the creation of a new team to re-initiate the change initiative, it was noted that there was *action* and *reflection* by the team in order to identify the stakeholders and also how to approach the stakeholders. The role of the change recipients was carefully examined by the team by considering *who or what really counts?* As outlined earlier in the paper, Mitchell et al.'s (1997) classification of stakeholders based on attributes of *power*, *legitimacy* and *urgency* when applied to different stakeholders provided assistance in dealing appropriately with such situations, offering insight into stakeholders' motivations for resistance; hence, offering an opportunity for halting an escalation of resistance. The outcomes of the survey with decision makers helped build the *climate for change* and provided a mandate for the change initiative. By conducting workshops with staff and sharing the survey outcomes strengthened the *climate for change*. The workshops also provided staff an opportunity for participation. This changed strategy by the new lead was able to obtain buy-in for the change initiative.

Situation 3: Shock absorber's Action – Reflection – Adaptation

Research literature available suggests that by taking time to reflect on actions, change agents, can adapt their strategy in the most 'fruitful and imaginative' way to address any breakdown (Van de Ven & Sun, 2011). Pettigrew et al. (2001: 701) have accurately captured this when they suggest 'customisation of change strategies' which works best when we have clear knowledge of who and what really counts. Throughout table 1 we note the various instances where the team, guided by the lead, progressed through stages of *action*, *reflection* and *adaptation*. Critical to note is the continuous adjustment made to the staff training through each phase following staff feedback; this emphasises the continuous changes made to the change initiative's implementation approach. The frequent use of reflective meetings about the change process as a device for sharing and socially constructing common understandings of the changes being implemented and the goals the organisation is meant to achieve was emphasised in literature to deal with resistance to change (Huber & Lewis, 2010; Randolph-Seng & Norris, 2011; Van de Ven and Sun (2011). During this process, the change agent

needs to be open to ideas and different perspectives on the change initiative that can lead to positive learning outcomes. They also need to be flexible with regard to the ideas and actions those resisting change provide. The change agent also needs to acknowledge tensions rather than privileging one opinion (Seo et al. 2004). Such *reflection* and *adaptation* could result in constructive, combined co-creation of purpose, approach, and methods for facilitating the change process (Ahmed & Cohen, 2015). This process of co-creation was evident in this change initiative. Through this process the new lead was not only able to obtain better results in the external audit in 2015 and 2016, but also achieve a culture change in the organisation.

We note from our analysis of the data captured related to this change initiative that the change agent’s role comprises largely of *action* – the continuous implementation to ensure the change initiative progresses as envisaged. However, the necessity of *reflection* and *adaptation* to deliver a successful change initiative is clearly demonstrated in this case. As depicted by Ahmed and Cohen (2015) in Figure 1, we believe that stakeholder evaluation is critical to any change initiative. However, our observation of this change initiative highlighted that stakeholder evaluation occurs iteratively through the stages of *action*, *reflection* and *adaptation*. We also observed that the change agent had to dedicate purposeful time for *reflection* which comprised around one-third part of the change initiative’s life cycle while *adaptation* comprised of two-third parts where necessary adjustments had to be made. As we have depicted in Figure 2, it is critical to make stakeholders the central feature of a change initiative to ensure their expectations and motivations are managed successfully by the shock-absorber i.e. the change agent. Our examination of stakeholder attributes supports Magness’s (2008) suggestion that stakeholder attributes will be transitory and not fixed in time. By examining stakeholder dynamics and their impact on organisational change initiatives, we gained insights to identifying the salience of not just stakeholders but also issues that are relevant to them and the contexts within which their influence might be operational.

Insert Figure 2 about here

Limitations and future research agenda

While our examination followed the recommended approach by Pettigrew et al. (2001), we would like to acknowledge that we were only able to observe the change initiative for a period of two years which is one of the limitations of this study. Moreover, our examination was based in the public sector which had implications on the speed and funding allocated to the change initiative. We suggest that a perhaps a similar project in private sector could proceed differently due to the nature of the environment private sector operates in. Hence, we refrain from generalising this approach to managing a change initiative but encourage further exploration of this approach to enhance it, particularly identifying better stakeholder analysis methods. Critical for any further examination will be a need to develop better understanding of the transitory nature of these stakeholder attributes in relation to issues.

CONCLUSION

Resistance to change is often portrayed as the single most cause for failure of change initiatives across organisations. In this paper, we built on the growing literature in organisational change which highlights the importance of acknowledging resistance to change and utilising it as a positive influencer. Central to our analysis was the role of the change agent by suggesting that they play the role of a shock-absorber. Through the literature we identified that change agents need to keep shifting among *action*, *reflection* and *adaption*. Our examination of a change initiative at a local government agency highlighted that if a change agent ensured there was *action*, *reflection* and *adaption* there was more chance of success. In order for this to occur it was critical to determine *who or what really counts?* i.e. it was essential to identify the motivations and expectations of stakeholders and make them a central aspect of the change initiative.

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Figure 1: Facilitating a change process (Adopted from Ahmed & Cohen, 2015)

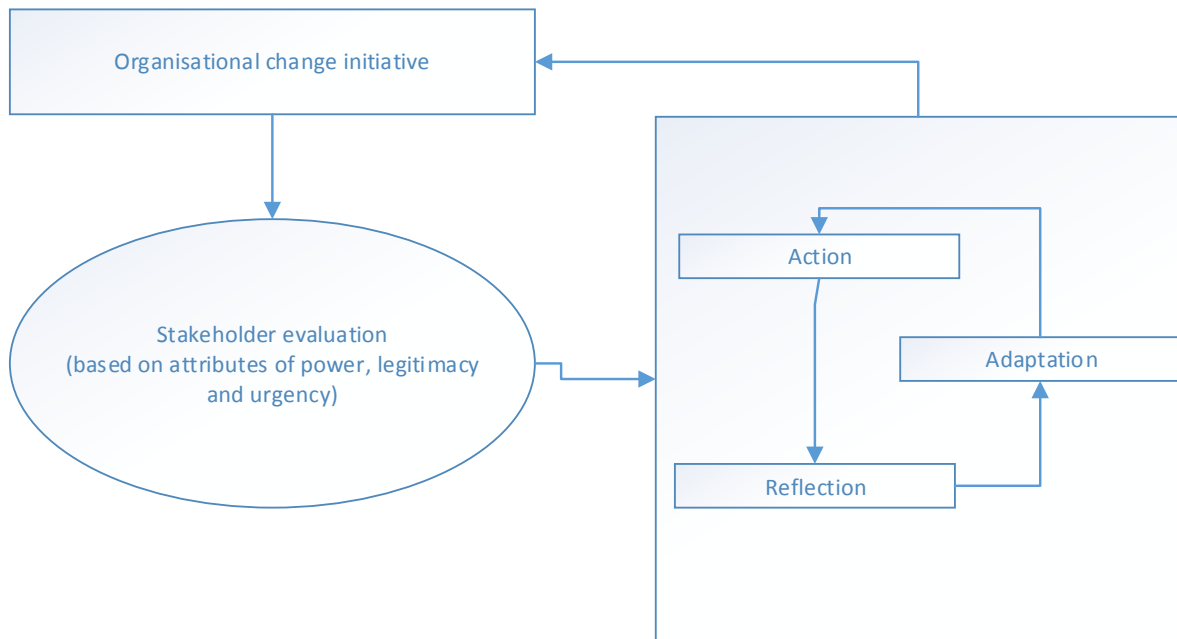


Figure 2: The role of a shock-absorber

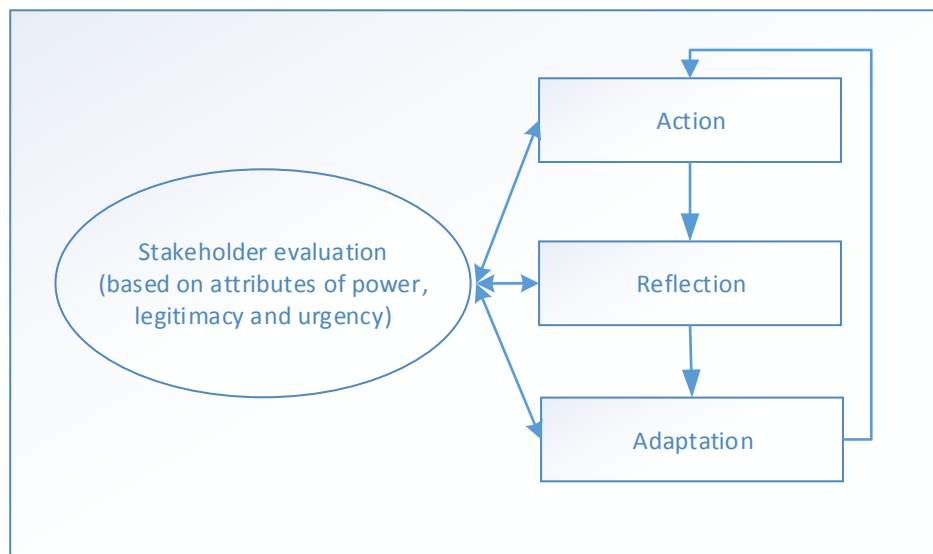


Table 1: Key events of change initiative at the agency

No.	DATE	EVENTS	Links to theoretical constructs and comments
1	July 2014	Audit I by external reviewers	Provided the impetus for change initiative
2	September 2014	Report received from external reviewers with results and recommendations	Provided the impetus for change initiative
3	September 2014	Two staff responsible report findings to Executive team and agree to take necessary steps of implementing peer review process Process lead by one staff member (Member A)	ACTION – change agents take necessary steps to begin change initiative
4	October 2014	Peer review process piloted across one section. All guidance provided via email by Member A.	ACTION – change agents take necessary steps to begin change initiative

5	October 2014	Peer review process included in performance appraisals of staff	ACTION – change agents take necessary steps to begin change initiative
6	October 2014-November 2014	Staff dissatisfaction and resistance to peer review process, mainly experienced staff	RESISTANCE TO CHANGE – linked to power, identity & setting
7	December 2014	Change initiative stopped due to staff resistance and dissatisfaction	ACTION – change initiative stopped; outcome of resistance
8	December 2014	New lead appointed for change initiative	ACTION – Change reinitiated
9	December 2014	New team established – lead, two experienced advisory staff	ACTION – Change reinitiated
10	January 2015	<p>Scope re-determined</p> <p>Expectations determined with Project Sponsor</p> <p>Change initiative rollout schedule developed</p>	<p>ACTION –scope determination</p> <p>STAKEHOLDER EVALUATION – who or what really counts?</p> <p>REFLECTION – how to get stakeholder buy-in?</p>

11	January 2015	Feedback obtained from decision makers/customers to obtain mandate for change	<p>ACTION – Decision makers/customers feedback</p> <p>REFLECTION – Re-examining change initiative approach based on feedback, i.e. how to present the need for change to staff?</p> <p>ADAPTATION – Adjustment to strategy, decision to conduct workshops with staff</p>
12	January 2015	<p>Workshops conducted with staff to explain – collaborative approach</p> <ul style="list-style-type: none"> • <i>Background to change initiative provided including the need for change by indicating mandate received from decision makers and external audit scores</i> • <i>Staff provided with an opportunity to provide input into the project.</i> 	ACTION – Workshops with staff conducted
13	February 2015	<p>Team</p> <p><i>Review staff input</i></p>	<p>ACTION – Review feedback from staff workshop</p> <p>REFLECTION – Examine key areas of improvement/assistance indicated by staff</p>

			ADAPTATION – Redevelop tools based on feedback from staff
14	February 2015	Team <i>develop tools</i> <i>design training package with peer review</i>	ACTION – Developing tools and training
15	February 2015	Sponsor promotes change initiative across agency	REFLECTION – ADAPTATION – ACTION – There was no visibility for the change initiative across the organisation. Hence, this was done to create visibility for the change initiative across the organisation.
16	March 2015	Team <i>deliver training v1.0</i> <i>obtain feedback from participants via anonymous survey</i>	ACTION – Delivery of training

17	April 2015	<p>Team</p> <p><i>begin work to develop a webpage as central place with tools and guidance</i></p> <p><i>continue to deliver training v1.0</i></p> <p><i>obtain feedback from participants via anonymous survey</i></p>	<p>REFLECTION – ADAPTATION – ACTION:</p> <p>Staff had indicated in workshops that it was hard to locate information about various aspects related to the change initiative. Hence an internal webpage was considered as an option for centralised information storing.</p> <p>ACTION</p>
18	May 2015	<p>Team</p> <p><i>appoint Champions across sections</i></p> <p><i>upgrade training based on staff feedback</i></p>	<p>ACTION</p> <p>REFLECTION – ADAPTATION – ACTION</p>

		<p><i>deliver training v2.0</i></p> <p><i>obtain feedback from participants</i></p>	ACTION
19	June 2015	<p>Team</p> <p><i>continue to deliver training v2.0</i></p> <p><i>launch webpage via internal staff communication</i></p>	ACTION
20	July 2015	<p>Internal staff communication to inform staff of next external review</p> <p>Papers selected for submission to external reviewers</p> <p>Audit II by external reviewers</p>	ACTION
21	July 2015	Phase I debrief done by team	REFLECTION
22	August 2015	Team continue to deliver training v2.0	ACTION
23	September 2015	Audit II results received from reviewers with recommendations – improved scores for the agency	ACTION

		Results presented to Executive team Mandate received to proceed with Phase II of project	
24	October 2015	Team upgrade training to v3.0 to embed latest external reviewer recommendations	REFLECTION – ADAPTATION – ACTION
25	November 2015	Team release report of external reviewers to staff via internal communication	REFLECTION – ADAPTATION – ACTION This was not done with the first external review. Following the staff support for the change initiative, the lead proposed for the results to be shared by the Chief Executive in their weekly blog.
26	December 2015 – June 2016	Team lead <i>ensures training continues v3.0 (monthly)</i> <i>regular health-check meetings with Champions</i>	ACTION

		<p><i>organises a Master-Class with external review agency for staff</i></p> <p><i>initiates discussions with Human Resources team around wider staff capability building needs</i></p>	<p>REFLECTION</p> <p>REFLECTION – ADAPTATION – ACTION</p> <p>REFLECTION – ADAPTATION – ACTION</p>
27	July 2016	<p>Internal staff communication to inform staff of next external review</p> <p>Papers selected for submission to external reviewers</p> <p>Audit III by external reviewers</p> <p>New providers sought for improving staff business writing skills</p> <p>Monthly training sessions v3.0 continue</p>	<p>ACTION</p>

28	August 2016	<p>New provider for business writing skills appointed</p> <p>Lead discusses opportunities to embed key skills in business writing training</p> <p>Monthly training sessions v3.0 continue</p>	<p>ACTION</p> <p>REFLECTION – ADAPTATION – ACTION</p> <p>ACTION</p>
29	September 2016	<p>Audit III report received from external reviewers with recommendations – improved scores for the agency</p> <p>Results presented to Executive team</p> <p>Mandate received to proceed with Phase III of project</p>	ACTION
30	October 2016	<p>Lead outlines new approach and embeds recommendations from latest external reviewers report</p>	REFLECTION – ADAPTATION – ACTION

31	November 2016 – December 2016	<p>Lead</p> <p>works with Internal Communications team to develop new staff communication material to encourage peer review process</p> <p>develops latest version of training v4.0</p>	REFLECTION – ADAPTATION – ACTION
32	January 2017	Internal Communications team release new staff resources to encourage peer review	REFLECTION – ADAPTATION – ACTION

05. Human Resource Management
Competitive (refereed delivered) Session

Nursing Nurses' Emotions: The Coping Strategies of Sri Lankan Nurses

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05. Human Resource Management Competitive Session

Nursing Nurses' Emotions: The Coping Strategies of Sri Lankan Nurses

Abstract: *Employees are expected to display organisationally desired emotions in face-to-face and voice-to-voice customer interactions. This element of emotion work in service encounters has been labelled 'emotional labour'. Though a large body of research exists on detrimental consequences workers suffered of performing emotional labour, how they coped with the negativity has received limited attention. Therefore, this study explored how Sri Lankan public and private sector nurses coped with detrimental effects of performing emotional labour. Key findings included, firstly, nurses used emotion regulation strategies that enabled them to surface and deep act and genuinely express their emotions, secondly, coping was a 'personal process' for Sri Lankan nurses, thirdly, coping is contextual and finally, choice of coping often varied across men and women.*

Keywords: emotional labour, coping, human resource management

INTRODUCTION

This study explored how nurses in the public and private healthcare sectors in Sri Lanka cope with detrimental effects of emotional labour. Emotional labour involves the effort, planning and control required by employees to modify their expression of emotions for a wage to meet the expectations of employers and customers (Ashforth and Humphrey, 1993; Bartram, et al., 2012).

Performance of emotional labour assisted workers to provide a personalised customer service; however, a significant body of research has shown that a dissonance between felt and organisationally desired emotions often led to job burnout, low performance and health issues (Grandey, et al., 2015; Hulsheger and Schewe, 2011). Yet, limited attention has been given to how emotional labourers coped with these effects (Anderson, et al., 2002; Bailey and McCollough, 2000; Korczynski, 2003). While little is known on how workers coped with emotional labour and even less is known on cross-cultural differences in coping (Anderson, et al., 2002; Burchielli and Bartram 2006; Labrague et al. 2017).

The aims of this paper are to explore the coping strategies and highlight the culturally nuanced nature of coping by bringing a South Asian perspective. To do so, this study examines 'how do nurses in the public and private healthcare sectors in Sri Lanka cope with detrimental effects of emotional labour?' The first section provides a literature review, second provides the context and methodology for the study. The third reviews empirical findings and fourth provides a discussion and conclusion.

Emotional Labour, Consequences and Coping Strategies

Research on emotions began in the 1970s in the fields of sociology and psychology and became a subject of inquiry in business management literature in the 1980s with the seminal work of Hochschild

on emotional labour, *The Managed Heart* (Hochschild, 1983). In her work, Hochschild distinguished between the two concepts, emotion work and emotional labour. Emotion work refers to ‘the management of feeling to create a publicly observable facial and bodily display’ in private spheres of life such as with friends and family (Brook, 2009; Hochschild, 1983, 7). Emotion work becomes emotional labour when the emotions previously displayed in private spheres of life are sold by organisations as human labour with a profit motive. Emotional labour treats emotions as a commodity that is sold for a wage (Hochschild, 1983). This transferring of the emotion management process from the private sphere to a public sphere is referred to as the ‘transmutation of an emotional system’ and individuals are expected to carry out acts of emotion management under the guidance of feeling rules prescribed by organisations (Hochschild, 1983, 19). Drawing on the work of sociologist Ervin Goffman (1956) on presenting self in social interactions, Hochschild (1983, 136) adopted a dramaturgical perspective where she viewed a service encounter and the social exchange of emotions that occurs during the service encounter as a performance on a ‘commercial stage’ where the customers were the ‘audience’ and employees the ‘actors’ with ‘standardised props’ and supervisors who act as the ‘commercial directors’.

The performance of emotional labour may result in surface or deep acting. Surface acting involves ‘trying to change how one outwardly appears by modifying emotional displays without shaping inner feelings’ (Grandey 2003; Hochschild 1983, 35). In surface acting, workers try to stimulate unfeeling emotions and/or suppress felt emotions through careful use of verbal and nonverbal cues such as facial expressions, gestures and voice tone (Ashforth and Humphrey, 1993; Bozionelos and Kiamou, 2008). In deep acting, individuals display ‘a natural result of working on feeling; the actor does not try to seem happy or sad but rather expresses spontaneously... a real feeling that has been self-induced’ (Hochschild, 1983, 35). Individuals could deep act by either exhorting feelings or by using ‘emotion memories’ (Hochschild, 1983; Theodosius, 2008). Exhorting feeling includes individuals trying to actively evoke or suppress an emotion (Ashforth and Humphrey, 1993). For example, a hotel receptionist empathising with an aggressive customer. Individuals may also use ‘emotion memories’, for example, when one needs to display happiness or excitement the employee may think of a situation in the employee’s life that brought happiness or excitement and imagine that it is ‘really happening now’ (Hochschild, 1983, 42). Workers expressing their real emotions may also be a method of performing emotional labour

(Ashforth and Humphrey, 1993; Kim and Han, 2009). This is known as ‘genuine acting’, ‘automatic regulation’ or ‘authentic displays’ (Chu et al., 2012; Grandey and Melloy, 2017).

Performing emotional labour would improve employees’ ability to cognitively distance themselves from negative incidents (Ashforth and Humphrey, 1993; Chu, et al., 2012; Goussinsky 2011; Hochschild, 1983, 2009; Lee, et al., 2015). However, the need to display ‘inauthentic emotional expressions’ may make workers feel false, hypocritical and suffer emotional dissonance (Ashforth and Humphrey, 1993; Theodosius, 2008, 28). Emotional dissonance represents ‘the state of discomfort, unease, tension, or psychological strain due to discrepancies between felt and expressed emotions or due to discrepancies between felt and organisationally desired emotions’ (Mishra and Bhatnagar, 2010, 403). Emotional dissonance often leads to job burnout including emotional exhaustion, depersonalisation and diminished personal accomplishment. Emotional exhaustion involves workers feeling they are no longer able to ‘give of themselves at the required psychological level’ (Holland, et al., 2013; Maslach, et al., 2001; Maslach and Jackson, 1981, 99). Depersonalisation refers to employees maintaining a distance between the worker and the customer by maintaining a negative attitude towards co-workers and service-recipients (Ali and Ali, 2014; Tunc and Kutanis, 2009). Diminished personal accomplishment involves employees perceiving a lack of personal and job competence and an inability to achieve their work goals (Adriaenssens et al., 2015). In the long run, emotional dissonance may lead to diminished mental resources, a weakened sense of authenticity and an impeded capability to create rewarding social relationships, less well-being and fatigue (Grandey, 2000; Wharton, 1999). Consequently, workers suffered psychological distress, low job performance (Hulsheger and Schewe, 2011), depression (Shani et al., 2014), poor self-esteem (Ashforth and Humphrey, 1993), physical illnesses such as heart attacks and cancer (Grandey, 2000) and develop intentions to leave organisations (Bartram et al., 2012). These effects may spill over to other domains of employees’ lives and create work-family conflicts (Kinman, 2009; Perera and Kailasapathy, 2013).

Emotional labourers use diverse coping strategies to replenish their diminished mental and energy resources (Bakker and Demerouti 2017; Demerouti 2015). Coping involves ‘constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person’ (Lazarus and Folkman, 1984, 141). Coping enables

individuals to develop resource reservoirs to deal with future resource losses (Hobfoll, 1989). Proponents of conservation of resources theory claim that resource investment is the way to maintain required resource reservoirs (Hobfoll, 2001). Coping acts as a resource investment for employees when stressed by helping them to replenish their lost resources (Hobfoll, 1989; Yoo, et al., 2015).

Coping strategies are types of recognizable actions individuals use to deal with stress (Skinner, et al., 2003). The most established and widely used categorisation of coping is between problem and emotion focused coping strategies (Demerouti, 2015; Wang, et al., 2015). Problem focused strategies focus on changing or trying to alter the source of stress by defining the problem, identifying alternatives, weighing the costs and benefits of alternatives, choosing the most appropriate alternative and acting (Carver et al., 1989; Lazarus and Folkman, 1984). These strategies comprise those directed at the environment such as altering environmental pressure, barriers, resources and procedures and those directed at the self such as shifting the level of aspiration, finding alternative ways of fulfillment, developing new standards of behaviour and learning new skills (Lazarus and Folkman, 1984). Problem focused strategies often develop a positive psychological state in individuals by enabling them to experience a sense of personal control over an issue and a sense of accomplishment (Folkman, 1997).

Problem focused strategies often involve proactive coping. Such strategies help individuals to build resource reservoirs to face future resource losses effectively (Hobfoll, 1989). The proponents of the conservation of resources theory claim that proactive coping strategies enable individuals to acquire and maintain sufficient resource reservoirs, to act early when signs of a problem arise and to select the battles they are able to fight (Hobfoll, 2001). For example, when nurses are trained only on technical aspects of the role, their ability to deal with job stress is reduced. However, when their training includes a component on building social support when dealing with stressful patient encounters, it can help them to develop their ability to respond to stress effectively (Hobfoll, 2001).

Individuals used emotion focused strategies when unable to modify threatening or challenging environmental conditions. These strategies may help individuals to take their minds temporarily off the issue (Lazarus and Folkman, 1984). When individuals do not possess sufficient resources for proactive coping, they may engage in reactive coping involving emotion focused strategies (Hobfoll, 2001).

Examples include avoiding, distancing and behavioural techniques (physical exercise, meditating, drinking alcohol, venting anger and seeking emotional support) (Lazarus and Folkman, 1984).

Practicing spiritual and religious beliefs represents another coping strategy. Religiosity and spirituality gained the attention of psychologists as a meaning-based coping strategy (Danhauer, et al., 2005; Folkman, 1997). The intention of using meaning-based coping strategies may be to search for and find positive meaning through coping (Folkman, 1997). While spirituality involves ‘a sense of connectedness to a larger purpose that is associated with a sacred higher power’, religiosity involves ‘a membership in a particular community of faith with its own structure, rules and belief systems’ (Byrne et al., 2011, 302). Spirituality and religiosity often enabled individuals to deal with chronic and severe stress (Folkman, 1997). Older adults may turn to organised (church attendance) or unorganised (prayer, religious reading, religious television) religious participation as a coping strategy (Danhauer et al., 2005). A strong sense of faith may reduce individuals’ psychological strain and religion may provide strong social support, give individuals a greater sense of control over situations and build self-esteem which helps them to deal with burnout and stress. Religion and spiritual beliefs may provide personal comfort that would replenish people’s personal resources and increase the ability to cope (Byrne et al., 2011; Graham et al., 2001). Resultantly, faith in religion and spirituality may enable individuals to view stressors as challenges and suffer less anxiety, or depression (Byrne et al., 2011).

The majority of studies have explored people’s coping techniques to deal with daily stress. Limited studies have explored coping strategies of emotional labourers and there is no evidence in the Sri Lankan context (Anderson, et al., 2002; Bailey and McCollough, 2007; Law, et al., 1995). Though coping is perceived to be contextual and influenced by cultural differences, religious and spiritual beliefs and environmental factors, there is little evidence on cross-cultural differences of coping (Anderson, et al., 2002; Burchielli and Bartram 2006; Callan and Dickson 1991; Herman and Tetrick, 2009; Labrague et al. 2017; Muhonen and Torkelson 2008). Thus, this study asks, ‘how do nurses in the public and private healthcare sectors in Sri Lanka cope with detrimental effects of emotional labour?’

CONTEXT

The healthcare sector in Sri Lanka included both public and private healthcare services. Public healthcare services were offered free of charge via a wide range of national, provincial, base (large town)

and district hospitals and health care units (Abeykoon, 2003; Jayasekara and Schultz, 2007). The Sri Lankan government allocated LKR 196.8 billion (nearly AUD1.65 billion) for healthcare and employed 34,221 nurses across 612 public hospitals (CBSL, 2017). Private healthcare services provided inpatient care from 1980s following the reintroduction of private practice by public-sector doctors, liberalization of drug imports and service provision deficiencies of public hospitals (Abeykoon, 2003). The private healthcare sector played a significant role with 181 private hospitals (CBSL, 2017).

Though public sector needed 50,000 nurses there were only 34,221 and private sector faced a shortage of 15,000 nurses due to inadequate recruitment of nursing students into State nursing schools and limited training facilities (CBSL, 2017; De Silva and Rolls, 2010; Jayasekara and McCutcheon, 2006). Nursing density in Sri Lanka was 16 per 10,000 population (CBSL, 2017). Though low when compared to developed economies such as Australia (106.5 per 10,000), it is comparable to South Asian countries such as India 17.1, Indonesia 13.8, Myanmar 10.0 and ahead of Pakistan at 5.7 and Bangladesh 2.2 (WHO, 2015). In Sri Lanka, nursing was unattractive due to poor working conditions, limited career progression, inadequate professional recognition and salaries (Aluwihare-Samaranayake et al., 2017).

METHODOLOGY

The qualitative data was collected by conducting 31 semi-structured, in-depth, face-to-face interviews with male and female nurses from a private hospital (17 interviews) and a public hospital (14 interviews). Interviews lasted between 30 to 90 minutes. Randomly picked participants came from the medical ward, paying ward, intensive care unit, eye hospital, emergency treatment unit, dialysis unit, medical and surgery ward, paediatric ward, maternity ward and theatre. Participants consisted of 5 nursing supervisors and 26 senior and junior nurses. Profile of the participants is provided in Table 1.

Table 1 - Profile of Participants

	Female participants	Male participants	Work experience
Public Hospital	8	6	4.5 years to 23 years
Private Hospital	15	2	1.5 years to 40 years
Total	23	8	

Source: Interviews

All interviews were digitally recorded. The majority of participants were conversant in Sinhala and a minority in English. The researcher translated the interviews conducted in Sinhala into English, de-identified, coded transcribed interviews in NVivo and used thematic analysis to identify major

themes within coded data. In conducting thematic analysis, the researcher used the six-step analysis introduced by Braun and Clarke (2006).

EMPIRICAL FINDINGS

Deep, surface and genuine acting

Deep acting was common among public sector nurses than private sector nurses. The public-sector nurses deep acted in two instances. Firstly, when they dealt with patients being hospitalised for long time periods that increased the patient-nurse encounters and lessened the nurse-patient distance. Secondly, nurses deep acted when they faced a situation largely similar to a personal experience. The private-sector nurses deep acted when they dealt with terminally ill patients because such patients were often not in ‘their right minds’. In these instances, nurses deep acted by ‘reframing’ the situation which includes ‘changing their interpretation of a situation to create feelings that correspond with emotion displays their work required’ and using ‘emotional memories’ (Hochschild, 1983; Yin, 2016, 13).

“Even today when I see a patient with a chest pain I think of my mother...When I see a patient in a bad condition, I always remember my mother. This (mother suffering a chest pain) happened 10 years ago... Just like my mother is important to my family, the patient is important his/her family. I think of that...”
(female nurse, 10 years, public-sector, medical ward)

A private-sector nurse stated,

“...If the person gets aggressive due to the nature of their illness it's fine. For instance, when you take cancer patients they are anyway not in their right mind, so it's fine...” (female nurse, 3.5 years, private-sector, theatre/ intensive care unit/emergency treatment unit)

Surface acting was a common occurrence among public and private sector nurses. Public-sector nurses surface acted firstly, when dealing with patient aggression on a daily or near-daily basis, secondly, when it was required to ‘balance emotions’ by displaying or refraining from displaying emotions such as sadness, fear, disgust and nervousness, thirdly, to avoid ‘getting too close’ to patients by displaying an unfelt ‘detached expression’, fourthly, the nurses appeared ‘strict’ and angry’ to avoid verbal, physical and sexual harassment by patients and finally, to suppress feelings of stress, trauma, fatigue and anger caused by overworking. For private-sector nurses, surface acting was a vital part of their jobs because despite their real feelings the organisation required them to display cheerful and friendly emotional expressions. The patients in private hospitals paid for their treatment, therefore, expected higher respect, better handling and care from nurses. For private-sector nurses, a firm control of their emotions was required firstly, when dealing with customer misbehaviour in terms of

uncooperative, demanding and complaining patients and their families, secondly, to mask or mute emotions to either hide their true feelings such as sympathy, disgust and fear or display them when unfelt and thirdly, for junior nurses to hide their fear and nervousness when dealing with patients because of their lack of experience and training. For surface acting, the nurses used emotion regulation strategies such as ‘pretending’ and ‘restraining’ (Yin, 2016, 11). ‘Pretending’ is where the nurses ‘faked unfelt emotions, exaggerated emotional expressions or deliberately maintained a distance’ and ‘restraining’ includes ‘supressing negative feelings’ (Yin, 2016, 9). One participant revealed,

“Sometimes it’s advantageous to show anger to the patients. Then they back off thinking that the nurse is wicked. Then they don’t come to do unwanted things. If another nurse talks to him nicely then he tries things on that nurse. So we discuss with each other about such patients and we all try give him the same treatment. Then he stops it” (female nurse, 10 years, public-sector, medical ward)

Another participant added,

“Sometimes cancer patients come to get their wounds dressed. I feel sad when I see them. They are also depressed... We don’t show our feelings. We hide them. We control our feelings...” (female nurse, 3 years, private-sector, medical and surgery ward/emergency treatment unit)

In addition, public and private sector nurses experienced instances where they expressed their genuine emotions. In such situations, they either ‘released’ their emotions by expressing positivity, for example, express happiness when a patient left the hospital or ‘outpoured’ their emotions by displaying empathy, sympathy or frustration (in public-sector) they naturally felt towards patients (Yin, 2016).

“Mostly I feel sad when patients die. Sometimes they walk well and then the situation changes and they die. Once a boy of about 20 years died and I cried when I was giving CPR because he was my brother's age” (female nurse, 10 years, public-sector, medical ward)

Another participant revealed,

“We feel for another human being as human beings. But we cannot help it. For example, when there is a brain damage you cannot save the patient” (female nurse, 21 years, private-sector, emergency treatment unit)

Consequences of emotional labour

The performance of emotional labour led to several consequences for public and private sector nurses. Maintaining a positive relationship helped patients to ‘open up with nurses’, ‘trust nurses’ and ‘believe in nurses’ which assisted the healing process. One participant revealed,

“I never liked nursing earlier...But then I started liking the profession with the feedback I got from patients...I have had the blessings also... I have cared for a lot of patients whose limbs weren’t functional. They always bless me. Therefore, I continued in this profession” (male nurse, 16 years, public-sector, emergency treatment unit)

Another participant revealed,

“...the psychiatric patients...initially when they come they are quite violent. However, they are really obedient to nurses. Things they do not reveal to their families they tell us...The problems they don't discuss with their families they discuss with us. It's because we get close to them...” (female nurse, 16 years, private-sector, neonatal intensive care unit)

High levels of surface acting, workload, on-going responsibility, lack of training and experience led to job burnout among public and private sector nurses. While public sector nurses suffered emotional exhaustion, depersonalisation and diminished personal accomplishment, the private-sector nurses suffered emotional exhaustion and a sense of diminished personal accomplishment. Private-sector nurses were prohibited to display feelings of depersonalisation because customer service was core. Resultantly, public and private sector nurses suffered to insomnia, work-family issues, illnesses such as hypertension, heart diseases, diabetes and intentions to leave the profession.

“When we don't have time for important personal commitments such as children's activities it could create issues. When there is too much stress we could fall ill. We take the stress home and even at home we get aggressive. We scream at our children or husband. So it can have an impact on personal life as well...” (female nurse, 23 years, public-sector, paying ward)

Another participant stated,

“They (junior nurses) have told me that when they go home after doing a night duty they cannot sleep...It took me several years to understand this job fully. With the workload, I used to get aggressive with family and I didn't like people talking to me when I was stressed...” (male master, 21 years, private-sector, emergency treatment unit/acting chief nursing officer)

To overcome the negative effects of emotional labour, the nurses used several coping strategies.

Coping strategies

Problem-focused coping strategies

The problem-focused coping strategies were twofold, namely, those directed at the environment and those directed at self (Lazarus and Folkman, 1984). In the private and public healthcare sectors, the nurses hardly used problem-focused strategies that were directed at environment because they did not possess necessary authority, resources and management support to alter the environmental pressures, barriers and procedures. However, they often used problem-focused strategies that were directed at self such as skills they developed via training. Public-sector nurses were trained to handle patients, care for terminally ill patients and provide end of life care before they were appointed as staff nurses. Thereafter, they received ‘in-service’ training on medical discoveries, medical equipment and epidemics; however,

they received limited guidance to maintain their psychological wellbeing. Private-sector nurses were trained in private nursing schools and they received limited training on patient handling, patient care and responding to emotional demands. Public-sector nurses were better in handling emotional challenges because they often cared for many patients with complex medical requirements which helped them to be resilient. Due to the limited number of patients in private hospitals, private-sector nurses received less experience and were not as skilled to handle patients and face emotional demands.

“...During our Nurses’ Training School training we have been even asked to arrange the dead body so that we will not be scared of death. I always tell them (junior nurses) to look at things positively and stop looking at things negatively” (female nurse, 10 years, public-sector, medical ward)

Another participant revealed,

“...the workload of a nurse in a general hospital is high and this could affect the relationship between the nurse and the patient...But I still say that nurses in the government sector are experienced. End of the day even patients from the private sector come to us. We have a three-year full course. I don’t think private sector nurses get all this...” (male nurse, 20 years, public-sector, dialysis unit)

Emotion-focused coping strategies

Emotion-focused coping strategies focus on managing, or reducing, psychological distress (Carver et al., 1989; Folkman and Lazarus, 1980). Employees often used avoidance as a coping strategy, for example, taking a break from serving customers (Anderson et al., 2002; Grandey, 2000; Healy and McKay, 2000). Since nurses dealt with human lives, taking a small break from the work floor was not an option, especially in a Sri Lankan public hospital where one nurse cared for 25-30 patients on a day time shift and 50 patients in a night shift (Isikhan, et al., 2004). In the long run, nurses developed intentions to leave their profession as an avoidance strategy (Grandey, 2000). Public-sector female nurses developed the need to leave due to emotional exhaustion and male nurses due to a sense of diminished personal accomplishment because of less opportunities and recognition. Private-sector nurses did not use avoidance as a coping strategy.

“Some don’t like night duty because it’s too tiring. Also, some hospitals have unlimited OT (overtime). Some cannot take leave when they want to. There are some who are really depressed... There are a lot of responsibilities in this job as well. Some bear it well, but some just leave the job” (female nurse, 23 years, public-sector, paying ward)

As a coping mechanism, public-sector nurses tried to distance themselves from stressful situations. Employees who could establish a clear estrangement between self and role suffered less burnout (Hochschild, 1983). This strategy was common among male nurses and they were better at

differentiating their professional lives from personal lives. They viewed emotionally demanding situations as a part of their work and did not let them impact their personal lives. One participant stated,

“I remember the patient for some time, but thereafter no. I don’t do anything to get over stress. I give my best care during my shift. I handover the patients properly despite the time I leave” (male nurse, 10 years, medical ward and forces)

Venting anger on family members was a common coping strategy among public and private sector nurses. Also, public-sector female nurses often vented their stress out on patients and patients’ families. However, private-sector nurses never displayed their frustration to patients because customer care was core in private hospitals. One participant revealed,

“...some nurses are aggressive towards patients...a result of this stress...Sometimes at night there are about 100 patients and only 2 nurses. All the responsibility lies in the hands of the nurse...” (female nurse, 23 years, public-sector, paying ward)

Another participant revealed,

“I have felt that when I go home I release it on the first person I meet...Therefore as soon as I go home I don’t go to talk much with people at home. Even if someone tells me about a problem at home I don’t respond immediately. Because I know that I will get aggressive and shout at them...” (female nurse, 8 years and 4 months, private-sector, renal transplant unit/emergency treatment unit)

Finally, public and private female nurses often sought social support from their colleagues, supervisors and family members. Sharing distressing experiences with others reduced employee isolation (Cricco-Lizza, 2014; Law, et al., 1995; Korczynski, 2003). Also, supervisor support has been recognised as a job resource that buffers the effect of job stressors such as customer aggression (Goussinsky and Livne, 2016). One participant stated, *“I talk with other nurses in the ward... Then I feel that I am not the only victim. I feel relieved...” (female nurse, 10 years, public-sector, medical ward)*. Another nurse said, *“When I am with friends I forget things faster...I...talk with them...Then I forget them soon” (female nurse, 4 years, private-sector, intensive care unit/paediatric ward)*.

Spiritual/religious coping strategies

Sri Lankan nurses also used religion, predominantly Buddhism, to cope with emotional labour. In Sri Lanka, the main religion is Buddhism and the majority of participants were Buddhists. Public and private sector nurses linked their ‘little’ understanding on the teachings in the Buddhist philosophy with their day-to-day incidents to understand their work with human lives and overcome their stress and frustration. The themes that evolved on the use of religion and spirituality include ‘life is a suffering’, ‘loss’, ‘pain’, ‘illnesses and nature of life’, ‘thinking of religion to overcome’, and ‘worship to relax’.

The participants used emotionally demanding situations to understand concepts such as suffering, pain and loss in Buddhism. Also, when they experienced situations that were difficult to ‘get over with’, most participants engaged in religious activities, re-visited the religious concepts to ‘understand the nature of life’ or visited places of worship. In addition, some participants stated that they felt that they should pursue understanding and learning religious teachings on ‘uncertainty of life’ and ‘suffering’ by looking at patients, even though they did not spend sufficient time doing so.

“I really get religious in such instances. I am scared that I will fall ill. I want to do my job. My parents educated me with the greatest difficulty. Therefore, what I do is think about my religion” (female nurse, 5 years, public-sector, medical ward)

Another participant stated,

“...I am a Buddhist. When I want to overcome such an incident, I always think about it when I worship in the morning. This helps me to relax” (male nurse, 12 years, private-sector, medical and surgery ward)

DISCUSSION AND CONCLUSION

This study adds to existing literature on emotional labour and coping in several ways. Firstly, this is one of the few studies that explored emotional labour in Sri Lanka and the first that explored the coping strategies used by nurses in the Sri Lankan public and private healthcare sectors (Dias and Arachchige, 2014; Perera and Arachchige, 2014; Perera and Kailasapathy, 2013; Thisera and Silva, 2017). It also adds to the limited research available on Sri Lankan healthcare professionals in general and nurses in particular.

Secondly, this study found that nurses used ‘reframing’ strategy to deep act, ‘pretending’ and ‘restraining’ strategies to surface act and ‘releasing’ and ‘outpouring’ strategies to genuine act. Deep acting strategy ‘reframing’ enabled nurses to view emotional challenges in a positive manner and created a consonance between felt and expressed emotions (Folkman, 1997; Yin, 2016). ‘Pretending’ and ‘restraining’ led to modifying outer feelings without modifying inner feelings, resultantly, nurses suffered job burnout. Though these helped nurses to achieve their professional goals, they impacted their personal wellbeing (Geng, et al. 2014; Yin, 2016). ‘Releasing’ and ‘outpouring’ helped nurses to express genuine emotions and enjoy an authentic harmony between felt and expressed emotions (Yin, 2016).

Thirdly, this study found that Sri Lankan nurses identified coping as a ‘personal process’ where they personally had to determine their methods of coping (Zander et al., 2010, 99). Sri Lankan nurses often used emotion-focused coping strategies because firstly, they did not possess sufficient authority,

resources or management support to modify threatening or challenging environmental conditions (Lazarus and Folkman, 1984). Secondly, the nurses received limited support from organisations to use proactive coping strategies. For example, none of the hospitals provided counselling, recreational activities or conducted special training programmes to help nurses to improve psychologic wellbeing. Therefore, nurses had to select their own coping strategies (Ablett and Jones, 2007). Selection of coping strategies including venting anger on family members and/or patients led to depression, self-blaming and wishful thinking (Demerouti, 2015; Gianakos, 2000; Ben-Zur and Yagil, 2005; Wang, et al. 2015).

Fourthly, this study found that cultural, religious and spiritual beliefs of individuals played a significant role in coping (Folkman, 1997). Western nurses used aspects of spirituality and religiosity such as spiritual renewal, building an awareness of their own spirituality, trying to identify concepts such as God and death, engaging in prayer meetings and treating their profession as a ‘calling from God’ to cope with emotional challenges (Ablett and Jones, 2007; Bakibinga et al., 2014; Cricco-Lizza, 2014; Chan et al., 2009; Ekedhal and Wengstrom, 2006; Zander et al., 2010). In Sri Lanka, majority of nurses were Buddhists. To cope, they re-visited and tried to understand concepts taught in Buddhism such as ‘life is a suffering’, ‘loss and pain’, ‘illnesses and life’ and ‘compassion’, visited religious places, worshipped and even advised patients to engage in religious activities. Research linking concepts in Buddhism including compassion and suffering to nursing is gaining momentum (McCaffrey et al., 2012; Rogers and Yen, 2002). As McCaffrey et al., (2012) stated, nursing should be viewed together with specific cultural backgrounds they operated in because nurses should respond to cultural requirements.

Finally, this study suggested that gender often impacted the selection emotion-focused strategies. Male nurses estranged themselves well from work while female nurses tended to ‘carry the burden home’. Also, women often used collective coping strategies such as seeking social support. Though men and women developed intentions to leave their profession, reasons behind such intentions varied. Men believed their profession was not ‘worth it’ because of a sense of diminished personal accomplishment due to a lack of career progression, limited educational opportunities and professional recognition while women suffered due to the workload. Studies have found that men used spiritual and religious coping differently to women (men being less spiritual compared to women); however, this study revealed no such difference (Hvidtjorn et al., 2014).

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Stream number
8. Management Education and Development
6. International Management (Cross-Cultural Management)

Abstract only in Program

The Role of Cultural Exposure at Pre-Study Period in Cultural Intelligence development: Exploratory Study of International Students.

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The Role of Cultural Exposure at Pre-Study Period in Cultural Intelligence development: Exploratory Study of International Students.

ABSTRACT: *Growing number of studies in Management Education are exploring factors that affect Cultural Intelligence development, but still with dominant focus on corporate environment. Growing body of literature is particularly focused on studying relationships between International Experience (IE) and Cultural Intelligence (CE). At the same time no clear conceptualized distinction between International Experience and Cultural Exposure does exist. No widely accepted construct that is capable of measuring the level of either EI or C, or both does exist. Current paper suggests an alternative measurement of CE and argues that it allows to deeper study relationships that exist between Cultural Exposure and Cultural Intelligence development in application to international students in Australia.*

Keywords: Cultural Exposure, International Experience, International Students, Cross-Cultural Management, International Business Education.

Introduction

Why some international students succeed when they change cultural contexts and move from their home countries and cultures to new countries to pursue their academic education goals, and why other fail or underperform or seriously straggling and need extended periods of time to complete the degree? How pervious international experience and cultural exposure, acquired by students at pre-study period contribute to their success in a new culture? Could International experience be acquired and measured only by formal work/study/travel journeys and counted in lengths and by frequency of those trips? How less formal and much more challenging for measurement experiences like having parents from different cultures, exposure to different languages, exposure to relatives from different cultures, having friends from different cultures, participating in different cultural events, and etc. could be measured and could contribute to the future students Cultural Exposure' Index? Does it mean, that if students came from poorer families with no actual international trips before their university studies, it limits their opportunity for cultural exposure and international experience. Seeing this problem broader and exploring potential alternative avenues of acquiring international experience will help us to inform a

growing number of potential international students worldwide and suggest and promote alternative avenues of Intercultural competencies development at Pre-Study Period.

International Students

The problem of Cultural Exposure and International Experiences obviously is very important for both, domestic and international students. At the same time particularly for international students, the lack of cultural exposure and international experience at pre-study period might create extreme pressure after moving to different cultural context and serve as a waterline between success and failure.

International Students could be considered as a distinct cohort deserving of separate study due to different cultural backgrounds, upbringings, and cultural experiences that affect development of Cultural Intelligence. The needs and experiences of international students have not been adequately reflected in the business education literature (Bordia et al., 2015). Additionally, at macro-level, the international education industry has a dominant role in the Australian economy. International education commercial activity arising from international students studying and living in Australia contributed \$22 billion to the economy in 2016 (DET, 2017). Education-related personal travel is Australia's third largest export after iron ore (\$53.7 billion) and coal (\$41.1 billion). International students represent a significant contribution to the Australian academic environment and economy.

With the increasing number of international students travelling to developed countries for higher education, there has been a growing interest in exploring the factors that influence their academic performance during their overseas studies (Li et al., 2010).

Cultural Intelligence (CQ)

In recent years, research on cross-cultural competencies has become more sophisticated, with the concept of CQ garnering increased interest among management researchers (Earley & Ang, 2003; Crowne, 2008; Flaherty, 2008; Lee et al., 2008; Portalla, T., & Chen, G., 2010; Rockstuhl & Ng, 2008; Shokef & Erez, 2008; Thomas & Inkson, 2003; Thomas et al., 2008). CQ has been defined as an

individual's capabilities to function and manage effectively in culturally diverse settings (Earley & Ang, 2003). As per Earley and Ang (2003), CQ is composed of four facets. This study utilizes the Cultural Intelligence Scale (CQS) consisting of Metacognitive, Cognitive, Motivational and Behavioral components, as these constructs have been extensively validated (Ang et al., 2007; Eisenberg et al., 2013; Konanahalli, 2014). The four key facets of the Cultural Intelligence Scale (CQS) are:

Cognitive CQ (COG) - this dimension focuses on explicit knowledge of values, norms, and practices in different cultures, including knowledge of social, economic, and legal systems in various cultures (Earley & Ang, 2003). Individuals with high cognitive CQ are able to analyse and understand similarities and differences across cultural contexts (Eisenberg et al., 2013).

Metacognitive CQ (MCG) - a high order mental capability to think about personal thought processes, to anticipate the cultural preferences of others, and to adjust mental models during intercultural experiences (Konanahalli, 2014). Metacognitive CQ focuses on higher order cognitive processes utilized by individuals to organize and comprehend cultural knowledge (Eisenberg et al., 2013).

Motivational CQ (MOT) – this dimension reflects an individual's ability to initiate, maintain and sustain learning and other functional behaviors in culturally unfamiliar or diverse situations (Eisenberg et al., 2013; Templer et al., 2006). It includes intrinsic motivation (i.e. the degree to which one enjoys cultural interactions) and extrinsic motivation (i.e. tangible benefits derived from cultural experiences and self-efficacy) (Van Dyne et al., 2008).

Behavioral CQ (BEH) – this dimension reflects an individual's ability to employ appropriate verbal and nonverbal actions when interacting with people from different cultures.

Overall, CQ allows an individual to appreciate the diversity of experiences to formulate rapid, accurate and situationally sensitive responses to emerging issues (Lovvorn & Chen, 2011). This study utilizes the traditional definition of CQS and does not examine variables at the more detailed level of CQ sub-dimensions as recently suggested by Van Dyne et al. (2012). Individuals that score highly on all four aspects of CQ have a desire to continually translate cultural knowledge to generate strategies that will aid in exhibiting appropriate verbal and non-verbal behaviors (Lin, Chen, and Song 2012).

International Experience (IE) and Cultural Exposure (CE)

International experience is a multidimensional concept that varies along several dimensions. (Takeuchi et al., 2005). The study of international experiences has gained increasing theoretical and empirical attention during recent years (Engle & Crowne, 2014; Engle & Nash, 2016; Ng et al., 2009; Takeuchi, 2005; Tarique & Takeuchi, 2008). In the early IB literature the dominating approach to International experience was thinking about expats previous work experience gained at previous or current international assignments. Recent studies in much higher extent changed their focus on non-work international experience and started focused on students' international experience as well, for whom international work experience on assignments is not relevant as a measurement. The growing number of articles has been focused on studying relationships between International Experience and Cultural Intelligence (Aba, 2016; Engle & Nash, 2016; Michailova & Ott, 2018, Iskhakova, 2018). Eisenberg et al. (2013) note that international experience is positively related to students' CQ at the time of commencing their study. Cultural exposure is defined in the literature as experiences related to a region that aid in developing a familiarity or understanding of the norms, values, and beliefs of that region (Crowne, 2013). Researchers have found that individuals who had been abroad for work or education had higher levels of CQ than those who had been abroad for other purposes (Crowne, 2008; Pless et al., 2011). Multiple trips and the length of each trip further contribute to higher levels of CQ (Tarique & Takeuchi, 2008). Several recent studies focus on the effects of non-work international experience on CQ (e.g. Ang et al., 2001; Tarique, 2005). Aba (2016) utilizes personal contacts and attendance at organized intercultural events as measures of intercultural experience. Ang et al. (2007) report mixed results on the relationship between international experience and CQ scores, although Eisenberg et al. (2013) suggest that this is predominantly due to poorly defined measures of international experience. Crowne (2013) notes that measurement of CE varies from study to study and is typically simplistic and suggests to measure "a breadth of exposure" and "a depth of exposure" and shows that both have an impact on CQ. While it is definitely the improvement, we still believe it still has own limitations. Social learning theory suggests that individuals develop by learning from the people around them. Shannon

and Begley (2008) propose that individuals who have parents from different countries or cultures have greater opportunities to learn about different cultural norms, values and practices at an early age, and to develop inherent behavioral repertoires within cross-cultural situations. They suggest that various degrees of social contact are likely to be significant factors of gaining a “global mindset”, defined as a mindset that combines openness to and awareness of diversity across cultures and markets with a propensity and ability to synthesize across this diversity. One of the most prominent articles in the given field is the recent study of Michailova & Ott (2018), where they conduct a critical analysis of the relationship between EI and CQ that reveals considerable variation and inconsistencies among findings within the extant of empirical literature. Michailova & Ott (2018) argue that this is mainly because most studies fail to apply a theory to explain the link between these two constructs and they draw from Social Learning Theory (SLT) which view learning as being affected by both observation and experience, and includes attention, retention, and participative reproduction, as one potentially powerful tool that can explain why and how EI can lead to CQ development. Michailova & Ott (2018) state that this is far more fine-grained and detailed approach to understanding and explaining the relationship between the two constructs that provided by any previous studies.

In our study we would like to build on that body of research. While Study of Michailova & Ott (2018) contributes significantly to conceptualization of theoretical relationships between constructs, still at empirical level a proper construct for measuring Cultural Exposure and International Experience to be created. We believe that IE and CE concepts have to be much clearer distinguished and understanding, particularly, of CE and IE at pre-study period is critically important for understanding of influence on CQ level. We strongly believe that creating a better defined construct will allow better, deeper and more precise and consistent measurement of relationships between CE and CQ, and our study is contributing to the limited body of theoretical and empirical literature studying those relationships on the case of International students.

Research Model and Hypotheses Development

Following Chen (2002), McKenzie & Schweitzer (2001) we applied regression analysis to examine the relationships among facets of Cultural Exposure and facets of Cultural Intelligence, and we also controlling for age, gender, and country of origin. Our Research Model (Figure 1) is a further development and modification of previous studies. We test relationships between facets of CE and facets of CQ separately and then we test the relationships between the Overall CE and overall CQ. Key improvements in our model include the addition of modified CE variables, studying individual relationships between CE and each facet of CQ, as well as between each facet of CE and each facet of CQ, and overall. After a thorough review of the literature and presentation of key theoretical concepts included in our study, we next formulate our hypotheses that will be subsequently tested and discussed.

Insert Figure 1 about here

Hypothesis 1. *Dimensions of Cultural Exposure (CE) correlate positively with level of Metacognitive CQ (MCQ).*

Hypothesis 2. *Dimensions of Cultural Exposure (CE) correlate positively with level of Cognitive CQ (COG).*

Hypothesis 3. *Dimensions of Cultural Exposure (CE) correlate positively with level of Motivational CQ (MOT).*

Hypothesis 4. *Dimensions of Cultural Exposure (CE) correlate positively with level of Behavioral CQ (BEH).*

Hypothesis 5. *Overall Cultural Exposure level at pre-study period correlates positively with Overall Cultural Intelligence level.*

Methods

a) Participants

Data are based on a culturally diverse sample of international students from a large university in Australia. These students had various levels of prior international experience and came to Australia as

international students. The final sample consisted of 188 respondents completing their first year of study in Australia, where 65% were male and 35% female, ranging in age from 19 to 44 with average age 25.5 (Table 1). The dominant number of respondents came from China, Hong Kong, and Taiwan (together comprising 41.9%), India (12.4%), Nepal (11%), Pakistan (9.3%), Middle East (ME) region including Lebanon and Iran (8.0%), Vietnam (8.6%), Malaysia (3%) and others (5.5%). Students were enrolled in various Bachelor and Master programs.

b) Data Collection

A survey was developed and offered through effective and reliable on-line software (Google Doc Survey) and emails with links inviting student participation were sent out to the selected cohort of students. The average time required to complete the questionnaire equated approximately 15 min. Participation rate was 62%. Data were collected between January and June 2016. Ethical approval was received from the University Ethical Research committee and students were informed about the voluntary nature of this study.

c) Instruments

The 20 items that comprise the Cultural Intelligence Scale (CQS) developed by Ang et al. (2007) are utilized in this study. *Metacognitive CQ*, *Cognitive CQ*, *Motivational CQ* and *Behavioral CQ* were measured based on Ang's (2007) scale. All items were rated on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). A high score indicated that an individual could better adjust to new cultures, understand local practices, and behave appropriately and effectively in other cultures outside his or her own (Lin et al., 2012). The Cronbach's alpha in our study for Metacognitive CQ, Cognitive CQ, Motivational CQ and Behavioral CQ ranged between 0.71 and 0.84. These reliabilities are consistent with those reported by Ang et al. (2007) and Lin et al. (2012). As an illustration of a survey question, the following is a question for Metacognitive CQ: "before I interact with people from a new culture, I ask myself what I hope to achieve". To study CE of International Students we used factor analysis to create three dimensions based on the information collected with the following questions: Geographic (*number of countries visited, number of countries lived in, length of time living outside birth country*); Inherited (*born in the same country as parents*) and Environmental (*e.g. had relatives*

in foreign countries in pre-study period, had friends in foreign countries in pre-study period).

Geographic dimension’s questions were measured by number of countries and by length of stay, Inherited dimension was measured as a binary variable with “0” – born in the same country as parents, “1” – born in different country than parents, that integrates the concept of “third culture kid” and Environmental dimension’s questions measured an environment characteristics. Three factors were sufficient to represent the collected data. Table 1 reports the factor loadings used to construct the corresponding explanatory variables.

Insert Table 1 about here

The three factored dimensions (Geographical, Environmental and Inherited) were used as facets of CE. The Geographical dimension is in line with Crowne’s (2013) study examining the depth and length of international experiences. Geographical dimension in our study is mostly related to the measurements of International Experience in the academic literature, namely, Frequency and Length of pre-study Travels and experiences. But 2 other dimensions - Environmental and Inherited could be considered as Cultural Exposure Measurements added by this study. No suitable measurement for Environmental and Inherited dimensions were found, so we constructed it independently. We measured several control variables: age, gender, and country of origin. Table 1 reports Descriptive statistics for selected variables.

Insert Table 2 about here

Results

We report below on the outcomes of testing our 5 hypotheses. The means and standard deviations of selected control variables are shown in Table 2. The current study further supports the validity of Ang

et al.'s (2007) four-factor measure of CQ. Initial analysis of the data was conducted by examining the reliabilities of the CQ facets. All alphas adhered to acceptable levels, with a range from 0.71 and 0.84. The magnitudes of correlations among the four CQ dimensions were moderate, which is comparable to those reported in recent studies (Ang & Van Dyne, 2008; Eisenberg 2013). The results indicate very low correlations between gender and all four facets of CQ, while age exhibits low to moderate correlations with facets of CQ, in line with Engle & Crowne (2014).

The results pertaining to each hypothesis are explored below, followed by a discussion of key findings. Analysis tba.

Discussion and Implications

Our study contributes to the growing literature on the relationship of CE and CQ in several ways. A greater and more nuanced understanding of the relationship between CE and CQ will facilitate better cross-cultural preparation for future international students at pre-study periods. Our contribution to conceptualization of theoretical construct of Cultural Exposure and creating a clear understanding between phenomena of International Experience and Cultural Exposure will allow to broad practical implications within the education industry at several stages of the international education process. Our major findings are as follows: tba

APPENDIX

Figure 1. Relationships between Cultural Exposure and Cultural Intelligence

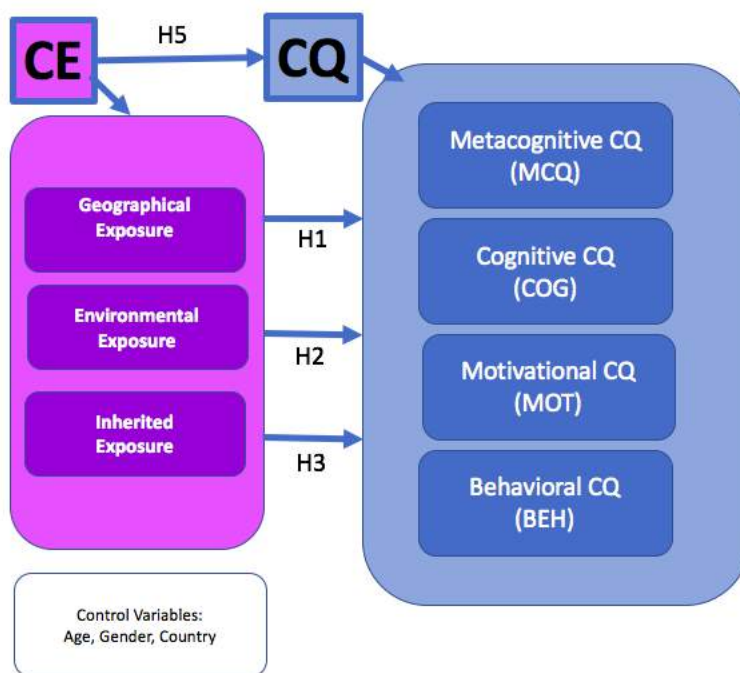


Table 1. Factor loadings and unique variance

Variable	Factor 1	Factor 2	Factor 3	Uniqueness
visited_q1	0.7163	-0.1119	-0.2287	0.4221
lived_q3	0.7345	0.0829	0.3438	0.3355
months_out~4	0.6985	-0.2597	0.1410	0.4248
n_of count~5	0.8204	-0.0843	0.0601	0.3163
q6_born co~t	-0.2916	0.0813	0.7892	0.2855
q8_have_re~e	0.2486	0.7218	0.2432	0.3581
q9_had_fri~e	0.1442	0.7109	0.4251	0.2931
q7_n_langu~s	0.0202	0.5742	-0.3541	0.5445

Table 2. Descriptive Statistics and Correlations of selected variables (N = 189).

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	25.5	3.98	1									
2. Gender (0:m/ 1:f)	0.35	0.48	.05	1								
3. Languages	2.39	0.68	.04	-.09	1							
4. MCQ	3.41	0.71	.04	.03	.09	1						
5. COG	3.76	0.80	.19	.01	.07	.34	1					
6. MOT	3.86	0.71	.18	.01	.23	.38	.56	1				
7. BEH	3.47	0.82	.16	-.04	.17	.27	.51	.59	1			

Note: Correlations greater than 0.10 are significant at the 0.05 level. Correlations greater than 0.20 are significant at the 0.01 level.

Table 3. Regression Results of MCQ and CE dimensions

MCQ	B	SE	t	P> t
Geographical	0.077	0.111	0.70	0.485
Environmental	0.133	0.111	1.20	0.230
Inherited	0.128	0.111	1.15	0.250

P** <0.05; R-squared=0.117

Table 4. Regression Results of COG and CE dimensions

COG	B	SE	t	P> t
Geographical	0.636**	0.150	4.22	0.000
Environmental	0.144	0.150	0.96	0.339
Inherited	-0.349**	0.150	-2.32	0.021

P** <0.05; R-squared=0.117

Table 5. Regression Results of MOT and CE dimensions

MOT	B	SE	t	P> t
Geographical	0.416**	0.123	3.37	0.001
Environmental	0.358	0.123	2.91	0.004
Inherited	-0.165**	0.123	-1.34	0.181

P** <0.05; R-squared=0.160

Table 6. Regression Results of BEH and CE dimensions

BEH	B	SE	t	P> t
Geographical	0.499**	0.169	2.94	0.004
Environmental	0.067	0.169	0.40	0.690
Inherited	-0.372**	0.169	-2.19	0.029

P** <0.05; R-squared=0.069

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4. Health Management and Organisation

Interactive session

Leadership in Victorian Clinical Directorates: An insider's perspective

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4. Health Management and Organisation

Interactive session

Abstract

The paper presents the insider perspectives of leadership within the clinical directorate (CD) structure of Australian tertiary hospitals. The clinical governance structures of Australian public sector hospitals have undergone significant change in the past three decades. Though the structure has been modified to suit individual hospital requirements, there is little evidence that the issue of relationships, particularly communication relationships, between staff has received such attention. This has a profound influence on the types of leadership in healthcare when the implementation of some of the most innovative leadership styles favored by management theorists is foiled through relationship disparities. Adapting innovative leadership styles and interdisciplinary communication to the current hospital structures is problematic. A research study is proposed to explore and cast light on the issues raised.

Key words: Health Leadership, Healthcare Professions, Health Workforce Issues, Healthcare Management, Hospital Management, Practice, Climate, Culture, Environment, Professional Identities

Modern hospital hierarchies present a problem in discerning which type of leadership is in place. The hospitals of today are complex in structure and employ a vast number of highly educated professionals who are task driven and socially embedded. While management scholarship has highlighted many of the issues which have become apparent over the preceding three decades since the introduction of the CD governance structure; communication between the various professional bodies remains one area of inquiry where consensus is equivocal, and where there is little consistency. This is apparent also in the discussion on leadership styles which leave their mark on all facets of hospital administration from succession planning and leadership development to driving productivity within and between local units of hospitals. It is important to understand the communication processes and the types of leadership that takes place in healthcare not only for consistency within each organisation (West, Armit, Loewenthal, Eckert, West & Lee, 2015), but also to align practices and policies to mobilise large numbers of staff towards good fiscal management and excellent patient care. The purpose of this paper is to introduce a

new project designed to review the current communication practices and leadership styles of executive staff in a major metropolitan hospital in Victoria, Australia. We also review the leadership scholarship for current leadership concepts found within healthcare. And further, we seek to compare what the literature is saying with the results of the recently completed project. Leadership theory has grown exponentially in the last two decades (Dinh, Lord, Gardner, Meuser, Liden & Hu, 2014) and induces some vigorous discussion within the literature. Here, we discuss how the most prominent of these views are applicable in contemporary healthcare and offer an integrated theoretical perspective on the mediators of communication and leadership which have come to light from the current investigation.

2.0 INVESTIGATING TERTIARY PUBLIC HOSPITAL LEADERSHIP-A PROPOSITION

Perhaps the most salient influences on communication between leaders are embedded within professional boundaries and expectations, and the imposition of governance structures of tertiary hospitals. Within the literature these two implications for leadership are not progressed to the extent that other emergent influences have been. Locating communication practices within the restrictions of professional practice or the demands of governance structures needs further enquiry. Building on the foregoing discussion, we suggest some propositions to investigate communication and leadership action in the tertiary sector, specifically within a professional and structural boundaries focus. Specific research questions to be addressed include:

2.1 Research Questions

1. *In what ways do the communication pathways of the clinical directorate structure of hospitals support effective diffusion of information between executive and senior staff?*

More specifically:

- a) *How are communication pathways currently implemented in the clinical directorate of the case study hospital?*
- b) *Why does the clinical directorate structure impact on effective operation of these systems from the perspective of staff?*

- c) *What aspects of structural arrangements specifically impact effective communication and how does staff overcome these barriers?*

3.0 THE PROPOSED STUDY

The proposed study is focused on communication and leadership in contemporary healthcare centres. A mixed method approach is employed. Qualitative data was extracted from semi-structured interviews and used to not only understand the personal nuances of individual communication practices and leadership styles, but to support and corroborate the quantitative social network analysis (SNA). SNA can be applied to define the participant’s involvement within a network and in this instance will generate some understanding about their communication practices as leaders. The first aim is to establish the level of interaction between professions by investigating the various types of communication relationships that have been formed. The second aim of the study is to understand how staff enact communication within their leadership in the clinical directorate. Of interest will be the influence of structure on the communication style and how this preference varies across the organisation in relation to executive members of staff within the organisation. The third aim of the study is to understand how preferred leadership styles and preferred communication pathways impact on activities. Particularly those activities in which cross directorate boundaries or are shared between teams causing complexity in task progress and communication.

3.1 Method

The study is undertaken at a large healthcare facility in Melbourne. The executive staff of this single site are the focus of the inquiry. Rather than comparing leadership styles between the consenting participants, this study aims to reveal the types of leadership found and to understand how structure impacts on individual’s choices of communicating within their leadership styles. The researcher intends to address bias in interpretation of the results by choosing a data analysis mechanism which responds to the voices of the participants. Structural analysis serves this purpose through aligning responses directly to

the research question. A deeper analysis is also obtained using In Vivo analysis which again uses the participant's responses verbatim (Saldana 2018). Together these two methods will be used to produce a metasynthesis; a narrative built directly from the participant's words. Data analysis is also complimented by a team approach to analysis which is supported by the guidelines of a code book.

3.2 Integrated theoretical perspective

We advance three organisational behaviour theories to understand the context and conduct of communication in this executive network. Elbasha and Wright (2017) posit that “empirical research has failed to effectively account for how macro structures are recursively interrelated with micro practices” (p. 107) and places emphasis on the need to understand the interplay between these two boundaries. The employment of Structuration theory (ToS), Third generation activity theory (TGAT) and Distributed leadership theory provides a framework in which to apply both an individual (micro), individuals as team members (meso) and individuals as leaders of teams (macro) view of the interplay respectively.

Theory of Structuration (ToS) facilitates discussion about individual behaviour or agency. This theory accounts for the agentic behaviour and the structure of the agent's world. Giddens (1973) proposes that individual behaviour is recursively perpetuated by the structure in which the individual resides and is in response to maintaining and propelling towards one's own goals. Agentic behaviour contributes towards complexity in the workplace when the agent designs and maintains aberrant methods of work to achieve goals. Agentic behaviour is also apparent in leadership where managing staff is preferential and commensurate with the managers own agenda.

Activity theory, in particular Third Generation Activity theory (TGAT) as detailed by Engestrom (2000) contributes toward understanding complex interactions in overlapping activities. These complex interactions involve actions of agents, or groups of agents that have an impact on other agents or agent groups. This theory is inclusive of boundary spanning and involves ‘knotworking’, an instrument used to maximize the skills of staff for the work at hand. Knotworking requires that the most skilled member of

staff take a leadership role for the current task, and when completed, step back from this role to allow another team member to take leadership responsibilities (Avis 2009). Leadership roles change depending on current requirements. TGAT is also useful to visualise the current position of each team involved in a cross- boundary interaction and to provide generally acceptable solutions.

Distributed Leadership theory (DL) (Gronn 2002) is chosen as a response to the devolved structure of the CD. Within the central hospital the healthcare streams present as individual units, hospitals also have satellite centres of care which are physically separated from the central hospital site. This separation incurs an absent leader model which suggests that there may be some distribution of responsibilities occurring. This articulates with ToS when managers must make decisions around who to share responsibility with, and indeed whether to share the responsibility at all. How much responsibility to share and how this will impact on the managers own agenda to achieve targets are also issues to be resolved? Agentive practice may include choosing delegates who share the same profession, who are friends or who are recommended by friends. Further, the absent manager at satellite sites empowers the person to whom leadership is distributed to then have their own agenda to succeed and become involved in complex activities as the managers representative. DL also articulates with TGAT when designing workloads for teams and the interaction of teams to complete complex tasks. Thorpe, Lawler & Gold (2011) suggest that DL is a response to the rapidly changing ‘operational, strategic or technological’ (p.239) landscape where the actions of groups are more responsive than the single heroic style leadership of the past. Thorpe et al. (2011) acknowledge the contribution of Engestrom’s activity theory to the alignment of tasks with the organisations goals and the collective unity required to achieve outcomes of these tasks.

4.0 A REVIEW OF THE LITERATURE

Leadership styles have been examined in many ways over decades. An underlying theme within the literature is to place leadership in the continuum of achieving service improvements. This traditional focus still excites leadership theorists (Fitzgerald, Ferlie, McGivern & Buchanan, 2013). Contemporary

leadership theory involves the consideration of more than just achieving service improvements. Theory around leadership incorporates a functional, contextual and relational collectively enacted work (Bolden 2011, Fitzsimons, Turnbull James & Denyer 2011) that is the consequence of social interactions, as well as the structural influences of organisational mandates and social identities within organisations (Sparrowe, Liden, Wayne & Kramer, 2001). Leadership also incorporates expertise, knowledge transfers and collaboration (Friedrich, Vessey, Schuelke, Ruark & Mumford, 2009). Together these elements have not been extensively reported within the context of the CD structure. Evidence from the literature suggests leadership opportunities to facilitate service key improvements are supported when there is “good pre-existing relationships” (Fitzgerald, Ferlie, McGivern & Buchanan 2013, p. 227). Braithwaite (2006) challenged the lack of empirically based inquiry into the relationship changes as a result of the structural rearrangement of healthcare organisations. Friedrich et al. (2009) nominate communication within their key collective constructs and cite modes of communication as an important factor within their framework for understanding collective leadership. Friedrich et al. (2009) discuss the importance of understanding the two-way communication of leaders and individuals with a focus within the distributed leadership setting. Their conclusion identifies the benefits of collective leadership, but suggest this relies on team members and leaders to “foster and facilitate the process” (p.95). The following discussion attempts to illustrate the lived experience of the problems of fostering and facilitating a network within the CD structure which not only supports interdisciplinary and multi-team communication, but the advancement of a distributed leadership style. The void in the literature concerns the inseparable link between communication and leadership and the mediating effects of the clinical directorate structure.

5.0 THE INSIDERS PERSPECTIVE

The insider’s perspective dwells on the influence of hospital structures as an important mediator in particular professional communication relationships. These professional relationships incorporate elements identified within the literature and are elevated to a higher abstraction by identifying the appearance of certain relationship styles in relation to differing roles within the healthcare organisation’s

structure. To do this we place a focus on those leadership types which are best described as personalised forms of leadership, in particular the charismatic, ideological and pragmatic leader models. This perspective also challenges the notion of collective leadership types, such as distributed leadership, as relevant in contemporary healthcare. The insider perspective suggests distributed leadership in healthcare is constrained citing restrictions of time and professional boundaries as limiting this type of activity.

5.1 Personalised leadership styles

Charismatic leaders are considered to be strategically more advanced in terms of leader-follower relationships than the ideologue or pragmatic leader. Key characteristics are the ability to identify needs of others, develop an environment where each leader can work with others and develop relationships or alliances to move forward to a common goal (Bedell-Avers et al. 2009). The strategy used by the charismatic leader is to remove traditional barriers and enable people to work together. Doing so also enables work to progress through anticipating the needs of workers and encouraging alliances to share workload or increase the amount of expertise to be applied to work. This leadership style may be illustrated by a nurse unit manager or senior nursing personnel within a unit who are not formal managers but are able to influence others to work together for mutual benefit. The charismatic medical leader may be one who manages junior doctors or be a senior medical administrator who does not have direct influence over colleagues but has to inspire them to a shared way of working within the organization when the doctors may work for other institutions and also in private practice unlike the nurses or other clinical staff. The charismatic leader is evident within the CD structure, particularly within disciplines. Leaders and members of discipline do display team work qualities, however in critical or definitive situations, the role of the professional is embedded within traditional reporting and hierarchical boundaries.

Nominating the ideological leader within tertiary hospitals presents an interesting challenge if the description offered by Bedell-Avers et al. (2009) is accepted. “Ideological leaders most often maintain strong group boundaries, demonstrate an oppositional character, and maintain a rigid commitment to their beliefs and values in a manner that precludes their acceptance of alternative leadership strategies” (Bedell-Avers et al., 2009, p. 312). This description aligns the style of the ideological leader with those qualities which may be more common among medical staff as a result of their training and professional roles. Socialisation to the medical profession may make it unnatural to take a social interactional approach to their role. Functionally, this leadership style does not encourage alliances with others, nor does it encourage collaboration with those who hold different values and beliefs. Followers of this leader find strength in the approach where goals and aims are shared. Similar professional status will also find supporters of this person.

The pragmatic leader may be prominent in healthcare. Bedell-Avers and her co-authors (2009) suggest these leaders, as many found in healthcare, focus on the functional needs of followers and the subsequent performance as a result of investment in providing these needs. This type of leadership practice acknowledges the experience and seniority of others; however such leaders selectively denigrate or celebrate the actions of others according to their own values and beliefs. “They appear to capitalise on the strengths and weaknesses of other leaders in a manner that better serves their goals” (p. 313). The pragmatic leader may be best illustrated as middle management and mentors within the nursing hierarchy. The middle management of doctors could also be included in this group due to the value placed on their own beliefs, the challenge of the integration of professions at the bedside (interdisciplinary teamwork) and the distance from the power base (their managers) to their own positions as major providers of care.

This middle management and mentor group undertake a great deal of responsibility, but are without autonomous input into the policies and procedures under which they work. Their outputs are mostly practical but requiring investment in others to maintain these outputs. These leaders demonstrate varying degrees of control which suggests their approach to any problem is one of assessing the situation, controlling threats and finding opportunities (Mumford, Antes, Caughron & Friedrich 2008). The pragmatic leader appears to be one who responds to the situations as they arise. Mumford et al. (2008) suggest this type of leadership as a response to situation and threats is also one which contributes to innovation; pragmatic leaders are exposed to opportunities to be challenged in complex situations giving rise to emergent practice which challenges and innovates old practices.

Each of these personalised leadership forms present barriers to fostering and facilitating team work and thereby a distributed model of leadership. While representing ego centric models of leadership; it is the structural barriers evident in the discussion which contribute to an ineffective communication network. Discipline silos also limit the diffusion of communication. The leaders described above have the social capacity to develop effective communication relationships however are constrained by hierarchy or discipline expectations and communication only occurs when necessary; forgoing the development of social relationship and more fluid communication pathways.

6.0 THE PARTICIPANTS PERSPECTIVE

The participant's perspective is drawn from the results of the data analysis and is compared to the findings of the literature review. From the outset the project results allude to a healthcare organisation which struggles to meet the needs of the Victorian community. Unprecedented growth within the service corridor of this organisation presents the greatest challenge to executive staff. There is also a recent

history of major management issues which continue to impact on the relationships between executives. These burdens are highlighted in the responses of the participants and present new considerations for management theorists. Participants failed to nominate functional, contextual and relational aspects highlighted within the literature review as a consideration in maintaining their communication relationships. Specifically expertise sharing, knowledge transfers and collaboration along with the establishment of long standing relationships. The lack of these social and professional engagements have a significant negative influence on the interaction between executives and are perpetuated by profession boundaries and structural instability. Leadership is a tightly controlled prerogative which incorporates little, if any of the ideals offered through the insider's perspective nor the literature review. This tight control over leadership responsibilities challenges the idea of distributed leadership within contemporary healthcare. Participants nominated limited tenure, a lack of time and professional expectations as important in their management responsibilities and implicit in their choices of leadership style and communication pathways. This ego-centric approach to leadership does little to contribute to growing teams who foster and facilitate team work and relationships with other teams and contributes to complexity where teams overlap with the activities of other teams. Overwhelmingly participants nominated establishing trust relationships with fellow executives as the most important aspect to facilitate their communication. This requirement of trust extends beyond Giddens concept of "power as a means of getting things done" (1984, p.283), and so dominates the considerations of leadership. Participants nominated trust as imperative in allocating of tasks, securing and giving resources and consulting others outside their disciplines for their expertise. Participants also said the lack of trust contributes to a cautiousness and reticence to develop good communication relationships, or to distribute tasks. This appears to be directly related to the structural and professional limitations of the organisation at this time. This project supports the view that there is an inseparable link between structure and communication and that structure is an important mediator recursively situated within in the development of effective communication pathways.

7.0 CONCLUSION

The study addresses issues that the insider perceives to be embedded within the clinical directorate structure from its inception. Through the years since the structure was introduced, several tertiary hospitals have reconciled their governance structures and added or removed levels according to their needs. There is little evidence that the issue of relationships between staff has received attention. Professional connectivity and embeddedness appears crucial in the leadership preferences of staff in tertiary hospitals. Tribal alliances influence leadership types where the choice is pre-determined and mandated by previous generations. Governance structures also influence the types of leadership in healthcare by restricting the implementation of some of the most innovative leadership styles favored by management theorists. The bureaucratic ego-centric style leader still lives within the echelons of hospital management despite efforts by theorists and innovative staff to adapt leadership styles to the current hospital structures. There is no doubt that informal networks play a significant role in the professional judgements made by leaders in healthcare. Leaders who follow the styles mandated by their professions, stifle experimentation and growth in exemplary leadership. This project has highlighted the incongruent nature of related, yet separated disciplines and the unresolved issues around consistent and appropriate leadership models within tertiary Australian hospitals. The governance structure changes now yield little debate within healthcare scholarship. Future efforts by researchers could focus on the role of limited tenure of executives which appears to be prevalent in contemporary healthcare organisations. Participants suggest this limited tenure model means executives do not have the trust relationships which come from long standing relationships. This, in turn, impacts on stability on organisations and for executives to have enough time to invest in teams who will foster and facilitate relationships.

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Stream Number 3 Gender, Diversity and Indigeneity
Competitive Session
Abstract Only in Program

Managing Intersectionality for Sustainable Work: Cracking the Glass Cultural Ceiling

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Managing Intersectionality for Sustainable Work: Cracking the Glass Cultural Ceiling

Abstract:

A focus on the experience of culturally diverse leaders has been slow and the intersecting impact of gender and cultural diversity sees culturally diverse women notably under-represented in Australian leadership ranks as they experience a double jeopardy, or ‘cement’ ceiling. This paper contributes to addressing the dearth of Australian research by providing evidence from a rigorous empirical study, based on interview, focus group and survey data coupled with an examination of national and international primary and secondary source material. Due to space constraints the main feature of this paper is a presentation of the empirical findings with a focus on the barriers experienced by culturally diverse female aspiring leaders.

Key words: Cultural diversity, Women, Leaders, Australian organizations

Introduction

and

Overview:

In spite of almost five decades of Australia’s multicultural policy and a country which boasts one of the most culturally and linguistically diverse populations (ABS, 2017), this is not reflected in the executive teams and boards of Australian public, private and not-for-profit organisations with the vast majority of board and senior leadership positions held by Anglo-Celtic men. As noted in research by the Australian Human Rights Commission, in ASX200 companies, over 75% of CEOs are of Anglo-Celtic heritage; 18% have European heritage; 5% are from a non-European background and no CEOs have Aboriginal or Torres Strait Islander heritage (AHRC 2016). Similar findings were also reflected in the leadership ranks of the Federal and state parliaments, ministries of governments in the states and federally, in most public service roles and the leadership of Australian universities (Australian Human Rights Commission, 2016). The follow up report by the AHRC (2018) recently revealed that the senior leadership suite is dominated by particular groups with up to 97 percent of the nearly 2,500 executives surveyed for the purposes of the report identifying as having Anglo-Celtic and European backgrounds. Adding to this work, research by the Diversity Council Australia (DCA) shows the striking intersecting interplay of gender and ethnicity, resulting in what Beale (1969) called a ‘double jeopardy’. Some five decades after this term was coined, these intransigent barriers into leadership for culturally diverse women continue, with forecasts showing that if company directors in ASX-listed companies were 100

people, 2 would be culturally and linguistically diverse women; 6 would be Anglo Celtic women; 26 would be culturally and linguistically diverse men and 78 would be Anglo Celtic men (DCA, 2017). The dismal under representation of culturally diverse women in leadership positions displayed in the available data resulted in two key questions which guided our study. First, *why do so few culturally diverse females reach top leadership positions in Australian organisations?* And second, *what can Australian organisations do to better recognise the skill and ambition of culturally diverse female talent?*

Our work is informed by a context-specific analysis and features a multi-method approach to addressing the neglect of culturally diverse women in leadership positions. Notably, the treatment and experience of culturally and linguistically diverse men and women workers has been largely ignored in the diversity management scholarship and as a corollary, in policies and initiatives (Azmat et. al., 2014; Syed and Özbilgin, 2009; Author, 2013). To illustrate, Syed and Kramar (2010: 104) note that ‘even in best practice organisations, equal opportunity programs tend to have a narrow focus, prioritising women, harassment, caring responsibilities and disability ahead of religion, nationality and race (2010: 102). Similarly, Bell et. al., (2009:178) in their study on migrant workers in the US highlight the invisibility of immigrants in the diversity literature. Finally, Kamenou and Fearfull (2006: 159) argue that: ‘HRM has largely been silent with regard to the issues constantly faced by ethnic minorities at work. It ignores social groups and how cultural and religious aspects can affect perceptions of ethnic minority groups within organisations, thus having a negative effect on their career opportunities and experiences’ (see also Alcazar et. al., 2013; Azmat et. al., 2014; Benschop, 2001; Hartel, 2004; Syed and Özbilgin, 2009).

In sum, in terms of the literature covering the leadership progression of culturally diverse men and women, it is safe to say that it is spread across various polls including, sociology, organisational studies and human resource management. A variety of different terms for cultural diversity are also employed with race, ethnicity and minorities featuring more regularly than the Australian coined term: ‘cultural diversity’. With the largest pool of research emerging from the US and UK, this research has a narrow concentration on specific cultural groups, with what is often a focus on the experience of those

identifying with African American, Hispanic, and to a lesser extent, Asian cultural backgrounds (e.g. McCarty Killan et al., 2005). Very few studies examine a broader range of cultural backgrounds when looking at minority representation in leadership. This is problematic given the different cultural landscape of Australian society. Issues also exist with the range of barriers examined, with a limited amount of studies looking at the double bind that culturally diverse women experience.

In addition to attempting to address the scarce discussion around the experience of ethnic minority men and women workers, the extant literature also notes that there are two interconnected forces at play including perceptual and systemic barriers which must be overcome to gain access to leadership positions. In triangulating our data analysis we have gone some way to: (i) shed light on the perceptual and systemic barriers impeding culturally diverse women from gaining access to leadership positions and (ii) address the void in Australian scholarship. Most importantly we deal with one of the most marginalised groups of workers seeking to access leadership in Australian organisations: culturally diverse women.

Methodology

While drawing on survey data, this study complements this with the narratives of culturally diverse women, engaging them in a deep dive into their experience in accessing leadership positions. Importantly, we bridge the quantitative and qualitative divide by drawing on and conducting an analysis of both sets of data in order to build a robust and rigorous illustration of the experience of culturally diverse women in accessing and in gaining leadership positions.

As we see it, the quantitative and qualitative silos, which see data and analysis sliced along an objective/subjective, static/dynamic, mechanistic/relational plane where context plays a central or peripheral role is indeed simplistic and artificial. Hanson (2008: 97) captures the limitations of the strict dichotomy between the two forms of data collection and analysis, arguing that:

Most of the arguments for one side or the other are based on assumptions about what one side thinks the other side is doing, rather than what the other side is doing. This has been analogous to the process of social construction of “other,” something based on what it is not rather than what it is, and with greater homogeneity that actually exists within the “other.”

For the purposes of this study we overcome this divide by drawing on a multi-method approach. Our evidence gathering involved several phases. First, we conducted an extensive review of international and national research to understand the barriers (perceptual and systemic) to greater leadership representation for culturally diverse women, including whether (or not) the intersecting interplay of gender and culture presents a magnified barrier. Evidence collected from the primary and secondary source analysis was drawn on to develop the on-line survey, as well as to inform questions for the focus groups and interviews. Importantly, we located the construction of our questions administered in the survey, interviews and focus groups within a (country) specific context emphasising the centrality of pre-existing structures and the policies and processes that shape, consolidate and reproduce the contextual dynamics (van Dijk and van Engen, 2012: 78-79).

In the process of designing the focus group, interview and on-line survey questions, a broad body of literature and secondary documentation was reviewed; Census surveys from around the world were consulted; and, industry and academic expertise was drawn on through the establishment of a project reference group, which met fortnightly/monthly via phone conference over a nine month period. The frequent discussions with the project reference group ensured an iterative approach to the development of the interview/survey and focus group questions and to the analysis of the findings. In terms of the shaping of the questions, our iterative process allowed us to identify and respond to the limitations identified in other projects of a similar type.

There are several limitations we sought to overcome. First, we identified that there was a notable over-reliance on approaches that conceptualise (cultural) diversity as discrete, fixed demographic characteristics such as for instance, country of birth, religion and language spoken. Such an approach means that there was a failure to recognise the significance of (cultural) identity (Chrobot-Mason, 2004; Galvin, 2006; Johns et. al. 2012; Linnehan et. al. 2006; Nkomo & Cox, 1996): that is, that combination of ascribed and self-selected identity characteristics (Jenkins, 2004). Second, there was little recognition of multiple and intersecting dimensions of cultural diversity when measuring cultural background

(Bondi, 1993; Boogaard and Roggeband, 2010; Browne and Misra, 2003, Kirton, 2010; Phinney & Ong, 2007; Triandafyllidou and Wodack). Third, there was a lack of engagement with global experience as a measure of cultural identity and diversity (Tung, 1993). And finally, existing approaches were insufficiently responsive to the way (cultural) diversity is shaped by the national context (Jones, et al. 2000; Konrad, et al. 2006). Importantly, insights from this process were incorporated into the design of each of our evidence-building threads: interviews, focus groups and an on-line survey which were all informed by a broad and multi-layered definition of culturally diversity, which is detailed further on.

Survey

For the survey respondents, we requested they indicate their country of birth as well as their cultural identity, with respondents being able to mark up to two cultural identities to which they felt they belonged. A definition of cultural identity was provided, as follows: *“Your cultural/ethnic identity is the cultural/ethnic group to which you feel you belong. This identity may be linked to your country of birth or that of your parents, grandparents or ancestors or it may be different. For example, it may be your partner’s ancestry or it may be the country or countries you have spent a great amount of time or you feel more closely tied to.”* In short, the survey recognised that an employees’ cultural identity may be informed by multiple rather than only one prevailing ethnicity, and as such we sought to collect data on up to two different cultural/ethnic groups that an employee may identify with. This approach to measuring cultural background makes data analysis more complicated as it requires analysing multiple cultural identity responses. However, it respects the fact that as many as 30% of Australian workers identify with more than one cultural background and as such they can find it difficult to specify just one cultural identity, ethnicity, or cultural background in surveys (DCA, 2011). Moreover, allowing people to describe their cultural background in more than one way (for instance Australian-Chinese rather than just Australian) also enables their response to capture not just how *they* identify but also how *others* may perceive them to identify.

The online survey was conducted to provide female leaders and emerging leaders from a diversity of cultural backgrounds with the opportunity to offer their insights into perceived barriers and enablers of

their careers. Accordingly, the questions were structured around four key themes, including: (i) Career Aspirations; (ii) Career Experiences; (iii) Career Intentions; and (iv) Demographic Information.

The survey was administered to female leaders and emerging female leaders in a selection of Diversity Council Australia (DCA) member organisations, representing a range of industry sectors. Notably, *‘Emerging leaders’* was determined by the participating organisations administering the survey and was not predefined. This allowed for some flexibility in the determination of an ‘emerging’ leader with some located in lower levels in the organisation yet able to provide important insights. The sample included both ‘culturally diverse’ and non-culturally diverse female participants as we were keen to investigate whether there were statistically significant different responses between these two employee groups. Findings are based on the responses from 366 female leaders and aspiring leaders who completed the survey.

When reporting on survey findings, ‘culturally diverse’ refers to any women who identified in the survey as being only from a non-Main English Speaking Country cultural background. Of note, according to the Australian Bureau of Statistics these are countries other than Canada, Ireland, New Zealand, South Africa, United Kingdom, and the United States of America. This definition recognises Australia’s history of British colonisation, so culturally diverse includes people with European, Asian, African, Middle Eastern and Pacific Islander cultural backgrounds. Our definition did include Indigenous women as culturally diverse. This was purposeful and done in order to respect Indigenous Australians’ unique position as First Nations people.

Of the 366 respondents, 198 identified as being only from a Main English Speaking Country Cultural background and 96 identified as being only from a non-Main English Speaking Country cultural background. The remaining 67 respondents identified with both MESC and non-MESC cultural backgrounds, while five did not wish to identify their cultural identity. Importantly, we categorised our groups as culturally diverse and non-culturally diverse women, rather than providing information on particular employee segments within this: such as for instance, Asian, South East Asian or South Asian,

Chinese identifying women etc. This type of more fine-grained analysis was not possible due to sample size constraints (see also Authors, 2016).

Focus Groups and Interviews

In addition to the on-line survey, focus groups and interviews were undertaken to build a deep understanding of the barriers to and enablers for culturally diverse women progressing into leadership, and what actions organisations can take to address the underrepresentation of culturally diverse females in leadership ranks. The focus groups included 54 culturally diverse female leaders and emerging leaders from a range of organisations, industry sectors, organisational levels, and cultural backgrounds across Melbourne and Sydney.

Participants were invited through the DCA's member email distribution list. The focus groups were conducted at a DCA member organisation who was willing to host the event and took 2 hours. The scope of the project and the anticipated was explained and conversation flowed freely between the participants. We noted that anything that was shared would not go beyond the safe space of the room in which the focus group was taking place. The women shared personal stories which indicated that while these women did not know each other prior to this event, there was a feeling of trust and comfort in conveying their experiences.

In addition to the focus groups, we also conducted 15 indepth individual interviews with culturally diverse women who were in high-profile very senior roles (e.g. Board Directors, CEOs, C-Suite) to explore in greater depth the career experiences of successful culturally diverse female leaders in Australia. Interviewees represented a broad range of cultural backgrounds, organisations, and industry sectors and were contacted through the DCA. The interviews were conducted by phone and took between one to one and a half hours. As with the focus groups the elaboration of deep personal experiences highlighted the importance of conveying this for the purposes of the study. Anonymity was reinforced to the interview participants.

We took an identity-based broad approach to defining ‘culturally diverse’ when inviting focus group participants and Interviewees to participate in the project. Specifically, we invited them to participate if they were a “female leader who identifies as being from a culturally diverse background” and noted that “for this project we are taking a broad definition of culturally diverse which refers to anyone with *non-Anglo cultural origins*”. We defined culturally diverse as including people with European, Asian, African, Middle Eastern and Pacific Islander cultural backgrounds. Focus groups and interviews were structured around four main questions: (i) what has been your experience accessing and being in leadership roles as a culturally diverse female?; (ii) as a culturally diverse woman in leadership, what were/are some of the key enablers to your progression into leadership roles?; (iii) as a culturally diverse woman in leadership, what were/ are some of the barriers that slowed down or prevented your career progression?; (iv) what could organisations do that is different to current approaches to ensure culturally diverse women who aspire to leadership can access these roles?

Thematic analysis was conducted on each of the focus groups and interviews. Findings were then triangulated by reviewing focus group, interview, and survey data to identify key themes and reviewed in light of quantitative trends. In addition to identifying targeted barriers our evidence also featured solutions to addressing the barriers, however space constraints mitigate against presenting these and the focus of the project findings is placed firmly on the barriers identified.

Project Findings

Overall, we found that our respondents were ambitious, capable, and resilient and as such were well placed to contribute to their own and their organisation’s success into the future. For instance, 84% of the culturally diverse respondents planned to advance to a very senior role and for 91% of them, working in a job that offered them the ability to enter leadership positions was extremely or very important. In terms of their skills and capabilities, two thirds (66%) of the culturally diverse female talent spoke a language other than English when at home, and over a third (37%) had a bi/multicultural identity, in which they identify with more than one cultural background and so are able to communicate or ‘broker’ across cultural contexts. Resilience featured as an important characteristic in accessing senior leadership

positions. For instance, the respondents noted that their personal resilience had been key to them retaining their leadership aspirations in the face of the career barriers or locks they had experienced.

In contrast to this illustration, we also found that Australian organisations could better value and leverage the ambitions and capabilities of culturally diverse women. A large majority of the research respondents revealed that they felt invisible, overlooked and undervalued when it comes to leadership opportunities, while others felt they were regarded as ‘high risk’ leadership contenders. For instance, only 15% of the research participants strongly agreed that their organisation took advantage of workforce diversity to better service clients or access new markets. Extending on this point, while 88% of the respondents noted that they planned to advance to a very senior role, only 1 in 10 strongly agreed that their leadership traits were recognised or that their opinions were valued and respected. Finally, one in four of the project respondents (26%) agreed that cultural barriers in the workplace had caused them to scale back at work: that is, reduce their ambitions, work fewer hours, not work as hard, and/or consider quitting; and 28% stated it was likely they would seek a job with another employer within the next year.

Our analysis revealed six barriers and we devised six enablers or six lock and keys as we branded them. Each of these falls into the category of perceptual and/or systemic forces which impede access to leadership. As noted, due to space constraints, the following presents the locks by way of highlighting the findings.

Bias and Stereotyping

Stereotyping and bias were consistently ranked as the strongest talent lock to culturally diverse women making it into the C-suite with only one in five of our culturally diverse respondents noting their workplace was free of cultural diversity or gender based biases and stereotypes.

Figure 1: Bias Indicators for Culturally Diverse v Non-Culturally Diverse Women

Only 12% of culturally diverse women strongly agreed that they had the same opportunities in their workplace as anyone else with commensurate ability and experience. Overwhelmingly, respondents noted that leaders, colleagues, and clients often stereotyped them, making incorrect assumptions about

them based on their gender and cultural background. This perceptual short cut they said reinforced and reproduced bias, meaning they were less likely to be considered as leadership material. The most common stereotypes made about them were that, as culturally diverse women they must lack English literacy skills and strategic ability and be “shrinking violets”. Finally, respondents noted that there was an assumption that because they had a particular cultural background they must be an expert in that culture/ethnicity and fluently speak the relevant language.

In addition to short cuts about one’s cultural competence, there were also assumptions made about cultural background highlighting the simplistic ideas surrounding cultural background. For instance, respondents noted that their cultural identity was based largely on their physical appearance. To illustrate, one respondent noted that she was consistently assumed to be Indian when in fact her grandparents came to Australia from Pakistan and she was a third generation Australian who identifies primarily as Australian. Adding to this there was an assumption that one’s identity is fixed. That is, that a woman’s cultural identity does not change in different contexts. As one Australian Born Chinese project respondent noted, she may actually feel Australian when interacting with her overseas-born colleagues, yet Chinese when at home with her (Chinese) parents.

Divisions in Driving Change

Based on the frequency with which the issue was raised by the respondents, emergent divisions in the process of creating more diverse and inclusive workplaces ranked as the second strongest talent lock or barrier. The majority of the respondents we spoke to relayed the resentment they had encountered from men or women from Anglo-Celtic cultural backgrounds who assumed that they had been given ‘special treatment’ and attained their leadership role only because of their gender or cultural background rather than their contribution to their organisation, that is a merit based trajectory. Paradoxically, they noted that being ‘rolled’ out as the ‘poster girl’ of cultural diversity meant that they were tasked with creating cultural change and breaking down barriers for emerging culturally diverse women leaders. As aptly captured by one of the respondents, “You have this very small number of culturally diverse female staff trying to engage and influence everyone, and address fears about difference, and encourage leaders to take a risk on the unfamiliar – there’s this view that ‘You’re the one who stands to benefit so you get out there and do it.’”

Lack of Relationship Capital

A lack of relationship capital in the form of sponsorship, mentoring, and networking was consistently cited by culturally diverse women as a key talent lock preventing them from progressing into leadership positions. For instance, one in four (26%) culturally diverse female leaders agreed their cultural background negatively influenced the amount of relationship capital they had access to. A similar amount (28%) agreed their gender negatively influenced their access to relationship capital. Only roughly one in seven (15%) culturally diverse female talent strongly agreed they had access to professional networks, and 21% felt included by others in social activities in their workplace. Finally, culturally diverse women were more likely to have access to a mentor to give advice and feedback (30%) than a sponsor to help them win crucial assignments and promotions (17%) (Leonard, Mehra, & Katerberg, 2008).

Figure 2: Impact of Cultural Background on Relationship Capital for Culturally Diverse Women v non-Culturally Diverse Women

Masculine Western Leadership Model

Culturally diverse female talent reported that leadership models used for assessing emerging leaders in Australian organisations were inherently biased towards more masculine Western or ‘Anglo’ leadership styles. According to respondents, this was expressed to them both explicitly and implicitly. For instance, in terms of explicit messages, one respondent noted: *“I was told ‘Look around you and see how everyone else looks – you’ll never be anyone other than a coordinator’”*. In terms of implicit messages another respondent claimed: *“There is this subtle expectation around leadership because of the visual cues you get about who leads this organisation – not looking or leading like that person has an impact.”*

Culturally diverse women described the male Western leadership model as being characterised by particular characteristics including: extroversion, self-promotion, gravitas and the ability to work ‘full-time face-time’, all of which mitigated against the career progression of culturally diverse women leaders. The following table captures the leadership style of culturally diverse women versus non-culturally diverse women (Hoyt & Simon, 2016) .

Figure 3: Leadership Style of Culturally Diverse Women v Non-Culturally Diverse Women

Lack of flexibility

Culturally diverse women spoke of the challenges of performance being assessed on the basis of the number of hours worked in the office/on-site rather than productivity, that is, a full time/ face time mentality. Participants indicated leaders were (implicitly) required to work full-time in the office/on-site – a requirement which played into the hands of people with no care-giving responsibilities or interests outside of work. As such the structural bias was clear. Our findings indicated that: accessing flexible work was extremely important for 61% of culturally diverse women, yet only 32% strongly agreed that they felt free to speak up about flexibility needs at work. The lack of genuine support for

and engagement with flexibility was discussed by many of the culturally diverse women who participated in the study. This was evident in the stigma associated with flexible work, in which flexible workers were seen as less hard working and less committed to their careers and their organisations. As captured by one of the respondents: “Leaders do not always ‘walk the talk’ – they keep talking about wellness but are perfectly aware that they and their staff work 65 hours a week for months, and are they’re ok with that.”

Accountability

Culturally diverse women commented that in many cases little more than “lip service” was paid to D&I, such that for many leaders it became a “tick and flick” exercise. As noted by one of the respondents: “Many leaders do just enough to meet the KPI – for instance that 100% of their team have been through unconscious bias training – and are then shocked when their people leader feedback says that culturally diverse women are frustrated in their careers.” According to the culturally diverse women we talked with, the way to address the culture of disinterest in and lip service toward the career progression of culturally diverse women was to make leaders accountable for delivering on D&I. It was such a process of transparency and accountability that would address the systemic and perceptual barriers creating impediments to senior leadership positions for culturally diverse women. To jump start the process of radical change, culturally diverse female participants identified targets as an important enabler. They noted targets provided an incentive for leaders to challenge their mindset that culturally diverse women were ‘high risk’ leadership appointments. Of the merit in setting targets, one of the respondents commented that: “No culturally diverse woman wants to be promoted because of a quota but we won’t get there because of merit because a white bloke from Riverview looks better than a Muslim woman from Lakemba.” Overwhelmingly there was a chorus of response that Australian organisations needed to start ‘counting culture’ – in their workforce and their markets. With no reporting mechanism currently in place in Australia which compels organisations to track the career progress of culturally diverse women (and men), respondents noted that this needs to be overturned.

Conclusion

Overwhelmingly, research on the experience of culturally diverse women in accessing leadership positions remains fragmented and small within an Australian context. More importantly very few studies take an exploratory approach to the underrepresentation of cultural diversity women in senior leadership positions. This exploratory study reveals that culturally diverse women leaders are ambitious, resilient and capable yet they remain undervalued, underleveraged and ready to move on. In response to these findings we identified six locks and six keys. This paper features insights into the systemic and perceptual barriers gathered through various modes of data, including interviews, focus groups and survey data. Importantly, the data also revealed important practical solutions to respond to these barriers which are stymieing the advancement of culturally diverse women leaders, providing lessons for scholars and practitioners. Due to space constraints our paper was limited to a presentation of the barriers.

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Figures:

Figure 1: Bias Indicators for Culturally Diverse v Non-Culturally Diverse Women

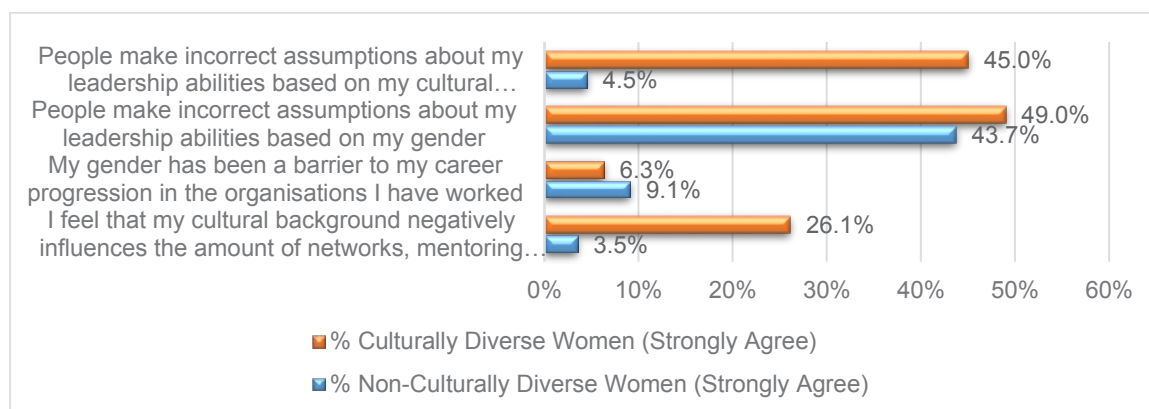


Figure 2: Impact of Cultural Background on Relationship Capital for Culturally Diverse Women v Non-Culturally Diverse Women

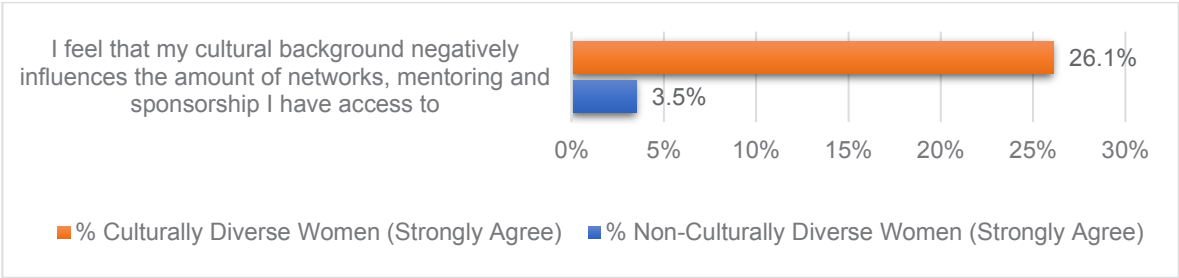
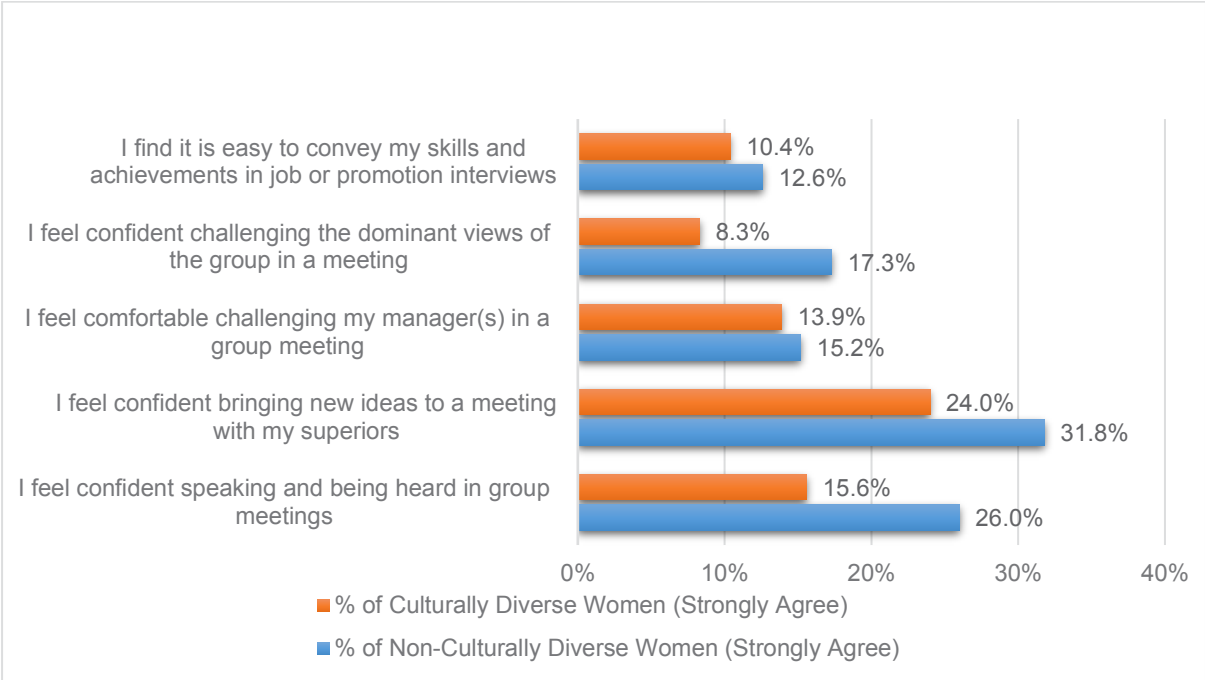


Figure 3: Leadership Style of Culturally Diverse Women v Non-Culturally Diverse Women



06 International Management
Interactive Session

**The internationalization of Knowledge-intensive Business Services Firms
(KIBS): A review of the literature**

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The internationalization of Knowledge-intensive Business Services Firms (KIBS): A review of the literature

ABSTRACT

This article provides a review of the literature on international business in the KIBS sector in order to address their internationalization behaviors. The findings reveal that KIBS sectors are talent-intensive, technology-intensive, innovation-intensive, involving co-production with their client firms, and clustered in metropolitans. Knowledge and networks are two important dimensions to their international survival and development. Export and investment foreign entry modes are common in their internationalization. KIBS advance their internationalization with their existing clients and by their own. This paper identifies KIBS as a new unique niche in explaining internationalization behaviors of firms. As current research fails to explain why and how KIBS internationalize, we are calling for more process studies focusing on KIBS internationalization.

Keywords: international OB, future of work, design-led innovation, collaborative creativity, small business

People have a long history in developing, manufacturing, and selling things. However, now fewer and fewer people work in production. What previously required hard work and nimble fingers is now automated. One thing that is in demand in the world today is the advanced packaging of services and solutions. Knowledge-Intensive Business Services (KIBS) as a concept emerged in the late 1980s (Bilderbeek, Hertog, Marklund, & Miles, 1998; Miles et al., 1995). They are services firms that mainly engage in providing knowledge-intensive inputs for the processes of business operations (Wiig Aslesen And & Isaksen, 2007). These inputs are usually solutions (Miles, 2005; Miles et al., 1995; Nahlinder, 2002), which will significantly support and improve the client firms' innovation systems (Doloreux & Shearmur, 2013), and further impact the innovation systems that the client firms embedded in (Corrocher & Cusmano, 2014; Doloreux & Shearmur, 2012; Muller & Zenker, 2001). In

this respect, the innovation literature has stressed the role of KIBS as facilitators, carriers, and sources of innovation (Fernandez-Esquinas, Pinto, Yruela, & Pereira, 2016; Pylak & Majerek, 2014; Shearmur & Doloreux, 2009), which are of potentially significant importance, not only for promoting innovations (Di Maria, Grandinetti, & Di Bernardo, 2012; Doloreux & Shearmur, 2012; Sundbo & Toivonen, 2011), but also for driving the knowledge-based economy (Abecassis-Moedas et al., 2012).

KIBS supply services to all sectors in New Zealand. This large cross-cutting sector accounts for 20% of New Zealand's GDP, 62% of all commercial services exports, and 20% of all firms amounting to 100,000 companies with more than 400,000 employed and self-employed workers. Moreover, the KIBS also have one of the highest indirect contributions to exports with 22% of their output contributed to other firms' exports in New Zealand (Ministry of Business, Innovation and Employment, 2014). With economic liberalization, global market integration, and other factors such as the wide use of Information and Communication Technologies (ICTs), KIBS have been presented more opportunities to carve out an international presence. Typical KIBS include computer programming, consultancy, and related activities, information service activities, legal and accounting activities, activities of head offices, management consultancy activities, architectural and engineering activities, technical testing and analysis, scientific research and development, and advertising and market research (Schnabl & Zenker, 2013). Although a number unique characteristics have distinguished KIBS from other industrial sectors (Doloreux & Laperrière, 2014), the internationalization of KIBS still remains under-researched. This paper provides a review of the literature investigating the characteristics, foreign entry forms and internationalization pathways of KIBS in order to identify this sector as a new research niche in explaining the internationalization of firms, and thus creating

possibilities for future research.

CHARACTERISTICS OF KNOWLEDGE-INTENSIVE BUSINESS SERVICES

Key characteristics of KIBS sectors include: talent-intensive, technology-intensive, innovation-intensive, involving co-production with clients, and clustered in metropolitans. The employment structure of knowledge-intensive business services sector differs from that of other service sectors. Tomlinson (1999) shows that KIBS is more learning- and knowledge-based than other sectors, even when controlling for occupational structure. Research has found that KIBS are more likely to employ scientific and technical personnel (European Commission, 2012). Similarly, white-collar highly educated and skilled employees take a lion's share in the sector (Tomlinson & Miles, 1999). Rodríguez (2014) suggests that as scientific and technical personnel are perfectly capable to acquire, adapt, and disseminate knowledge, particularly tacit knowledge, such personnel are usually employed in greater numbers in KIBS sector, than in other sectors (Miles et al., 1995).

In addition, research has also identified that KIBS tend to be extensive users of technologies (Boden & Miles, 2000). According to Flanagan (1999), KIBS are often related to the adoption, production and transfer of new technology. Information Technology (IT) and ICTs play a significant role in dealing with the explicit knowledge in KIBS (Wood, 2009). Besides, as KIBS mostly co-produce solutions with their client firms for the client firms' processes of business operations, ICTs tend to be widely applied in order to keep in contact as well as exchange knowledge and information with the clients. Some studies point out that technology is also largely contained in the provided

solutions so as to improve their clients' business operations (Shearmur & Doloreux, 2013; Teirlinck & Spithoven, 2013). In some cases, KIBS directly assist the development and application of new technologies to their client firms (Tomlinson & Miles, 1999).

KIBS are often singled out as one of the most innovative segments of the service sectors and sometimes compared to high-tech sectors in manufacturing (Edquist, Hommen, & McKelvey, 2001; Zackrisson, 2003). KIBS shape innovation and knowledge such as contract Research and Development (R&D) services in their client firms. Besides, KIBS also utilize innovations, and often introduce innovations developed in other firms. Thus, KIBS not only help their client firms to be innovative, but are also quite innovative themselves. Carmona-Lavado, Cuevas-Rodríguez, and Cabello-Medina (2013) added that the specific demands of clients for customized solutions can also provide enormous innovation to KIBS. When transferring technology between firms, KIBS are also agents of innovations (Miles, 2001). As agents of innovations, KIBS pick up ideas from one firm in the process of production, and they then develop and introduce the ideas to other firms. Therefore, KIBS can have important roles in systems of innovation. According to Lundvall and Borrás (1997), the decentralized, flexible and project-based characteristics, the management of employees, recruitment, and learning process of KIBS, as well as the intensive use of IT systems and computer-based systems are all of great importance for explaining their innovativeness.

It is also commonly recognized that KIBS coproduce with their clients (Lehrer, Ordanini, DeFillippi, & Miozzo, 2012; Valminen & Toivonen, 2012), and they can benefit from the coproduction and close relations with clients in more ways than repeat business and stable partnerships (Miles,

2012). When the clients have problems in their business processes, they will turn to KIBS to find solutions. KIBS will accordingly apply and often further developing its domain knowledge, which relevant to the classes of problems confronted by their clients, to bear in situations where clients lack this knowledge themselves or lack the capacity to mobilize it (Miles, 2012). In this process, learning can occur in dyadic interchanges between KIBS and clients. Within the boundaries of the cooperation and interactions, KIBS also cultivate relationships and in the meanwhile seek opportunities for other (often unrelated) projects (Hadjikhani, 1997; Johanson & Vahlne, 2009).

The last characteristic is the clustering between KIBS and their collaborative partners. Evidence has indicated that KIBS are highly concentrated in the largest urban areas (Shearmur & Doloreux, 2015; Wiig Aslesen And & Isaksen, 2007; Wood, 2006). Research has revealed that KIBS cluster in metropolitans so as to benefit from agglomeration economies (Alcácer, & Chung, 2014; Shearmur & Doloreux, 2015). Specifically, KIBS may be benefited from the positive externalities of metropolitans, such as targeted customers, talented labor pool, knowledge spillovers, low-cost transportation, information sharing, as well as high-quality urban amenities (Jacobs, Koster, & van Oort, 2013). KIBS tend to seek collaboration with others in order to strengthen their organizations' commitment in R&D projects. In turn, KIBS' reputation for status, competence, and a general openness towards knowledge may spill over at the organizational level and attract partners for formal collaborations (Brennecke & Rank, 2016). Authors of econometric studies of the geography of innovation - many of which are reviewed by Feldman (1999) - have frequently claimed that localized knowledge spillovers of this kind are the main reason for the geographical concentration of innovative activity.

The review and discussion of the characteristics of KIBS reveal that key features of KIBS broadly fall into two categories: knowledge or networks (see Table 1). Specifically, the talent-, technology-, and innovation-intensity of KIBS can primarily result from a pursuit of effective and efficient acquisition, accumulation, and utilization of knowledge. Secondly, KIBS often produce knowledge in close co-operation with a client or a network instead of in isolation. As KIBS co-produce and co-locate with clients as well as peers, KIBS exchange knowledge with their clients, cultivate relationships within the boundaries of the cooperation project, and in the meanwhile, seek opportunities for other (often unrelated) projects through their networks. Geographical clustering facilitates frequent face-to-face contact between organizations' personnel, which may ease the creation and maintenance of business relationships (Balland, 2012; Maggioni, Nosvelli, & Uberti, 2007; Ter Wal, 2011). Through successive collaborations with a variety of firms, KIBS act as bridging organizations within the wider economy (Miles et al., 1995).

Insert Table 1 about here

INTERNATIONALIZATION FORMS AND ACTIVITIES OF KIBS

An internationalization form or foreign market entry mode of firms usually refers to "an institutional arrangement that makes possible the entry of a company's products, technology, human skills, management or other resources into a foreign country" (Root, 1987, p. 5). Traditionally, firms can enter overseas markets through three basic generic modes: export entry modes (direct or indirect), contractual entry modes (licensing, franchising, strategic alliance, and other forms of outsourcing) and

investment entry modes (joint venture and sole venture) (Welch, Benito & Petersen, 2008). As a starting point of firms' internationalization, a firm's internationalization form or foreign market entry mode influences the firm's internationalization performance in the long run (Anderson & Gatignon, 1986; Hill, Hwang & Kim, 1990). The following section will review the relevant literature on the internationalization forms of KIBS – with the focus specifically directed towards the distinctive foreign market entry modes they often adopt.

Export entry modes are common to KIBS. Export normally refers to delivering goods or services produced in one country to another country. In the case of KIBS, the expert services are usually delivered through the movement of persons and telecommunications networks (Roberts, 1998). Due to the significant role of personal contact in delivering expert services, the export entry modes of KIBS are mainly dominant by sending individual experts to the client in the target country (Rubalcaba & Toivonen, 2015). However, due to the development of ICTs, the inseparability of service production and consumption is not the norm anymore for many service transactions (Ball, Lindsay & Rose, 2008). KIBS increasingly consult their clients via the Internet on the basis of the previously acquired knowledge (Robert, 2001), and hence wired exports in cases where the knowledge-intensive business services can be coded are to some extent replacing the traveling of experts (Javalgi, Martin, & Todd, 2004).

Contractual entry modes, franchising and licensing are rare in KIBS. However, other partner-based arrangements are commonly seen in KIBS. Franchising requires KIBS to provide other companies the right to use a tested service concept for a contract period of time against a fixed

payment. In franchising, the franchiser benefits from the rapid growth of the business, and the franchisee(s) benefits from the efficiency and the cost reduction that the ready-made concept offers (Alon, 2006). However, given the difficulties of protecting the intellectual property rights of the service concept, franchising may not be a suitable way of working. By the same token, licensing is not popular in the KIBS sector as well. Apart from franchising and licensing, there are some other types of cooperation that are extensively used in KIBS. Tapscott, Ticoll, and Lowy (2000) identified that such forms of cooperation may include a common brand, acquisition of clients and contacts, subcontracting, R&D and training, and different ways of working. Additionally, deeper modes of cooperation, such as strategic alliances, are also quite possible.

However, the investment entry modes are relatively common in KIBS. As an enabler of face-to-face contact, KIBS may establish a wholly owned branch (or subsidiary) itself in the host country (Blomstermo, Sharma, & Sallis, 2006), or a majority or minority share of a branch (or subsidiary) in the host country through a merger or an acquisition (Roberts, 1998). The former practice is also known as "greenfield internationalization". The latter practice has become increasingly typical of KIBS (Roberts, 1998). In addition to the birth and the scope of ownership, the degree of centralization of the investment entry modes also varies. For example, the operation can be centralized in a head office. Besides, the branch (or subsidiary) can also have its own freedom to develop and conduct their business (Howells & Roberts, 2000).

Between the investment entry modes and the export entry modes, there is an intermediate form called "export projects" (Rubalcaba & Toivonen, 2015). Export projects are a specific form of

international movement in which the service provider temporarily relocates to their client so as to effectively and efficiently co-produce with their client. When the project is completed, the service provider will move to other markets and the office will be closed (Rubalcaba & Toivonen, 2015). Instead of expanding to an individual foreign market, the aim of export projects is to use the same expertise with modifications in different overseas markets (Sharma & Johanson, 1987).

In addition to these direct internationalization forms, there are also some preparatory and indirect forms of KIBS' internationalization. Scholars have pointed out that serving a foreign client in the firm's home country or serving a domestic client in the international market is often the first step that familiarizes KIBS with issues of internationalization (Roberts, 1998; Toivonen, 2004). By doing so, KIBS acquire market knowledge (Rubalcaba & Toivonen, 2015) and specialization (Toivonen, 2004). Through becoming a member of an international network, KIBS can increase their efficiency of business (Rubalcaba & Toivonen, 2015). The international recruitment provides a wider pool of experts to the company (Saxenian, 2000), increases the firm's useful contacts in target overseas markets, and improves the readiness of a company seeking to enter cross-border markets (Toivonen, 2002). In order to reduce cost in those functions that are outside their core business, KIBS adopt offshoring services as an effective mode to enter target markets (Rubalcaba & Toivonen, 2015). A summary of the internationalization forms of KIBS can be seen in Table 2.

Insert Table 2 about here

NON-LINEAR INTERNATIONALIZATION PATHS OF KIBS

The internationalization of KIBS can be described as either "dependent" or "independent". The former generally refers to KIBS that internationalize together with their existing clients, while the latter generally refers to KIBS that advance their internationalization by their own. Scholars have accepted that 'internationalization with clients' is quite common in KIBS (Glucker, 2004; Kautonen & Hyypia, 2009; Toivonen, Tuominen, Smedlund, & Patala, 2009). Indeed, KIBS' international activities are often linked with their clients' internationalization (Robert, 1998; Toivonen, 2004; Toivonen, Tuominen, Smedlund, & Patala, 2009). On one hand, the use of KIBS can cause the client firm's internationalization. Several empirical studies show that investments both in R&D (Moreira, Maia, Sousa, & Meneses, 2013) and product innovation (Becker & Egger, 2013; Cassiman & Golovko, 2011) have a strong positive impact on the decision to export. On the other hand, the use of KIBS can also be a consequence of internationalization. Harris and Li (2009) suggested that exporting has an effect on the likelihood of engaging in different innovation activities, such as R&D, the launch of new products and services, and the degree of collaboration with overseas partners. Overall, it can be seen that there is a connection between the internationalization of KIBS and their client firms and this connection can be bi-directional.

The second alternative in KIBS' internationalization is 'independent internationalization' pathways. There are two scenarios in 'independent internationalization path'. One is the 'gradual' scenario in which KIBS incrementally advance their internationalization from the local market to neighboring countries, and then to more broadly foreign markets (Toivonen, Tuominen, Smedlund, & Patala, 2009). For this scenario, it should be noted that though some KIBS follow an independent gradual

internationalization path, they do not always expand to increasingly broader markets, with some experiencing de-internationalization or re-internationalization (Toivonen, Tuominen, Smedlund, & Patala, 2009). The other is the 'rapid' scenario in which KIBS perceive the world as one market and enter various foreign host countries in many different internationalization forms simultaneously (Toivonen, 2004). Rapid internationalizing KIBS skip or do not apply any of the stages in the 'gradual' path.

CONCLUSION AND FUTURE RESEARCH DIRECTIONS

In conclusion, this paper provides a review of literature on KIBS as well as their foreign entry forms and internationalization pathways. KIBS are important to New Zealand's future. They are talent-intensive, technology-intensive, innovation-intensive, involving co-production with clients, and clustered in metropolitans. These key features of KIBS broadly fall into two categories: knowledge or networks. The export and investment foreign entry modes are common in KIBS. Moreover, KIBS advance their internationalization with their existing clients and by their own. The internationalization of KIBS sometimes fluctuates with de-internationalization and re-internationalization. It is clear that understanding these characteristics is one way that KIBS can create and maintain competitive advantage in the war for innovation that exists in today's global marketplace. However, as current research fails to explain why and how KIBS internationalize, we are calling for more process studies explaining KIBS internationalization. Particularly, why and how knowledge and networks as well as their interactions influence the non-linear internationalization of KIBS.

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Table 1: Key Features of KIBS

Knowledge Aspect	1.	Talent-intensive
		<ul style="list-style-type: none"> • High proportion of scientific and technical personnel
	2.	Technology-intensive
		<ul style="list-style-type: none"> • Technology is widely applied in KIBS routines • Products and services provided by T-KIBS are particularly technology-intensive
	3.	Innovation-intensive
		<ul style="list-style-type: none"> • KIBS introduce and shape innovations in their customized solutions • Products and services provided by KIBS has a low degree of standardization, and a high degree of uniqueness
Network Aspect	4.	Co-produce with project partners
		<ul style="list-style-type: none"> • KIBS co-produce with their suppliers, customers, and peers
	5.	Spatial proximity
		<ul style="list-style-type: none"> • KIBS are highly concentrated in metropolitans for resource and opportunities • KIBS seek collaborations

Table 2: Internationalization Forms of KIBS.

Internationalization Forms of KIBS		Main International Business Activities
Direct forms	Export entry modes	Export expertise service through individuals and the Internet.
	Investment entry modes	Sole venture and joint venture.
	Mix of export and investment entry modes	Export projects.
	Contractual entry modes	Cooperation rather than franchising or licensing.
Indirect forms	International activities through client firms	Serving domestic firms in international markets; serving foreign clients in domestic markets.
	International activities without equity involvement	International recruitment of experts.
		International networks not based on shareholding.
		Offshoring.

Measuring and validating the spiritual intention scale

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Abstract

Islamic literature acclaims the importance of setting the right intention prior to any action or decision, that is, to please God. Therefore, having the right intentions extends all aspects of a Muslim life, including observing ethical behaviour at work. While this spiritual component has prominence in the Islamic tradition, little work has been done to quantify it. The current study attempts to propose a spiritual intention scale based on previous studies. Validity and reliability tests were conducted. With a sample of 160 Muslim employees in Malaysia, the results show that the items in the scale are valid and reliable to measure spiritual intention. The scale serve as a tool to be utilised in measuring intention in Islamic management studies.

Forming the right intention prior to any task undertaken by a Muslim is essential. In Islam, intention refers to a spiritual component of the soul and heart of mankind that triggers deed, decision and action (Mhd Sarif & Ismail, 2011). To differentiate intention in conventional and Islamic management, spiritual intention is used to refer to the latter. The 10-item organisational citizenship behaviour – Islamic perspective (OCBIP) (Kamil, Mohamed, Osman-Gani, & Ahmad, 2014) was used as a basis for the spiritual intention scale. The justification of this lies in the content of the scale and the original scale adopted to devise the OCBIP scale, which will be explained further in the subsequent sections.

The paper will start with the review on the literature in defining intention in conventional studies, and state on how this definition is different in the Islamic perspective. Methods section will outline the measures and analyses used in testing the scale adopted. The paper will conclude with discussion of the results and the conclusion.

LITERATURE REVIEW

Intention in conventional studies

Intent is described as the individual's internal decision in relation to the issue, and the most immediate determinant of behaviour (Ajzen & Fishbein, 1980). The theory of reasoned action (Ajzen & Fishbein, 1980) and the theory of planned behaviour (Ajzen, 1991) in social psychology posit that when individuals are faced with a decision, they would make a systematic, rational use of available information to form an intent. The behavioural intention is the immediate determinants of the individual's. The behavioural intention is a result of the attitude toward the behaviour and subjective norms, which represent the social pressures put on the individual to perform or refrain from a certain behaviour. Intention also depends on the individual's perceived behavioural control. Intention has become a principle construct in understanding and predicting behaviour in ethical decision-making research and social psychology (Johnson & Coyle, 2012). When an action is judged as ethical, the

individual is more likely to form an intention to perform it. Multiple scholars have used intention to predict ethical behaviour in organisational settings (Dedeke, 2015; Hunt & Vitell, 1986; Rest, 1979).

Spiritual intention in Islam

Islam literally means submission to one God, who is the creator. To be a Muslim (i.e. one who submits) is to strive to fulfil the obligations prescribed for the sake of God. The Islamic declaration of faith is, “there is no god, but God and Muhammad is God’s messenger”. This declaration proclaims God’s monotheism and affirms Muhammad as the prophet who brought the message of God, among others in the form of the Quran, the holy book in Islam (Böwering, 2012). In Islam, the reward from God is obtained based on the intention of performing any action (Al-Bukhari, Book 2, Hadith 47). Therefore, Muslims are urged to start any action with the right intention, where they are sincerely for the sake of obtaining God’s pleasure (Ali, 1988). There should not be any other reason in worshipping or doing any good deeds other than the sole reason to please God (Kamil, 2012). Muslims also have the realisation of the constant presence of God in them. Therefore, Muslims are inclined towards a self-check mechanism in themselves. Therefore, intention refers to a “spiritual component of the soul and heart of mankind that triggers deed, decision and action that can be accepted in the quality of rituals and prayers” (Mhd Sarif & Ismail, 2011, p. 136).

The worldview of Islam encompasses both the *dunya* (the world or current life) and *akhirah* (the hereafter). The *dunya*-aspect is seen as a preparation for the eternal *akhirah*-aspect. In other words, Muslims perceive this world as a temporary place to live in, and in all his/her action will be accounted in the hereafter. Further, everything in Islam is ultimately focused on the *akhirah*-aspect without implying any neglect of the *dunya*-aspect; this world as the means of achieving a pleasing abode in the hereafter (Al-Attas, 2001; Kamil, 2011). In fact, Ather, Khan, and Hoque (2011) study concluded that the theories and factors of motivation of traditional management are insufficient to explain motivation under Islamic management due to Muslim employee’s expectations that is a mix of expectations of this world and the world hereafter.

In Islam, the reward from God is obtained based on the intention of performing any action (Al-Bukhari, Book 2, Hadith 47). Therefore, Muslims are urged to start any action with the right intention, where they are sincerely for the sake of obtaining God's pleasure (Ali, 1988). This is supported by Iqbal and Mirakhor (2017), who contend that intention plays a critical role in determining the legal aspect of the action. Islam recognises the moral significance of intention in advocating sincerity in intent. Iqbal and Mirakhor (2017) maintain that, "each virtue is judged in light of the intention behind in the practice of the virtue. The distinction between having intention to serve humanity and the betterment of society as opposed to achieve personal gain could make an action ethical or unethical" (p. 63). It is important to note that both the intention and consequences are important in deciding an action, however, the outcomes of everything belongs to God (Mohammed, 2007). Therefore, Mohammed (2007) argues that Muslims to strive to perform the best that they can with the right intentions, and the consequences of that intention and action will be in the hands of God.

According to the Islamic ethics, Muslims have to zealously guard their behaviour, deeds, words, thoughts, feelings and intentions (Mohammed, 2007). At the workplace, the Islamic Work Ethics (IWE) set guidelines whereby competition with good intention in the marketplace is encouraged in Islam where it is conducted fairly and honestly (Ali & Al-Owaihan, 2008). Iqbal and Mirakhor (2017) stress that the shari'ah judges the virtue of justice in man not only by his material performance, but also by the essential attribute of this intention with which he enters into every contract or transactions. This intention consists of sincerity, truthfulness, and insistence on rigorous and loyal fulfilment of what he has consented to do (or not to do). This demonstrates the close links of Islam, divine intention and good conduct. Islamic ethics encourage Muslims to do good deeds to others in order to receive good grace from God (Al-Ammar, Ahmed, & Nordin, 2012).

Measuring spiritual intention

Given the importance of spiritual intention in Islam, little effort was found to quantify the construct in Islamic management literature. Among such effort is the recent Islamic work values scale developed of by Ab Wahab, Quazi, and Blackman (2016), which heavily based on the Qur'an, Sunnah

and renowned Muslim scholars. “Good intention” is one of the 13-construct scale that comprises of five items (other constructs include justice, consultation, timeliness, and competence). However, the scholars found that the questions for “good intention” did not show a simple structure, and was dropped for the final scale. The scholars point out that the items used were not good indicators of the construct. There are five items in the scale as listed below:

- Every action should start with a good intention.
- A good intention is necessary to help me not to go astray.
- Whatever the difficulties, I stick to my original intentions.
- The values of work are derived from the accompanying intention, rather than the results.
- It is always necessary to start our work with a good intention.

This study aims to relabel the OCBIP scale by Kamil et al. (2014) to measure spiritual intention. The OCBIP scale was adapted from Al-Amar’s (as cited by Kamil, 2012) study to measure the degree to which a Muslim schoolteacher fits the description of a God-conscious person in carrying out his professional responsibilities. According to Al-Ammar et al. (2012), every single moment of an ideal Muslim life can be considered as worship by having good intention when doing things seen and unseen, and doing them for the sake of Allah. For instance, qualities such as forgiving and being steadfast, and avoiding harm to other people will strengthen the faith. Kamil et al. (2014) modified the scale by relating the items to organisational citizenship behaviour of the Muslim personality. The 25-item scale by Kamil et al. (2014) includes concepts such as: removing hardship, alleviating harm, advocating high moral standards, and values such as altruism, helping behaviour, and job dedication among others.

METHODS

Sample and procedure

Nine hundred and fifty Muslims working in Malaysia from various industries and employers were contacted. Two hundred and fifty eight questionnaires were returned in printed or online forms.

Questionnaires that have less than 5 percent missing data and suitable to be used in the analysis was 160, which will be the final sample size for this study.

Measures

The OCBIP scale developed by Kamil et al. (2014) was used as the basis for the spiritual intention scale (Table 1). Respondents answered with 5-point Likert scale from “Never” to “Always”.

Approach for analysis

Selection of items and content validity

Selection of items from the 25-item scale by Kamil et al. (2014) that matches the definition of spiritual intention adopted in this study was made. Further, the items was compared against the literature related to Intention in Islam to check for content validity. Netemeyer, Bearden, and Sharma (2003) state that content validity refers to the degree to which elements of measurement instrument are representative and relevant to the targeted construct for a particular assessment purpose. It can be improved accurate conceptualisation and construct definition in which the items intend to measure.

Construct validity

According to Hair, Black, Babin, and Anderson (2014), construct validity is the extent to which a set of measured items actually reflects the theoretical latent construct those items are designed to measure. The construct validity assessments were conducted using exploratory and confirmatory factor analyses. Prior to factor analyses, the Bartlett’s test of sphericity and the Kaiser-Meyer-Olkin (KMO) test for individual measures of sampling adequacy were conducted.

Factor analyses were used to check if the spiritual intention scale is represented adequately by the 10 items. Using SPSS (version 24), exploratory factor analysis (EFA) is done by extracting the components using principal component analysis with varimax rotation. Later, the cross-validation of the exploratory stage is made through the confirmatory factor analysis. Confirmatory factor analysis

(CFA) was conducted using the Analysis of Moment Structures (AMOS), version 23. The estimation method of maximum likelihood was utilised.

In CFA, fit indices were used to assess the goodness of fit of the measurement scales, specifically on how well the specified model reproduces the observed data. For the current study, fit indices thresholds suggested by Williams, Vandenberg, and Edwards (2009) were applied. Measurement models were evaluated using four indices. The first is chi-square statistics (χ^2), which Hair, Black, Babin, and Anderson (2010) describe as the most fundamental fit index that generally include the value of χ^2 , degrees of freedom (df) and significance level. By convention, a non-significant χ^2 indicates that the model fits the data, that the model is accepted. On the other hand, a significant χ^2 ($p < 0.05$) suggests that the model does not fit the data and should be rejected. Yet, absolute indices may be undesirably affected by sample size (Kline, 2015; Tanaka, 1987). The value provides the best inferential test of overall model fit. The value is related to sample size (N), model complexity and non-normality. Specifically, as N increases and the number of variables increases, the χ^2 is likely to be greater (Hair et al., 2010). Comparative fit index (CFI) compares the proposed model against an independent model. The value ranges from zero to one, which corresponds to no fit and perfect fit respectively. A value closer to one is desirable, while ideally would be above 0.95. Root mean square error of approximation (RMSEA) refers to the average differences per degree of freedom expected to occur in the population. A value below 0.05 indicates good fit; while below 0.08 indicate adequate model fit. Lastly, the model is evaluated by observing the standardised root mean residual (SRMR). This index assesses the correlation of the residual variances of observed variables. A value below 0.10 is considered adequate (Williams et al., 2009).

Several options are available in order to retain all the items and improving the CFA model. The first is the approach of error covariation. Modification indices (MI) are used to guide model modification, whereby high MI would indicate any redundancy present in the scale (Byrne, 2010). Modification of the models were based on both on statistical results and theoretical underpinnings (Byrne, 2010; Hair et al., 2014). Co-varyating the measurement errors of redundant items will constrain the redundancy effects and thus, will increase the model fitness. According to Brown (2006), even

though co-varying error terms are not advisable, however, this approach can be used sparingly if there is a plausible reason for correlating the errors of two indicators. Different scholars also employ the error co-variances for various reasons, for example, in cases of high modification indices (Aluja, García, & García, 2003; Han, Kim, & Cho, 2017; Kamil, 2012; Najmaei, 2013; Oladinrin & Ho, 2016; Salehi, Harris, Marzban, & Coyne, 2015) and high RMSEA (Hone, Jarden, & Schofield, 2014).

Alternatively, a separate factor for items with high error co-variances can be made, where the items in the scale can be retained. The approach of creating new subscales was used by Salehi et al. (2015).

Convergent validity

Convergent validity refers to the magnitude of the standardised factor loading and their significance level. This means, the larger the factor loadings with a corresponding significant t-value, the better evidence that the measured variables represent the underlying constructs. All factor loadings should be statistically significant and has a standardised loading estimates of 0.5 or higher.

A summary indicator on convergence can be made through the calculation of average variance extracted (AVE). An AVE 0.5 or higher suggesting adequate convergence. A lesser value indicates that, on average, more error remains in the items than variance explained by the latent factor structure imposed on the measure. AVE is calculated with the below formula:

$$\text{Average variance extracted} = \frac{\text{Total of all squared standardised factor loadings}}{\text{Number of items}}$$

Reliability

A commonly applied estimate of reliability, the measure of Cronbach alpha is used here. According to Field (2009), a value of 0.7 or higher suggests good reliability. High construct reliability indicates that internal consistency exists, meaning that the measures all consistently represent the same latent construct.

RESULTS

Content validity

Each item of the Intention scale was compared to the literature on Intention in Islam. This is shown in Table 1. Table 2 shows the items that are not included in the Intention scale and the reason why they were left out.

++TABLE 1 HERE++

++TABLE 2 HERE++

Construct validity

Exploratory factor analysis

Using principal component analysis with varimax rotation, initial analysis indicated that data had adequate factorability (KMO= 0.905, Bartlett’s test of sphericity is significant). As indicated in Table 2, all items were found to load on one factor. Intent10 was slightly below the 0.5 threshold of factor loading, the item is retained until confirmatory factor analysis is conducted.

++TABLE 3 HERE++

Confirmatory factor analysis

The one-factor model of the Intention construct was subjected to CFA (Figure 1). The factor loadings satisfied the minimum value of 0.5, except for Intent10. The removal of Intent10 added little improvement to the model fitness ($\chi^2= 135.906$, $df=27$, $CFI=0.885$, $RMSEA=0.159$, $SRMR= 0.0697$). As noted before, with good factor loadings, but poor fit of the model, it is an indication that there are certain items in the model which is redundant of each other (Byrne, 2010). The modification indices were used to identify the redundant items. Inspection of the modification indices indicated high residual correlations in three cases, shown the Table 3.

++FIGURE 1 HERE++

++TABLE 4 HERE++

Based on Table 3, the crucial items that overlap is Intent1, Intent2, and Intent3. Scholars remind that deletion of items based on MIs must be made based on theoretical background (Datu, Yuen, & Chen, 2017; Olaru, Witthöft, & Wilhelm, 2015). To recap, from the Islamic perspective, Intention refers to a “spiritual component of the soul and heart of mankind that triggers deed, decision and action that can be accepted in the quality of rituals and prayers” (Mhd Sarif & Ismail, 2011, p. 136). Put simply, it refers to the purpose or motive of doing something and the rewards will be based on what each person has intended (Al-Nawawi, 2003, Hadith 1). As Muslims, God is placed as the cause and end of everything (Kamil, 2012). To capture this definition, it is essential to retain Intent1, Intent2, and Intent3 in the scale. For the third pair (Intent5 and Intent9) were also retained as there is not theoretical support to remove them. Specifically, even though both items related in performing an action for the sake of God (or intended for God), Intent5 is outwardly directed (or regarding the relation with other human beings) and Intent9 is inwardly directed, which means to the person him or herself.

Model re-specification for the single-factor solution would be justified as the Intention scale has not been used to measure spiritual intention before. For instance, Clench-Aas, Nes, and Aarø (2017) adopted the approach of co-varying error terms in carrying out scale testing. The error terms of items for each high MI cases can be allowed to covary. Subsequently, three error co-variances were created: e1 and e2, e2 and e3, lastly e5 and e9. In addition, error terms for Intent1 and Intent3 were also made to covary as the fit indices were found to have inadequate fit (high RMSEA and MI were found). The model (shown in Figure 2) was found to have good fit indices ($\chi^2= 46.050$, $df= 23$, CFI= 0.976, RMSEA=0.079, SRMR= 0.0390). The loadings of the items is listed in Table 3.

++FIGURE 2 HERE++

Alternatively, Intent1, Intent2, and Intent3 can be placed in a separate factor (Figure 3)¹. The model also result in an adequate model ($\chi^2= 54.370$, $df= 26$, $CFI= 0.970$, $RMSEA= 0.083$, $SRMR= 0.0422$). The single-factor solution resulted in a slightly better model fit indices. Therefore, the single-factor solution is selected for the final model due to the resulting model fit indices and it is supported by the results from EFA. Subsequent analysis will only involve the single factor solution.

++FIGURE 3 HERE++

Convergent validity

AVE was found to be 0.546, which indicate adequate convergence of the items to represent the underlying construct (Table 4).

++TABLE 5 HERE++

Reliability

The Cronbach alpha was found to be 0.919 (Table 3), which is above the threshold of 0.7 to indicate good reliability of the scale. This suggests that all the measures consistently represent the same latent construct.

DISCUSSION

The selection of the items from the OCBIP scale to be included in the Intention scale was made initially by reviewing each of the OCBIP item consistent with the definition of Intention that is being adopted in the study. Relevant support from Islamic literature were also sought to justify the items for the Intention scale. The result was 10 items were shortlisted for the Intention scale. The second stage

¹ When we re-ran the EFA to force the scale to fall into two factors, the subsequent CFA did not result in adequate model fit indices. Therefore, creating a separate factor here is solely based on CFA results.

was checking the items for reliability and validity. Responses from 160 participants were obtained and analysed. The results of factor analyses show that all ten items in the spiritual intention scale loaded on one factor. The initial model did not display a good-fitting model. The CFA model utilised the modification indices, where high values would indicate redundancy of items in the scale. The first model ensue post-hoc analysis of correlating the errors of items with high modification indices. The alternative model is having separate factor for the highly correlated items (Intent1, Intent2, and Intent3). Of the two models, the first model with error covariance show better model fit compared to the alternative model. Therefore, the first model, with single factor solution was adopted as the final scale.

The definition of intention is spiritual component of the soul and heart of mankind that trigger decisions to be undertaken solely for the seeking pleasure of God (Mhd Sarif & Ismail, 2011). From the Islamic perspective, intention refers to the purpose or motive of doing something and the rewards will be based on what each person has intended (Al-Nawawi, 2003, Hadith 1). Intention also relates to the Islamic worldview that encompasses the current life and the hereafter. As a preparation for the eternal hereafter, a Muslim perfected his character to please God.

The use of the OCB scale as the foundation of this scale is congruent with what was reported by Chan-Serafin, Brief, and George (2013). According to the authors, religious workers compared with nonreligious ones likely will engage in more extra-role behaviours intended to benefit the organisation. However, for Muslims, the reason behind these actions is to please God, whether directed to co-workers or the organisation.

The scale was found to be valid and reliable. The scale can be used in studies such as ethical decision-making, in which authors argued the importance of intention in Islamic perspective (Mhd Sarif & Ismail, 2011; Sulaiman, Toulson, Brougham, & Lempp, 2017). However, future studies can test the scale and seek experts' opinion regarding the items to measure and estimation of intention from Islamic perspective and subsequently, test the scale empirically.

CONCLUSION

The present study demonstrates the process leading to validating the OCBIP scale in order to measure Intention. The study started with a review of the Islamic management literature and comparison with the items in the Intention scale. The Islamic management literature itself is rooted by the Qur'an and Hadith (the sayings and approval of Prophet Muhammad) indicating the values were endorsed by Islam. The scale then undergone construct validity test, which was conducted using exploratory and confirmatory factor analyses. Lastly, the scale was checked for convergent validity and reliability. The findings show that the scale is valid and reliable to measure Intention. Future studies should further test the scale in different Muslim countries to determine its applicability.

TABLES

Table 1: Comparison between the intention scale used in this study and the Islamic literature on intention.

Intention scale	OCBIP scale	Item description	Relation to the literature
Intent1	OCBIP1	I do my work in the best way I can for the sake of gaining God’ pleasure.	Muslims are urged to start any action with the right intention, where they are sincerely for the sake of obtaining God’s pleasure (Ali, 1988)
Intent 2	OCBIP5	As a Muslim, I feel obligated to deliver a quality job because I am being paid for my service.	Muslims have to fulfil obligations at the workplace to his best in terms of timeline and quality (Gillian, 1999). This item reflects the one of the items in the trustworthiness construct by Ab Wahab et al. (2016), “I would feel guilty if I were to be paid for not doing my job well”.
Intent 3	OCBIP6	I strongly feel I have to work because it is an act of worship to God.	Muslims believe that work is a form of worship and duty due to its contribution to the society; whereby Islam does not consider working as an obstruction to dedication to God (Syed & Ali, 2010).
Intent 4	OCBIP12	If I find my organisation not doing the right thing, I feel obligated to make a positive change.	Muslims are urged to start any action with the right intention, where they are sincerely for the sake of obtaining God’s pleasure (Ali, 1988). Forgiveness avoid actions that are harmful, immoral, or unjust in order to seek God’s pleasure (Al-Ammar et al., 2012).
Intent 5	OCBIP23	For God’s sake, I encourage my co-workers to respect the organisation even though I am against its policies.	Islamic view of doing good deeds illustrated the state of faith which located in the hearts of believers and reflected the sincerity of action seeking the pleasure of God (Al-Ammar et al., 2012).
Intent 6	OCBIP3	I sincerely help my co-workers for the sake of gaining God’s pleasure.	Faith determines actions, and both faith and actions shape the personality (Kamil, 2012). This is supported by Rafiki and Abdul Wahab (2014), where Islam integrates religious practices of business activities with personal worship. Combining these practices in good intention is considered as worship itself.

Intent 7	OCBIP8	I feel God’s divine wrath will descend upon me if I do not work diligently for which I am paid for.	Morally responsible conduct is urged due to the premise that man has been endowed by God with mental and physical capabilities to function as trustees of all earth’s resources and men themselves. As such, man need be trustworthy in order to carry out the trust given to him responsibly and faithfully (Abdurrahman, 2005).
Intent 8	OCBIP9	I feel obligated to assist co-workers who face difficulty with jobs.	The spirit of team work and brotherhood in work present cooperation and equality of effort and opportunity to help each other to fulfill needs in this world and the hereafter (Kamaluddin & Ab Manan, 2010).
Intent 9	OCBIP10	For the sake of God, I accept responsibilities that are not prescribed part of my job.	Muslims are urged to start any action with the right intention, where they are sincerely for the sake of obtaining God’s pleasure (Ali, 1988). This item reflects the one of the items in the sincerity construct by Ab Wahab et al. (2016): “I would do good things just for the sake of God”. Another similar item is, “The values of work are derived from the accompanying intention, rather than the results” (good intention construct).
Intent 10	OCBIP24	Even though I may not be happy with my organisation’s policies, I do protect the organisation’s resources.	Man need be trustworthy in order to carry out the trust given to him responsibly and faithfully (Abdurrahman, 2005). Islam does not allow wastage, thus urging efficient management of resources as well as utilising and distributing resources in conformity of God’s prescriptions (Abdurrahman, 2005).

Table 2: Items from OCBIP that are not included in the Intention scale.

OCBIP scale	Item description	Reason for exclusion
OCBIP2	I rely on God’s reward only when I do good.	This item was not included in the Intention scale because, even though the item is closely relate to the definition of Intention being adopted, Kamil (2014) reported redundancy of this item and OCBIP3. Therefore, only OCBIP3 is included in the Intention scale.
OCBIP4	I strive to correct mistakes on my own initiative to suite the Islamic teachings.	This item is broad, with no specification of behaviour at the workplace.
OCBIP7	As a Muslim, when I am disturbed I make sure it does not affect my work.	The action do not directly relate to the definition of intention that is being adopted.
OCBIP11	I participate actively in organisations' meetings.	This item does not directly reflect the intention behind the participation.
OCBIP13	I prepare special gifts for my hardworking co-workers.	This item does not directly specify the intention of gift-giving.
OCBIP14	I think of ways to develop my organisation.	This item does not directly specify the intention behind the actions.
OCBIP15	I help other co-workers who have heavy workloads.	This item does not directly specify the intention behind the actions.
OCBIP16	I stay after work hours to help other employees.	This item does not directly specify the intention behind the actions.
OCBIP17	I stay in the office during breaks in order to assist my co-workers on their job.	This item does not directly specify the intention behind the actions.
OCBIP18	I encourage co-workers to observe Islamic teachings whilst doing their jobs.	This item gives no specification of work-related activity.
OCBIP19	I feel obligated to voice against unIslamic acts in my organisation.	This item does not directly specify the intention behind the actions.
OCBIP20	I humbly advice my co-workers about Islam.	This item gives no specification of work-related activity.
OCBIP21	I feel bad when I cannot make corrections to a wrong act in my organisation in accordance with Islam.	This item does not directly specify the intention behind the actions.
OCBIP22	I speak nice of my organization even if I do not like its policies.	This item was not included in the Intention scale because, even though the item is closely relate to the definition of Intention being adopted, Kamil (2014) reported redundancy

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Not opted-out

		of this item and OCBIP9. Therefore, only OCBIP9 is included in the Intention scale.
OCBIP25	I orient new employees even though it is not required of me.	This item does not directly specify the intention behind the actions.

Table 3: Factor loadings and internal consistency of Intention scale – results from exploratory factor analysis.

Item	Factor loading
Intent1	.836
Intent2	.830
Intent3	.835
Intent4	.626
Intent5	.717
Intent6	.805
Intent7	.802
Intent8	.772
Intent9	.804
Intent10	.000
Eigenvalue	5.761
% of variance explained	57.607
Reliability (Cronbach α)	.913
KMO	.905

Table 4: Items with high modification indices (MIs) - Intention.

Case	Item	Question	Modification indices
1	Intent1	I do my work in the best way I can for the sake of gaining God’ pleasure.	17.763
	Intent2	As a Muslim, I feel obligated to deliver a quality job because I am being paid for my service.	
2	Intent2	As a Muslim, I feel obligated to deliver a quality job because I am being paid for my service.	15.459
	Intent3	I strongly feel I have to work because it is an act of worship to God.	
3	Intent5	For God’s sake, I encourage my co-workers to respect the organisation even though I am against its policies.	19.719
	Intent9	For the sake of God, I accept responsibilities that are not prescribed part of my job.	

Table 5: The finalised Intention scale (9-item scale), AVE and Cronbach alpha

Item	Loadings	CR	AVE	Cronbach alpha
Intent1	0.75	f.p.	0.546	0.919
Intent2	0.73	14.110		
Intent3	0.75	13.589		
Intent4	0.58	7.178		
Intent5	0.67	8.343		
Intent6	0.81	10.297		
Intent7	0.80	10.154		
Intent8	0.76	9.605		
Intent9	0.77	9.756		

FIGURES

Figure 1: The initial model of the intention scale (Model fit indices: $\chi^2= 154.411$, $df=35$, $CFI=0.879$, $RMSEA=0.146$, $SRMR= 0.0676$)

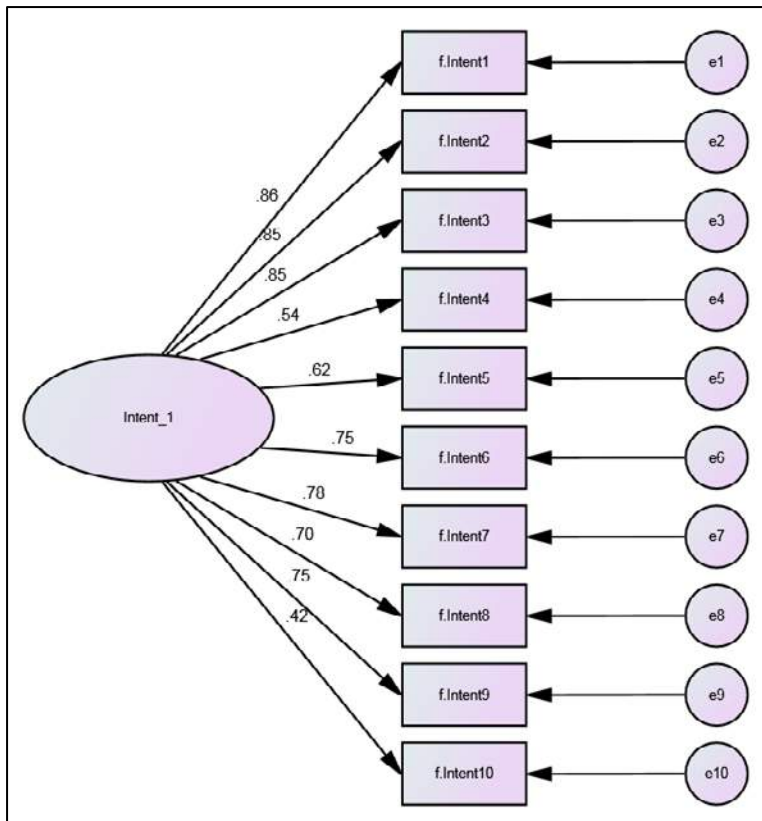


Figure 2: One-factor CFA solution for intention construct - error covariance (Model fit indices: $\chi^2= 46.050$, $df= 23$, CFI= 0.976, RMSEA= 0.079, SRMR= 0.0390)

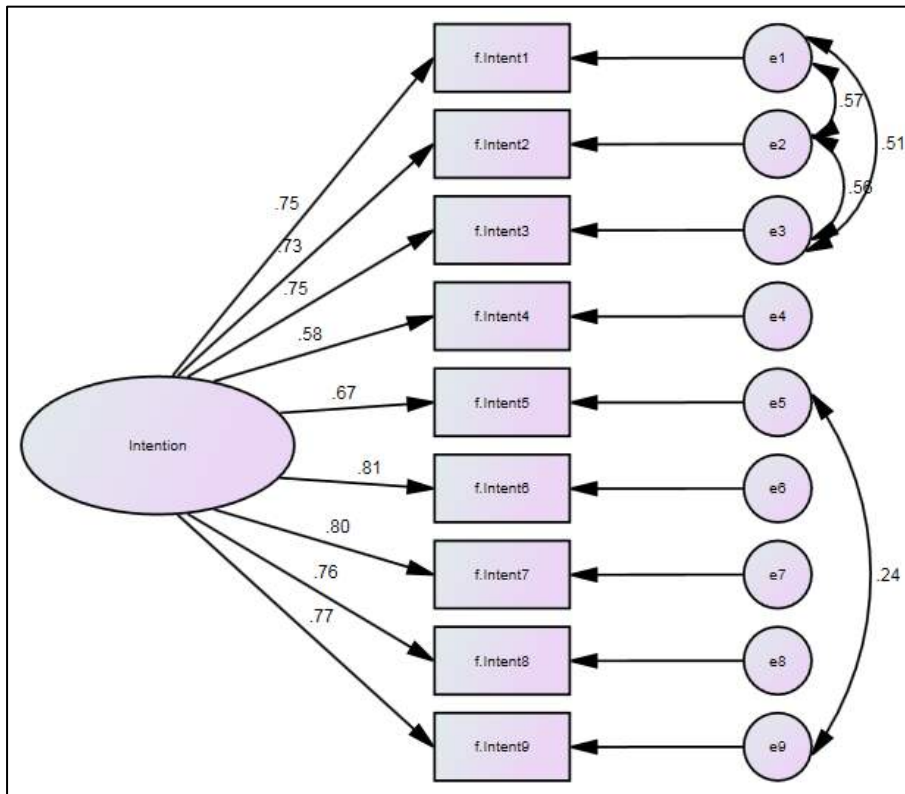
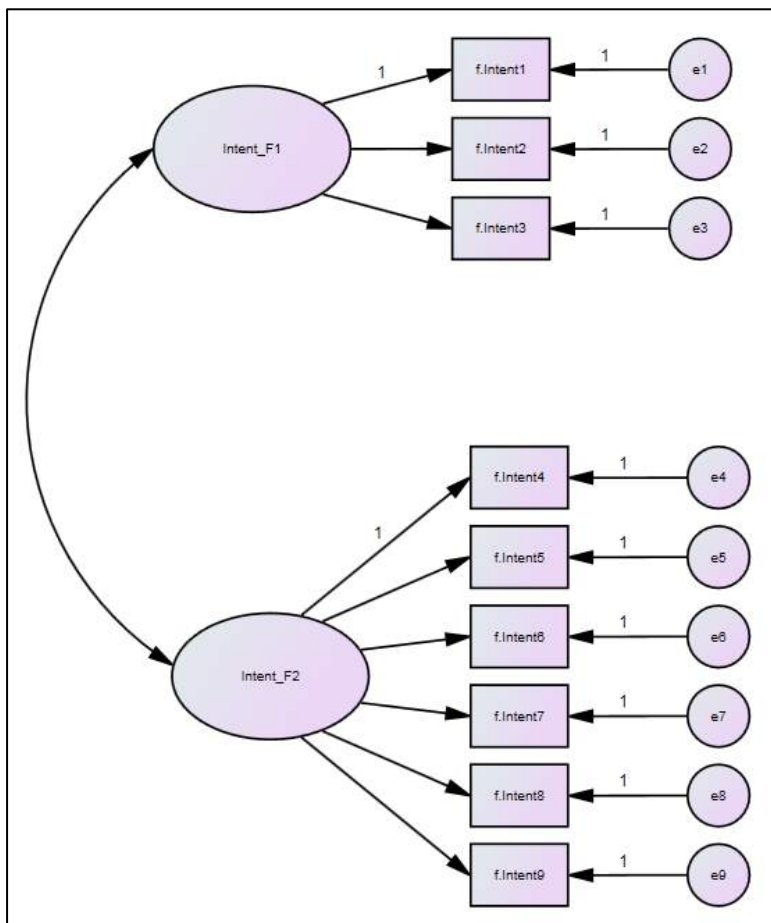


Figure 3: Two-factor CFA solution for intention construct – separate factor for the first three items (Model fit indices: $\chi^2= 54.370$, $df= 26$, CFI= 0.970, RMSEA= 0.083, SRMR= 0.0422)



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SUSTAINABLE HRM – IS IT JUST RHETORIC WITHOUT EMPLOYEE VOICE?

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SUSTAINABLE HRM – IS IT JUST RHETORIC WITHOUT EMPLOYEE VOICE?

ABSTRACT:

Sustainable Human Resource Management (HRM), a relatively new yet expanding view of HRM's role in achieving an organisation's sustainability objectives, has thus far failed to adequately consider the role of the employee, and specifically employee voice. Following a review of the literature, we identify employee voice as a gap in the sustainable HRM research that is in need of greater attention. We support this view with the narration of two vignettes that demonstrate the impact of failing to embed employee voice mechanisms into sustainability initiatives. The paper concludes with the proposition that without employee voice, sustainable HRM theory may be consigned as rhetoric, rather than a reality that achieves its objectives of contributing towards a sustainable society.

Keywords: sustainable HRM, employee voice, Green HRM, sustainability, employee participation

As society's understanding of the vital importance of adopting and adapting to more sustainable ways of life increases, organisations are accepting and embracing their roles in contributing towards sustainability too. Research has shown the impact organisations can have on improving sustainability outcomes in areas such as social responsibility (Aguinis & Glavas, 2012; Ehnert, 2009; Gupta, 2017) and reducing negative environmental impacts (Hanna, Newman, & Johnson, 2000; Markey, McIvor, & Wright, 2016; Paille, Chen, Boiral, & Jin, 2014; Ruiz-Quintanilla, Bunge, Cohen-Rosenthal, & Freeman-Gallant, 1996). As Ybema, van Vuuren and van Dam (2017, p. 2, citing Docherty, Kira & Shani, 2009 and Ehnert, Wes & Zink, 2014) stated:

Gradually, the view is gaining acceptance that a one-sided focus on a rather short-termed efficient and effective exploitation of natural, social and human resources in organisations is no longer desirable, and should be replaced by a more long-term approach that incorporates the sustainability of these resources.

One response to the acknowledged need for greater sustainability within and from the business world is consideration of the role Human Resource Management (HRM) can take in supporting the sustainability objectives of the organisation.

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The term sustainable HRM has been coined to explore a new way of expanding beyond Strategic HRM's focus on economic achievement, towards a broader theory of HRM that accounts for HRM's social and ecological footprint as well (Freitas, Jabbour, & Santos, 2011; Kramar, 2014). Whilst much work has been done within sustainable HRM (see Ehnert, 2009; Ehnert, Harry, & Zink, 2014; Kramar, 2015), we argue that an important element is yet to be fully explored and conceptualised within this theoretical framework; Employee Voice (EV). This is despite findings within the Green HRM literature that employees do impact not only on the achievement of environmental objectives, but also that "employee integration capability into sustainability is an important antecedent to firm performance" (Wolf, 2013, p. 104).

The purpose of this paper is to begin to identify the importance and potential role of employee voice within sustainable HRM. We do so by achieving three aims. Firstly, we identify employee voice as important in achieving sustainable objectives, yet largely missing from the extant literature. Secondly, we begin a focus on the potential impact of employee voice within sustainable HRM with a recounting of two vignettes. Lastly, we conclude with proposed future research directions to further explore this aspect of sustainable HRM.

The paper is structured thus; following key definitions, we explore the sustainable HRM literature, with a focus on the Green HRM subset of this field. We identify within this literature findings that employees do impact on achievement of organisational environmental goals, and that employee's environmental knowledge and perspectives impact on the organisations' sustainability objectives. Identifying employee voice as missing from the sustainable HRM literature thus far, we argue that this gap in the research is an area in need of attention. We support this argument with an exploration of two vignettes that illustrate the implications of failing to incorporate employee voice within sustainability initiatives. We conclude by proposing future research directions that we believe will aid in the concept of sustainable HRM moving beyond rhetoric and into reality.

DEFINING SUSTAINABLE HRM AND EMPLOYEE VOICE

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As a new school of thought emerges and begins to be explored, a precise definition can be difficult to agree upon as a range of perspectives and interpretations are debated. Defining Sustainable HRM is no different. Kramer (2015) demonstrates this in explaining the range of definitions, approaches, assumptions and theoretical frameworks that can underpin a definition of Sustainable HRM. In doing so, the key aspects that appear to identify sustainability as an emerging perspective in the field of HRM are distilled. Kramer (2014, p. 1084) defines Sustainable HRM as “the patterns of planned or emerging HR strategies and practices intended to enable the achievement of financial, social and ecological goals while simultaneously reproducing the HR base over a long term”. Two aspects of this definition warrant further discussion. First, this definition draws on the Brundtland Commission of the United Nations (1987) view of sustainability, which identified three ‘pillars’ of sustainability; economic, social and environmental/ecological. In 2015 the United Nations adopted 17 Sustainable Development Goals (SDGs), providing specific and detailed goals for governments, business and society as a whole to work towards achieving global sustainability (United Nations, 2018). While these SDGs give more precise target areas and specificity to actions that fall under the sustainability umbrella, the Brundtland Commission’s three pillars of sustainability are still preferred for definition purposes due to their succinctness and commonly understood meanings of economic, social and environmental goals. The second notable aspect of Kramer’s (2014) definition is the temporal aspect of sustainability; that a sustainable approach to HRM incorporates consideration of achieving sustainability across economic, social and environmental goals in the now, and also into the future (Wagner, 2013).

Within the field of Sustainable HRM, our aim is to draw attention to the role of employee voice (EV). Employee voice can be defined as the conduit for employees to raise issues and concerns, put forward interests and opinions, as well as ideas to contribute to the organisation decision-making with management (Pyman, Teicher, Cooper, & Holland, 2009). For management it provides an opportunity to put forward ideas, test them with the workforce and receive feedback on employee perspectives on the matters (Holland, Cooper, Pyman, & Teicher, 2012). In other words, a key aspect of employee voice according to Van Dyne, Ang and Botero (2003) is that it can facilitate pro-social

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behaviour in the workplace through enabling or being the catalyst for expressing constructive ideas and solutions for the benefit of the organisation, through involving employees and management jointly in the decision making processes. The nature of voice communication channels between management and employee can be formal or informal, and at various levels across the organisation (Holland et al., 2012). However, as with practices such as TQM and HPWS, if the employee voice is not heard, employees quickly see through the rhetoric and the danger is such practices are negated as they are seen as a fad.

EMPLOYEE VOICE: THE MISSING INGREDIENT IN SUSTAINABLE HRM

The role of Employee Voice within Sustainable HRM literature is yet to be explored in a comprehensive, all-inclusive manner. Research that has factored in the employee in some way, through employee participation or employee involvement, has done so with a focus on only one pillar of the sustainability equation; economic, social, or ecological. While the role of the employee within the economic pillar has been explored in depth through Strategic HRM theory and research, and the social pillar has been considered under the umbrella of Corporate Social Responsibility (CSR), the employee within the ecological pillar, often termed Green HRM, is a more recent area of exploration.

There are two aspects of the Green HRM literature that demonstrate the merit of further exploration of EV within sustainable HRM. Firstly, there are findings within the literature that have found that employees do have an impact on the achievement of an organisation's ecological, or 'green', objectives. Across the small body of research that has explicitly explored the role of the employee within environmental initiatives, the findings unanimously report that employee involvement (EI) improves an organisations success in achieving their environmental goals (Boiral, 2002; del Brío, Fernández, & Junquera, 2007; Hanna et al., 2000; Paille et al., 2014; Ruiz-Quintanilla et al., 1996; Tang, Chen, Jiang, Paillé, & Jia, 2018). These studies have explored the topic of employee impact on environment goals from different perspectives, such as Ruiz-Quintanilla et al.'s (1996) socio-technical perspective and Paille et al.'s (2014) Organisational Citizenship Behaviours for

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the Environment (OCBE), and also across different countries including USA, China and Spain. The research consistently found that employee involvement in the achievement of environmental objectives, be that through formal EI measures such as training and assessing employees in environmental objectives, job design, incentive programs, formal communication channels and/or teamwork (del Brío et al., 2007; Hanna et al., 2000; Tang et al., 2018) or informal EI channels such as informal meetings, worker suggestion schemes and/or learning climate (del Brío et al., 2007; Ruiz-Quintanilla et al., 1996; Tang et al., 2018), improved environmental outcomes for the organisation.

Given the evidence that employees do affect an organisation's ability to reach their environmental goals, and therefore operate in a sustainable way, then explicitly exploring the opportunities, mechanisms and combinations of various employee voice channels within sustainable HRM may reveal further detail on the relationship between EV and Sustainable HRM, providing useful information to organisations to support their sustainability objectives.

The second key finding from the Green HRM literature is the acknowledgement that employees bring their own perspectives, knowledge and attitudes towards the environment to the workplace, be that positive and supportive, or negative and opposed. In other words, "an individual's attitudes likely correspond to them refraining from green behaviours, or behaving in, green ways" (Rayner & Morgan, 2018, p. 62). Employees' attitudes about their employer's environmental initiatives and their perspectives towards environmental sustainability have been found to impact on the organisation's success or otherwise in achieving its environmental objectives (Blok, Wesselink, Studynka, & Kemp, 2015; Boiral, 2002; Rayner & Morgan, 2018; Temminck, Mearns, & Fruhen, 2015; Wolf, 2013). Blok et al. (2015, p. 61) state that "the results show clearly that environmental awareness and personal norms have a significant impact on the intention to act pro-environmentally". Other research has drawn similar conclusions, utilising a range of different theories and perspectives, including Ability, Motivation, and Opportunity (AMO) (Rayner & Morgan, 2018), Pro-Environment Behaviour (PEB) (Blok et al., 2015) and Organisational Citizenship Behaviours for the Environment (OCBE) (Temminck et al., 2015).

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In view of the impact employee perspectives and attitudes towards environment has on achieving sustainability, then it can be argued that creating channels and mechanisms for employee voice will allow for two-way communication between employers and employees. Such two-way communication, or voice, has the potential to allow employees keen to influence achievement of sustainability objectives the opportunity to contribute towards, enhance, and support such initiatives, whilst also allowing management to inform and educate those less enthusiastic or unknowledgeable employees about why and how sustainability is a valued goal for all organisations and individuals to strive towards.

One exception to the lack of specific focus on employee voice within sustainable HRM is Markey, McIvor and Wright's (2016) research into the role of employee participation in the reduction of carbon emissions. Markey et al. (2016, p. 173) examined a range of employee participation mechanisms, both direct and employee representative, and found "strong associations between organisational activities for the reduction of carbon emissions and employee participation in motivating, developing and/or implementing these measures". In finding that employee participation does have a strong association with reduction in carbon emissions, they draw on Cox, Zagelmeyer and Marchington's (2006) employee voice framework of depth, breadth and scope of employee participation mechanisms (Markey et al., 2016). This draws attention to the potential role of employee voice within sustainable HRM.

The findings surrounding employee participation (EP) and employee involvement (EI) within Green HRM demonstrate the merit of further exploration in this area under the wider sustainable HRM banner. Markey et al. (2016, p. 173) support this notion when they state "the importance of the concepts of depth and scope [of employee voice] in evaluating the extent to which employee participation is substantive". What we actually need to look at is how organisations are addressing the development of sustainable HRM practices within their work places. This paper explores two organisational approaches to this issue.

**ILLUSTRATING (THE LACK OF) EMPLOYEE VOICE IN SUSTAINABILITY
ACTIONS**

Ehnert (2009) identified gaps in the sustainability HRM literature across conceptual, analytical and empirical grounds. Within the broader topic of sustainability HRM, we have drawn attention here to the role of the employee, specifically, employee voice. We move here in the direction of undertaking a small, initial step towards an analytical exploration. We do so through recounting of vignettes, demonstrating the impact employee voice – or more specifically a lack thereof – can have on an organisation’s achievement of their sustainability goals.

Case Study: MetroUni

MetroUni places strong emphasis on its forward-thinking approach to sustainable work practices across a variety of its business areas including Energy, Water and Transport. The focus here will be on waste and energy management at the individual level.

It is important to note that MetroUni has a website dedicated to sustainability; this, and a newsletter, are the key voice forums. From an HRM perspective it is clear that this is downward voice with no employee input. There are no committees at the department level for sustainable action and all initiatives are taken by senior management and imposed on the workforce. Two examples we use to explore the impact of a lack of employee voice within sustainability initiatives are waste management and energy.

Vignette One: MetroUni and the Mini-Bins

As an initiative to reduce the University’s landfill waste and contamination of recycling of waste, MetroUni introduced a ‘mini-bin’ program. MetroUni states:

The program entails the removal of office under-desk landfill receptacles, which are then replaced with small desktop waste bins and under desk paper recycling boxes. Staff are required to empty the desktop bin into their closest waste-to-landfill bin, and recyclables via

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the kitchen recycling bin. Once a week, cleaning staff empty the under-desk paper recycling boxes. The initiative creates excellent environmental outcomes, while also aligning with health and wellbeing expert recommendations to get up from our desks regularly.

MetroUni's review of the roll out of this sustainability initiative states that:

- The initiative has been rolled out across the entire organisation, with great environmental results.
- Over 18,000 mini bins have been installed across our five locations
- A recent office waste audit in a building occupied by over 300 staff showed 51% of items placed in the previous landfill bins were recyclable.

This sustainability initiative – to reduce landfill waste by providing a smaller ‘pint glass sized’ receptacle, and to reduce recycling contamination by requesting employees separate waste into landfill, paper, and other recyclables – is an example of an organisation adopting a sustainability process without employee consultation. MetroUni staff report that they were not consulted on this change; in their eyes, one day their bins were removed and replaced by ‘no bin’, or a bin too small to be used effectively. Often the mini-bin is not used at all, with the mini-bins being found thrown out or stored away in filing cabinets. In response, staff have tended to just go to the closest big bin to eradicate their rubbish, having an unknown effect on recycling and contamination rates.

The organisation-initiated review of the program indicates a perception that the mini-bin program has been a success “with great environmental results”. However, based on the data provided as part of this review, this interpretation of the results is questionable. The waste audit showed in a building of over 300 staff, 51% of items that should have been recycled were; but what of the 49% that were not? Further, this statistic is not representative, in that most of the buildings at MetroUni do not have 300 or more staff. Lastly, senior management could not relate any improvements in recycling to the mini-bins.

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It could be argued that had employees been given a voice in this sustainability initiative, a more positive and effective outcome could have ensured. Had staff been involved in development of the idea, perhaps employees' needs regarding landfill waste and recycling could have been more embedded in the initiative, likely resulting in higher success rates in reducing landfill waste and reducing recycling contamination. Employee ownership of the mini-bin change may have improved the uptake of the initiative. In addition, had employees had a voice at the implementation stage, communication may have been improved, again possibly having a positive impact on the success of the initiative. Without employee voice, this sustainability initiative has had dubious positive impact on improving waste outcomes at the University. When taking into account the financial and environmental cost of producing 18,000 mini-bins that are not being used to their potential, it could be suggested the mini-bin program has had a detrimental impact on the sustainability footprint of MetroUni.

Vignette Two: Energy use at Metro Uni

MetroUni have stated that given energy use is a major source of carbon emissions, managing the University's energy consumption is an essential component of their environmental sustainability aspirations. They state:

At MetroUni, we recognise our responsibility to reduce our emissions and are working on achieving our target of reducing our emissions by 30% below 2010 levels by 2020. We were the first Australian university to commit to an energy reduction target and we're proud to be a leader in taking action on climate change.

An example of how a lack of employee voice and consultation on sustainability initiatives actually hinders the achievement of such a goal is illustrated by lighting in the University's photocopy rooms. Photocopy rooms are generally located in old internal storage rooms; these rooms often have no natural light, with the only lighting source being fluorescent strip lighting. In what is assumed is an effort towards reducing energy consumption, the photocopy rooms often have a sign asking staff to

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turn off the lights after use. It is therefore common for these photocopy room lights to be turned on and off up to 20 times an hour. This is despite research that proves that with this type of lighting, frequently turning the light on and off uses more energy than leaving it on, and decreases the life expectancy of the globe, therefore resulting in extra waste and cost (Department of Energy, 2018).

Had employees been given a voice on the topic of lighting photocopy rooms, it is possible a more sustainable - both economically and environmentally - option could have been communicated and agreed upon. Research on optimal times to leave fluorescent light on could be disseminated, and other options such as automatically shutting off lights after the optimal (most energy efficient) timeframe had passed, or relocating photocopiers to corridors or areas with natural light, may have been implemented. However, with no employee voice or consultation on sustainability at MetroUni, staff do not know how to communicate such ideas and initiatives. We ask the question; how much better and acceptable could these sustainability initiatives and solutions be if staff were engaged in the process?

CONCLUSION AND FUTURE RESEARCH DIRECTIONS

As our vignettes demonstrate, without employee voice, sustainable HRM runs the risk of becoming a fad, unable to deliver on its aspirations to help organisations achieve their sustainability objectives. To reach its full potential sustainability initiatives, including those directed through HRM, must incorporate two-way employee voice. As Temminck et al. (2015, 403) have stated “there is a need for organisations to recognize that the environmental behaviour of employees is a key part of the solution when it comes to organizations addressing their environmental impacts”. We argue such employee voice mechanisms will ideally employ a range of EV channels, both formal and informal, allowing for both breadth and depth of communication (Cox et al., 2006).

It is also important to note that research in the area of sustainable HRM to date has tended to focus on only one of the three pillars of sustainability; economic, social or environmental. This may be a reflection of the infancy of the research; a response to grappling with novel concepts, developing research agendas and untested conceptual frameworks. We suggest that as the body of literature has

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developed, particularly over the past decade, that the time is nearing that a more comprehensive approach to sustainable HRM could emerge, whereby attention is given to all three pillars of economic, social and environmental sustainability.

We therefore conclude by proposing two, singular or intertwined, future research directions. Firstly, the gaps revealed in the literature, and the anecdotal vignettes raised in this paper, demonstrate the need for empirical research focusing on employee voice within sustainability initiatives. Such research has the potential to further the theoretical and practical knowledge of sustainable HRM. Secondly, the time has come to begin drawing together findings from each of the three pillars of sustainability – Strategic HRM, CSR, and Green HRM – together, with future research exploring sustainability as whole, rather than a focus on only one aspect of the sustainability puzzle.

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07 Leadership and Governance

Interactive Session

Great Leaders Do Everything: Indirect Effect of Transformational Leadership on Helping Behavior and Moderating Role of I-Deal

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07 Leadership and Governance

Interactive Session

Great Leaders Do Everything: Indirect Effect of Transformational Leadership on Helping Behavior and Moderating Role of I-Deal

ABSTRACT: *Drawing on the conservation of resources theory and idiosyncratic deal, this study aims to find out the relationship between transformational leadership and helping behavior through the mediating effect of trust in leaders. I-deal acts as the moderating role on the direct effect of trust in leaders and helping behavior. Moreover, it is also expected to moderate the indirect effect of transformational leadership on helping behavior via trust in leaders. A two-wave survey was conducted and the results found that there is a negative indirect effect of transformational leadership on helping behavior via trust in leaders. I-deal strengthens the negative effect. Theoretical and practical implication is provided.*

KEYWORDS: Transformational leadership, trust

Positive leader behavior has an important role to play in all of the organizational settings (Arnold, 2017), and thus, researchers have paid a lot of attention to investigate different leadership behaviors in order to provide understanding of which leadership behaviors fit the organizational settings and produce the most benefits for the employees and organizations. Transformational leadership should be one of the mostly researched topics in organizational behavior (Judge & Piccolo, 2004). Previous studies found that transformational leadership is positively related to employee performance and effectiveness (Avolio, Bass, & Jung, 1999; Keller, 1992; Dvir, Eden, Avolio, & Shamir, 2002), positive affect (e.g., Bono, Foldes, Vinson, & Muros, 2007). However, attention to the negative outcomes produced by transformational leaders cannot be ignored. A study conducted by Kark, Shamir, and Chen (2003) found that there were two faces of transformational leadership; that is, there could be two contrasting outcomes of transformational leadership – empowerment and dependence. Some other studies found that transformational leadership leads to higher strain (e.g., Franke & Felfe, 2011). Researchers argued the mechanism through which can help explain the direction of the outcome, for example, in Kark et al.’s (2003) study, they found that it is due to the identification process which produced either empowerment or dependence from the effect of transformational leadership.

Trust in leaders is suggested to be the mechanism through which transformational leadership can impact helping behavior. Trust has been defined in many different ways in the literature, but they all shared the same notion that “trust is an expectation or belief that one can rely on another person’s actions and words and/or that the person has good intentions toward oneself” (Dirks, 2000, p. 1004; Cook & Wall, 1980; Cummings & Bromiley, 1996; Dirks, 1999; McAllister, 1995; Robinson, 1996). An interesting conceptualization of trust is a person is at risk or vulnerable to another person. Here the notion of trust in leaders refers to the employees who are at risk or vulnerable to their leaders, as they fully rely on the guidance and support from their leaders. However, abundant studies focused the attention on the positive effect of trust in leaders to team performance, or other positive benefits to the organizations, little effort has been given to explain the abuse of this trust from the employees. Thus, the current study tries to integrate the trust of leaders and helping behavior to explain why employees

can make use of their trust in leaders to produce a negative relationship with helping behavior based on the concept of conservation of resources theory (Hobfoll, 1989) since the employees can fully rely on their transformational leaders and thus, they have more resources which provide a stress-free work life. Helping would not be treated as their job duties, instead, they believe their leaders would take care of the others.

We argue that not only trust in leaders will dampen the helping behavior, the level of idiosyncratic deals (i-deals in short) (Rousseau, Ho, & Greenberg, 2006; Liu, Lee, Hui, Kwan, & Wu, 2013; Hornung, Rousseau, & Glaser, 2009) would further strengthen the negative effect of trust in leaders and helping behavior. In this 21st century, people encounter a lot of differences in the workplace, including the difference in age, gender, generations (Lawler III, 2011) and thus, employees in different generations require different work arrangement and setting in order to fulfill their personal life (Lawler III, 2001). I-deals are thus being initiated between the employee and employer, from the special arrangement that employee is allowed to leave earlier because of the further study to spend a year doing volunteer work or travel, instead of letting their employee quit the job (Hochschild, 1997).

I-deals are defined as “voluntary, personalized agreements of a nonstandard nature negotiated between individual employees and their employers regarding terms that benefit each party” (Rousseau et al., 2006, p. 978). Empirical research has shown that i-deals have an impact on employee work-related perceptions, attitudes, and behaviors, for examples, i-deals were found to be positively related to job satisfaction (Ho & Tekleab, 2013), affective commitment (Liu et al., 2013), motivation to continue working after retirement (Bal, De Jong, Jansen, & Bakker, 2012), organization citizenship behaviors (Anand, Vidyarthi, Liden, & Rousseau, 2010), and voice behavior (Ng & Feldman, 2015), and negatively related to work-family conflict (Hornung, Rousseau, & Glaser, 2008) and strain (Hornung, Rousseau, Weigl, Muller, & Glaswer, 2014).

Because of the importance of i-deals to both employees and organizations, researchers have tried to identify the antecedents of i-deals, or keep investigating the outcomes of this special work arrangement while no discussion on how this work arrangement becomes a context or situation which

further regulate the behaviors of the employees. Thus, the current study provides an argument that i-deals will moderate the negative effect of trust in leaders and helping behavior, more specifically, i-deals provided to the employees will further strengthen the negative relationship between trust in leaders and helping behavior.

Taken the above discussion together, the objectives of this study are twofold. Firstly, it is aimed to explain the indirect effect of transformational leadership and helping behavior through trust in leaders to produce a negative effect on helping behavior. Secondly, it is to explain how i-deals further strengthen the negative effect of trust in leaders and helping behavior. The hypothetical model of the current study is shown in Figure 1.

Insert Figure 1 here

Literature Review and Hypotheses Development

Transformational Leadership and Helping Behaviors

Burns (1978) and Bass (1985) were the two main authors who proposed transformational leadership. Burns (1978) first saw transformational leaders as those who ask followers to transcend their own self-interests for the good of the team or organization. Bass (1985) added later that transformational leaders are the ones who motivate their followers to do more than they originally expected to do. Based on the study conducted by Podsakoff, MacKenzie, Moorman, & Fetter (1990), transformational leadership encompasses multiple dimensions: *Identifying and articulating a vision* refers to the leader’s behaviors that aim at identifying new opportunities for the unit/division/company, and communicate his/her vision to the others clearly; *Providing an appropriate model* refers to the role model set by the leaders which is consistent with the values of the him/her; *Fostering the acceptance of group goals* is the behavior demonstrated by the leaders that they can promote and solicit the cooperation among employees to work together for the common goal; *High performance expectation* demonstrates the leader’s expectation of high quality and excellence from the followers;

Providing individualized support is the behavior that the leader respects the followers and concerns their personal needs and development; and *Intellectual stimulation* refers to the behavior that the leaders will challenge the follower and ask them to re-examine some of the existing work procedures or assumptions to make them better.

Helping behavior is one of the important components of organization citizenship behavior, which is defined as “members’ discretionary behaviors intended to benefit other work group members or the group as a whole” (Sparowe, Soetjipto, & Kraimer, 2006, p. 1194). Examples of helping behaviors may be about assisting a coworker who is staying late to cover another’s shift, or orienting a newcomer to adapt to the new work environment. Helping behavior refers to the extra role displayed by the employees, and thus, it always requests the employees to do more, or even beyond their initial expectation.

Under the influence of the transformational leaders, as mentioned before, transformational leaders are able to ask the followers to perform beyond their expectation (Bass, 1985) and transcend their self-interest for the good of the organization (Burns, 1978). Doing good for the organization includes helping the employees which can further facilitate the progress of the organization. Thus, the following hypothesis is suggested:

Hypothesis 1: Transformational leadership is positively related to helping behaviors among employees.

Transformational Leadership and Trust in Leaders

As discussed before, trust refers to the employees’ vulnerability based on positive expectations of the intentions or behaviors of another (Rousseau, Sitkin, Burt, & Camerer, 1998). In this regard, the intentions or behaviors of another refer to the leader. According to Burke, Sims, Lazzara, and Salas (2007), the level of trust the employees have depend on the experiences, interactions, and context within which the relationship exists. As such, to be effective, a leader should be able to earn a high degree of trust from the followers through their leadership.

Transformational leadership is more likely to engender trust from followers because of their leadership behaviors shown to their followers. Generally speaking, transformational leaders show concern for the welfare and personal needs of the followers and they will act in accordance to their espoused values (Bass, 1985). Followers will be likely to identify with the leaders (Kark et al., 2003), and lead to dependence. Dependence is another form of trust (Kark et al., 2003). Specifically speaking, when a transformational leader shows individualized support, the leader will not only concern with the task completion of the followers, but also their personal needs and concerns. This will give rise to followers having confidence in the intentions and motives of the leader which leads to the perception of procedural justice, and then trust (Pillai, Schriesheim, & Williams, 1999). When the leader clearly articulates the visions to the followers, it will help the followers to buy in and commit to the leader's vision in which trust should be an important component (Bass, 1985; Ugwu, Knwereuzor, & Orji, 2016). A number of empirical studies have found that transformational leadership has positive effect on trust among followers (e.g., Phong & Hui, 2018; Ugwu et al., 2016). Thus, we hypothesize that

Hypothesis 2: Transformational leadership is positively related to trust in leaders among the followers.

Trust in Leaders and Helping Behaviors

Helping the coworkers refers to the resource-consuming activities (Bamberger, Geller, & Doveh, 2017). According to conservation of resources theory (COR; Hobfoll, 1988, 1989), helping the others is regarded as resource loss since a person's time, energy, and effort are consumed and lost due to the helping behavior (Hobfoll, 1989). Moreover, some researchers posited that helping the others is costly since it may adversely impact work goal progress and well-being (Bergeron, Shipp, Rosen, & Furst, 2013; Bolino & Grant, 2016). Thus, it is believed that helping will use up the resources of the providers and costs incurred when helping depletes them (Bergeron, 2007; Lanaj, Johnson, & Wang, 2016; Uy, Lin, & Ilies, 2017). Based on COR, when there is depletion of resources, stress will be produced (Hobfoll, 1989), thus, people will try to maintain and protect their resources in order to

experience positive well-being (Cohen & Wills, 1985) and even develop resource surpluses to offset the possibility of future loss (Hobfoll, 1989).

From the above reasoning, it is not known if an employee will offer help to their coworker or not (Bamberger et al., 2017). However, when the employees have high degree of trust to their leaders, they can fully depend on the leaders and even believe that their leaders will have plan and procedures to give help to the coworkers. In this regard, employee helping behavior will be reduced since they are under a good leader that they trust. Hence, the following hypothesis is developed:

Hypothesis 3: Trust in leaders is negatively related to helping behaviors among employees.

Mediating Role of Trust in Leaders

Taken together the above discussion, transformational leaders are able to solicit the trust among the followers because of the characteristics and behaviors shown by the leaders, but the trust in leaders will be negatively leading to the helping behaviors among them since the followers trust their leaders that they will also take care the interest and needs of the coworkers. In this regard, the following mediating hypothesis is suggested:

Hypothesis 4: Trust in leaders mediates the direct relationship of transformational leadership and helping behavior.

Moderating Role of I-Deals

As previously mentioned, i-deals are the special work arrangement negotiated between an employee and the employer, thus, there are several important features which characterize i-deal. First, it is individually negotiated, and most of the time, employer will grant an i-deal to an employee in order not to let him/her quit the job. Thus, it is believed that the employee is valuable to the organization. Second, an i-deal involves heterogeneous arrangement. Different work arrangement among employees would be resulted and creates within-group heterogeneity (Klein, Dansereau, & Hall, 1994). Employers are willing to grant an i-deal because they believe i-deal can be successfully in

motivating, attracting and retaining the services of a valued employee, and that employee can receive desirable resources.

Contents of i-deals involve a wide range of resources, from tangible and universalistic (e.g., payment, material goods) to abstract and particular (e.g., status, recognition, social support). Previous researchers have labelled these different types of i-deals as flexibility i-deal, task i-deal, work hour i-deal, and development i-deal (Rousseau, 2005; Rousseau & Kim, 2006).

According to COR, i-deal is a very valuable resource. Resource can be categorized into four types, objects, conditions, personal characteristics, and energies (Hobfoll, 1989). Employees having i-deals, no matter they are flexibility, task, work hour, or development, mean that they are having increasing their resources and thus, they will try to maintain them. Employees may be calculative in protecting their resources and thus, in this situation, this will strengthen the negative relationship of trust in leaders and helping behaviors. Based on this reasoning, the following hypothesis is developed:

Hypothesis 5: I-deal moderates the negative relationship of trust in leaders and helping behavior among employees, such that more (instead of less) i-deals possessed by the employees, stronger (instead of weaker) the negative relationship between trust in leaders and helping behaviors.

I-deal is also posited to explain its moderating effect on the indirect effect of transformational leadership and helping behavior via trust in leaders. Taking the same reasoning as above, when the employees keep their resources (as resulted from having i-deals), they would avoid all of the resources-depleting activities, especially when they have the choice. Since helping is an extra-role behavior, they would not risk their resources and thus, i-deal plays a moderating role on the indirect effect of transformational leadership and helping behavior via trust in leaders. The following hypothesis is suggested:

Hypothesis 6: I-deal has a positive moderating effect on the indirect relationship of transformational leadership and helping behavior via trust in leaders.

Methods

Sample and procedure

Participants in this study were employees and their immediate supervisors working in seven companies located in the Jiangsu Province, Mainland China. Two waves of data were collected to reduce potential common method bias. The human resource departments from each company helped to distribute the surveys to all participants. We surveyed 370 employees and 124 correspondent supervisors. All of the respondents were assured of the confidentiality and each survey was inserted into a sealed envelope with the instruction on the top of the envelope. All participants were asked to put their completed surveys in the sealed envelopes provided in the HR departments and our research assistant came to collect those surveys.

We adopted matched code to identify each employee's response and that of their corresponding supervisor. In Wave 1, the employees provided information on their demographics, perception of transformational leadership, and trust in leaders. Around one month later, their corresponding supervisors reported the helping behaviors of their subordinates and subordinates provided the information on i-deals in the second-wave survey.

A total of 370 matched surveys were collected. Of the 370 employees, majority of them were male (55.4%) and 44.6% were female. Of the 124 correspondent supervisors, 61.9% were male and 38.1% were female.

Measures.

All of the items were measured on a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree. Since the study was conducted in the Mainland China, the surveys were translated in Chinese following the standard translate-back-translate procedure (Brislin, 1980).

I-deals. We measured the flexibility and developmental i-deals with two- and four-item scales from Hornung et al. (2008). Task i-deal was measured using four items developed by Hornung et al. (2010), and work hour i-deal with 3 items from Rousseau, Hornung, and Kim's (2009) scale. All of

the i-deal items asked the participants to rate the extent in the employees' current jobs that they have "asked for and successfully negotiated individual arrangements different from their peers. The Cronbach's alpha for the combined i-deal is .86.

Transformation leadership. We used the scale developed by Podsakoff et al., (1990). There are five items for "identifying and articulating a vision", 3 items for "provide an appropriate model", four items for "fostering the acceptance of group goals", three items for "high performance expectation", four items for "providing individualized support", and four items for "intellectual stimulation". The items ask the employees to rate the behaviors of their immediate supervisor. The Cronbach's alpha for the combined construct is .87.

Trust in leaders. Four items were adapted from Dirks (2000). The Cronbach's alpha is .60.

Helping behavior. This was measured using 7 items from Dyne and Lepine (1998). The Cronbach's alpha is .80.

Analytic Approach

To examine all of the hypotheses, and the moderated mediation, we used PROCESS (Hayes, 2013) to run hierarchical regressions on the complete model with enlargement as the moderator and helping behavior as the outcome of voice behavior. Indirect and conditional indirect effects were calculated using 5,000 bootstrap samples to construct 95% bias-corrected confidence intervals (CIs; Preacher & Hayes, 2008).

Results

Table 1 shows the descriptives statistics, correlations, Cronbach alphas of the focal variables. Surprisingly, transformational leadership did not correlate with i-deal ($r = .02, ns$), but it is positively correlated with trust in leaders ($r = .30, p < .01$).

In order to develop the discriminant validity between each constructs, we used confirmatory factor analyses to compare two competing models, which are one-factor model and 4-factor model. CFA results show that the 4-factor model fit the data well with all the indices met the respective

criteria ($\chi^2 [913, N = 370] = 1371.51, p < .001$; CFI = .91; RMSEA = .04; IFI = .92). But the 1-factor models does not provide good indices ($\chi^2 [919, N = 370] = 1811.25, p < .001$; CFI = .83; RMSEA = .05; IFI = .83). The difference between the chi-square statistics associated with the competing models was statistically significant ($\Delta \chi^2(6, N = 370) = 439.73, p < .001$), showing that 4-factor models are better over the 1-factor models.

PROCESS results (Table 2 Model 1a and Model 1b) showed that transformational leadership does not positively relate to helping behavior ($b = .05, ns$), thus, rejecting Hypothesis 1. Table 2 Model 1a also indicated that transformational leadership is positively related to trust in leaders among the employees ($b = .53, p < .001$), providing support to Hypothesis 2. Model 1b showed that trust in leaders among the employees is negatively related to helping behavior ($b = -.51, p < .05$). Thus, Hypothesis 3 is supported. To test the moderating effect, the interaction term of i-deal and trust in leaders was significant ($b = .15, p < .05$). However, according to the bootstrap analysis showing the high and low values of the moderator, there is no significant effect to the negative relationship of trust in leaders and helping behavior among the employees as CI includes zero (-.199, .007). Referring to Figure 2, it depicts the slope test of the moderator on the direct relationship between trust in leaders and helping behavior. Unfortunately, there is no significant interaction effect to the direct relationship of trust in leaders and helping behavior. Thus, the overall result rejects Hypothesis 5.

Insert Table 1 to Table 2 and Figure 2

Results from the bootstrap analysis showed that the indirect effect of transformational leadership on helping behavior via trust in leaders (Hypothesis 4) was significant given that 95% CI did not include zero (CI [-.1064, -.000]), showing support to Hypothesis 4. To illustrate the moderated-mediation effect (Hypothesis 6), the indirect effect of transformational leadership on helping behavior via trust in leader was significant (CI [.005, .173]), supporting Hypothesis 6.

General Discussion

Theoretical and Practical Implications

Helping behavior is believed to be a critical element in modern organization as it can help to facilitate interpersonal relationship among employees and advance the organizational progress (Gonzalez-Mule, DeGeest, McCormick, Seong, & Brown, 2014). Drawing on COR, this study found that employees would like to maintain their valuable resources instead of providing help to their coworkers, especially when they have high degree of trust to the transformational leaders.

Particularly, this study found that transformational leadership cannot lead to positive relationship of helping behavior since followers will have a high degree of trust to their leaders, the trust dampens the initiative of providing help to their coworkers. In this study, it shows that when there is high degree of trust to the transformational leaders, followers will be very relaxed and they believe the transformational leaders will concern the needs and the interest of the coworkers because of the individualized behaviors shown by the leaders. Thus, no helping behaviors will be shown.

Moreover, COR provides the understanding that i-deal is a valuable resource that the employees would like to protect and maintain for the possibility of future loss due to the sudden increase of workload, change in environment, or other situations (Hobfoll, 1989). With the presence of the transformational leaders and high degree of trust to them, the possession of i-deal cannot mitigate the negative effect of trust in leaders to helping behaviors, but it will strengthen this negative effect. This provides a new lens of assessing trust in leaders and i-deals in the organization.

This study provides implications to the practitioners, especially when they have transformational leaders in the work setting, or employees are having high degree of trust or i-deals. It is suggested that companies should provide more support and guidance to the employees so that even when they offer help the coworkers, their own resources would not be lost. Moreover, according to the study from Kark et al. (2003), transformational leadership has potential to produce dependence from their followers when they have high personal identification in their leaders. Dependence manifests high degree of trust as if they do not trust their leaders, they will not depend on them. Thus, it is a need not to develop personal identification, but organizational identification so that empowerment would be

resulted, and because they employees have identification in the organization, the future prospect of the organization and their coworkers working in this organization will be concerned

Limitations and Future Research Directions

Although this study provides a new understanding of trust in leaders and i-deal and contribute to the arenas of these two literatures, attention should be given to several weaknesses of this study. First of all, the supervisor was asked to randomly select three employees to complete the survey, although this data collection procedure has been adopted by other researchers (e.g., Duan, 2017), the employees selected may not provide variance to the analysis. Therefore, future research should try to ask all of the employees to complete the survey, if resources permit. Secondly, there were two times of conducting the survey and one month in between the two waves. One month may not be sufficient to produce causal relationships. Future research should try to conduct the second wave, or even more waves with around 3 months in between.

Conclusion

Transformational leadership, trust in leaders, helping behaviors, and i-deals are all the positive antecedents or outcomes that most of the researchers who would like to investigate, and believe they should have positive influence to each other. However, this study found that when putting them together, a side effect would be produced, that is, employees would rely on their transformational leaders, and maintain and protect their i-deals (major resources in the work setting). Therefore, helping behavior cannot be displayed.

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Table 1

Descriptive Statistics and Correlations

Variable	Mean	SD	1	2	3	4
1. Transformational leadership	3.71	.45	(.87)			
2. Trust in leaders	3.17	.81	.30**	(.60)		
3. Helping Behavior	3.87	.56	.04	.00	(.80)	
4. I-deals	3.37	.59	.02	-.01	.13*	(.86)

Note. N = 370. Reliabilities are reported along the diagonal.

*p < .05. **p < .01.

Table 2

Hierarchical Regression Results for Transformational Leadership and Helping Behavior

Variables	Model 1a	Model 2a
	Trust in leaders	Helping Behavior
Direct effects		
Transformational leadership (TFL)	.53***	.05
Trust in leaders		-.51*
I-deals		-.36
TFL x I-deals		.15*
R ²	.09***	.03*
ΔR ²		.02*

Note. N = 370. *p < .05. ***p < .001.

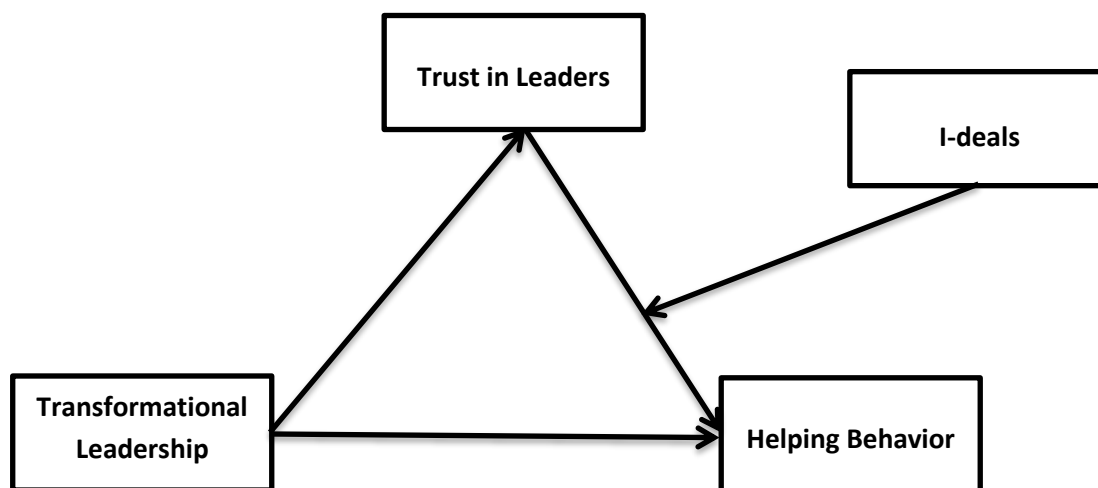


Figure 1. Hypothetical model of this study.

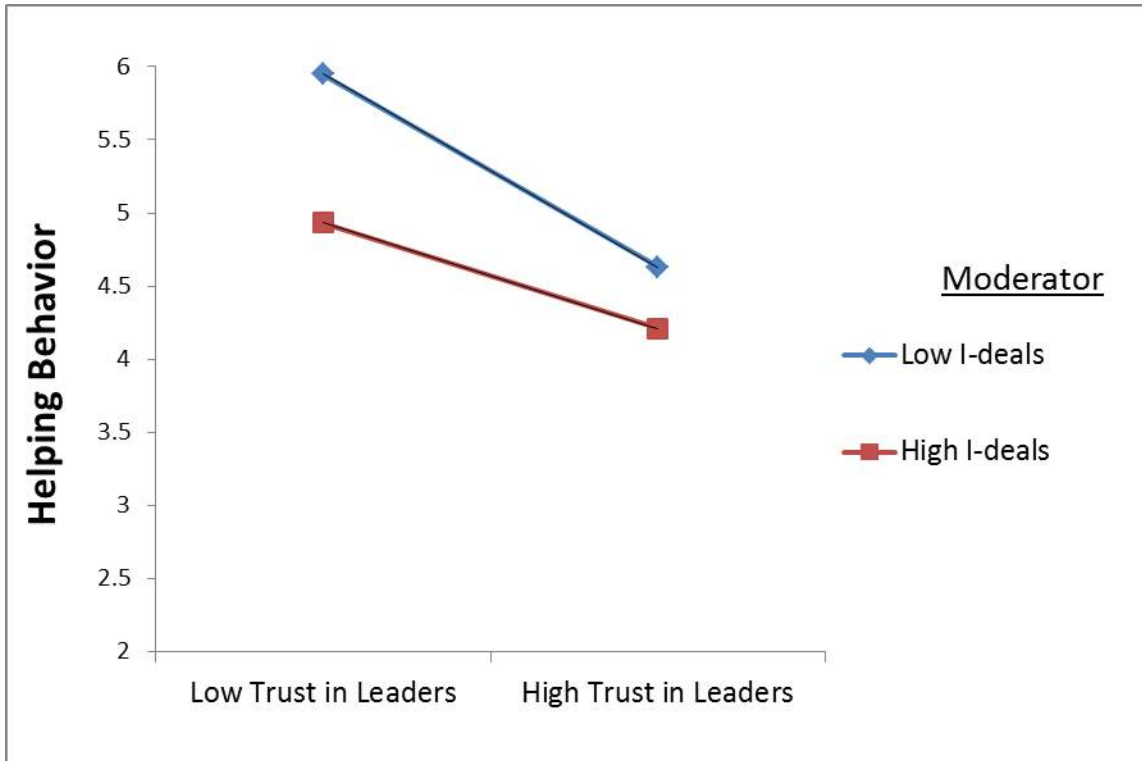


Figure 2. Trust in leaders interacting with i-deals to predict helping behaviour.

04 Health Management and Organisation

Refereed Delivered Paper

**Nurse Manager as Employee Champion:
Results from a scoping review examining retention in healthcare**

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Nurse Manager as Employee Champion: Results from a scoping review examining retention in healthcare

ABSTRACT:

Retention strategies have been emphasised as a way of addressing the estimated global deficit of 15 million healthcare workers by 2030. Central to these strategies are healthcare leaders, particularly nurse managers, whose role supports optimal employment of staff to meet individual needs, facilitate employee satisfaction, and achieve organisational objectives. This paper presents the outcomes of a scoping review which resulted in 183 items from multiple sources. Using Ulrich's HR business model, the review recognised nurse managers focus on both people and process as Employee Champions in managing retention, but lesser on strategic efforts. The findings have implications for nurse managers as Strategic Partners, if future contributions to managing the nurse shortage phenomenon are to be successful.

Keywords:

health leadership, health workforce issues, HRM in healthcare, hospital management, healthcare management

BACKGROUND

The World Health Organisation (WHO) estimates almost 21 million nurses and midwives make up approximately half of the global healthcare professional workforce. Yet, approximately 50% of WHO member countries report inadequate nurse-patient ratios (WHO, 2018). Shortfalls of approximately nine million nurses and midwives have been recorded, demonstrating nurse shortages as a crucial global phenomenon (WHO, 2016). Similarly, labour market projections for 2030 estimate a demand of 80 million global healthcare workers or Human Resources for Health (HRH), compared to a supply of 65 million, resulting in a deficit of 15 million healthcare workers (Liu, Goryakin, Maeda, Bruckner, & Scheffler, 2017).

The reasons for this shortfall are many, including an ageing nursing workforce (HRSA, 2013); an ageing population and a corresponding increased demand for healthcare services (increased geriatric care plus complicated and chronic healthcare needs) (Ortman, Velkoff, & Hogan, 2014);

insufficient enrolments and admissions to nursing graduate training institutions (AACN, 2017); and inadequate nurse-patient ratios (Aiken et al., 2017). Retention of the nursing workforce has been identified as a major contributory factor influencing the nurse shortage, precipitated by diminishing resources, nurse burnout, high stress levels, increased workloads, and demands on the healthcare services as a whole. While this situation is not dissimilar to other professions encountering challenges to retain staff, for example: child welfare services (Benton, 2016), social care services (McKitterick, 2012), and knowledge workers (Benson & Brown, 2007), the effects have a far-reaching, global impact.

International reports, such as the Global Health Workforce Alliance, identify approaches for redress including the provision of global strategic directions for HRH (Best et al., 2018; see also Nkowane & Ferguson, 2016; WHO Global Strategy on Human Resources for Health: Workforce 2030). The International Council of Nurses has similarly committed to working with nurses worldwide to “support... the development of inter-professional education and practice, and championing of strategies” to resolve this issue (Shamian, Murphy, Rose, & Jeffs, 2015, p. 26). Central to these initiatives are healthcare leaders, particularly nurse managers. Over the past few decades, the role of Nurse Managers (NM) has seen a significant shift, coinciding with the devolution of the Human Resource Management (HRM) function to these line managers.

The work of Dave Ulrich has transformed how the HRM function has been viewed (Ulrich, 1997). With the principle aim of separating the Human Resource policy making, administration and business partner roles, the Ulrich model focuses on four roles (four quadrants) which have diverse foci – from strategic to operational and from process to people. While there is some debate about the validity of the model 20 years after its publication, many of the elements of the model are useful for organisations when building an HR business model that fits their needs (Orion Partners, 2014). As line managers, NM support “the productive use of people in achieving the organisation’s strategic objectives and satisfaction of individual employee needs” (Stone, 2013, p. 4) and thus take on what might be considered people and process roles in the organisation. If the role of NM as line manager is

considered crucial to achieving organisation goals, including but not limited to staff retention, the strategic and operational roles of NM need to be explicated.

AIM

The aim of this paper is to determine what evidence exists in the literature about the role of nurse managers and the relationship between this role, and the retention of healthcare professionals. In order to identify the role of NM in the retention of healthcare professionals, a scoping review was undertaken of the healthcare sector as a whole, inclusive of hospitals, healthcare centres, community health services, private and public sector, to name a few.

RESEARCH DESIGN

Scoping reviews, also known as scoping studies, are useful for reviewing literature that may be of a “complex or heterogeneous nature” (Peters et al., 2015, p. 142). Given the subject area is in the healthcare sector, renown for being dynamic and complex (IOM, 2003), it is befitting such a review provides the broad overview and key concepts of what is available (Mays, Roberts, & Popay, 2005) from both the academic and grey literature¹. This scoping review is used as a mapping exercise to explore: “What is known about the role of the nurse manager in relation to staff retention?” The scoping review will contribute towards addressing this research question and identify research gaps through the process of the review (Anderson, Allen, Peckham, & Goodwin, 2008).

The Framework

¹ Grey Literature is defined by the Fourth International Conference on Grey Literature as: “That which is produced on all levels of government, academics, business and industry in print and electronic formats, but which is not controlled by commercial publishers.” (<http://www.greylit.org/about> Retrieved on April 13, 2018)

The Arksey and O'Malley framework (Arksey & O'Malley, 2005), hereafter referred to as the 'framework' was used in this review. The framework provides an overview of evidence available in the literature, including published academic and non-academic literature, and primary and secondary literature sources. The steps include: (1) identifying the research question, (2) identifying relevant studies, (3) study selection, (4) charting the data, (5) collating, summarising and reporting the results, and (6) consultation of stakeholders. (The sixth step in this framework is optional and has, for this scoping review, been omitted). The Joanna Briggs Institute Guidance for Conducting Systematic Scoping Reviews protocol (hereafter the JBI protocol) was additionally employed (Peters et al., 2015) for charting the data.

The scoping review is considered a non-systematic review and reports on the "overall state of research activity" not requiring the evaluation of the quality of studies as it is not considered "part of scoping study remit" (Arksey & O'Malley, 2005, pp. 20, 22; see also Peters et al., 2015). Additionally, given the challenges recognised by Levac, Colquhoun and O'Brien (2010) in assessing quality, this was not undertaken for this review.

Descriptive summary analysis (Hair, Anderson, Black, & Babin, 2016) and qualitative thematic analysis, "a form of pattern recognition where emerging themes become categories for analysis" (Fereday & Muir-Cochrane, 2006, p. 82) were used to map and summarise the findings from the retained sources. The Ulrich HR Business Model (Ulrich, 1997, p. 24) is used as an analytic tool to identify roles and interpret the research applying inductive thematic analysis to the findings of each study.

Table 1 presents details about each stage of the framework as it relates to this review. **Step 1** of the framework identifies the research questions. In order to understand the relationship between NM and retention of the nursing workforce, the scoping review addressed: "What is known about the relationship between the nurse manager and staff retention?" Subsequent questions included: (a) what

does existing literature say about the role of nurse manager regarding retention? and (b) What role does the nurse manager play in retention of staff?

Insert Table I about here

Step 2 outlines the search strategy used. The healthcare literature has a substantive amount of practitioner-based research, some of which although non-academic, oftentimes provides empirical data or operational evidence-based practice in the field. The search strategy adopted in the scoping review aimed to ascertain the wider perspective of research conducted in this field, identified through existing literature reviews in the subject area. From this extensive viewpoint, the most common databases were used as a springboard and formed the primary source of the literature search. A flowchart of the search strategy is provided at Figure 1.

Insert Figure 1 about here

The study selection process (**Step 3** of the framework) relied on pre-set inclusion and exclusion criteria. Items were initially selected based on keywords in the title. Titles without keywords were considered ‘outliers’ and a post hoc approach applied, which meant the inclusion and exclusion criteria were non-static and not extensive, but transformed as the review was undertaken as an iterative process. From an initial 988 items identified which match the selection criteria, a total of 924 items were reviewed and 183 items retained in the final analysis.

As recommended by the JBI protocol, **Step 4** of the framework involved charting the data. Charting is a “technique for synthesizing and interpreting [the] data” which enables the data extracted to be sorted by issues or themes (Ritchie & Spencer as cited in Arksey & O’Malley, 2005, p. 26). Data was charted using an Excel spreadsheet designed with the following headings: database, date retrieved, title of article, Criteria 1 (Keywords in title?), Criteria 2 (Title relevant to question?), Outlier by title (yes/no), Criteria 3 (Abstract relevant to question?), Reason, Full text available (Yes/No), Citation, Article type, Country, Abstract, Aim, Study population, Sample size, Methodology, Method/instrument, Key findings, Conclusion, Personal notes. A flowchart detailing the selection and charting process is provided at Figure 2.

Insert Figure 2 about here

The charting process led to the development of a summary table (**Step 5**) to assist with the collating, summarising and reporting of results. Table 2 provides an extract of this summary.

Insert Table 2 about here

RESULTS

The results of the scoping review present the “breadth of the available literature” (Arksey & O’Malley, 2005, p. 21) under the following headings: (a) Source of Studies; (b) Measuring Retention; (c) Nurse Manager Role; and (d) Enablers. (A summary of results of the scoping review is presented in Table 3). The detailed results are discussed below.

Insert Table 3 about here

(a) Source of Studies

The retained items are published in a broad range of sources including: e-books, magazines, periodicals, trade journals, wire feeds, newspapers, dissertations and academic journals. The majority are from academic journals (73%) with the remaining items published as grey literature, including 19% from dissertations and other sources, including non-academic literature.

Of the total literature, 34% was identified as good practice² items, whilst the remaining studies were academic or evidence-based studies with empirical data. A low volume of studies are based on existing operational performance standards (e.g. organisations with Magnet status accreditation).

A total of 47 different academic journals published articles in this field, with two leading journals, namely Nursing Management and Journal of Nursing Management publishing n=37 and

² Good practice for the purpose of this paper refers to research mainly practitioner-based initiatives, or research of a non-academic nature, and cases of good (or best) practice in units, wards or hospitals, oftentimes with measurable outcomes.

n=21 articles, respectively, both from USA. The remaining journals published between one and eight articles each making up the remaining 57% of retained references.

Of the total studies, 61% originate in USA, followed by Australia with 9%, Canada 8% and UK 5%. The remaining 16% is from 21 countries across the globe. The data shows studies have been conducted in 25 countries worldwide, with just under half holding the status of OECD Member States. Yet, given the four dominant countries named above are OECD member states, it becomes obvious the data will reflect a dominance of research by OECD member countries in this research field leaving non-OECD member states undertaking only 10% of the total studies worldwide. This presents both an opportunity for future research but a potential limitation in the current study which needs consideration when interpreting results.

The data shows publications extend from 1990 to 2018, with a surge of studies from 2001 to date. The data distribution presented in Figure 3, shows there was a marked increase in dissertations with a concentration of research from 2006 onwards.

Insert Figure 3 about here

(b) Measuring Retention

Over half the studies explicitly measure or focus on retention (52%) (Taunton, Boyle, Woods, Hansen, & Bott, 1997; Hogan, Moxham, & Dwyer, 2007; Ritter, 2011), with the remaining investigating proxies for retention: turnover (15%) (Kleinman, 2004b), intention to leave (16%) (Perry et al., 2016), and intention to stay (14%) (Duffield, Roche, O’Brien-Pallas, Catling-Paull, & King, 2009); similar to what has been used in the broader literature to understand why staff remain in or leave the workforce (Ke, Kuo, & Hung, 2017; Shimp, 2017). A small number of items (3%) study a mix of these measures or no measure of retention at all.

(c) Enablers

Approximately 20% of the retained items identified a series of enablers which could be leveraged to influence retention. These enablers focussed on: nurse manager capacity, HR strategic role, and factors including determinants, influencers, and predictors.

Of these items, 10% reflected the importance of NM capacity. For example, Abualrub and Alghamdi (2012) showed how transformational leadership style impacted Intention to Stay. Other examples of NM capacity include: leadership knowledge and skills (Cope & Murray, 2017), emotional and social intelligence (Clancy, 2014), critical thinking skills (Zori, Nosek, & Musil, 2010), hardiness (Flowers, 2014), and leadership styles (Casida & Pinto-Zipp, 2008).

A further 6% of the retained items identified the importance of retention as part of an HR strategic agenda. For example, Andrews and Dziegielewski (2005) identified holistic interventions at corporate/strategic level such as developing new nursing models to address retention, whereas Kiel (2012, p. 307) suggested the “orientation program must be seen as a total organizational initiative and not only as a nursing initiative”.

The remaining 4% of items identified a diverse set of factors including determinants, such as: job stress, social support, job satisfaction and organisational factors (Heidari, Seifi, & Gharebagh, 2017, p. 1468), conditions of work environment, rewards, physical and psychological responses to work, patient relationships, job content, relationships with co-workers (Taunton et al., 1997); antecedents such as job satisfaction factors (family/work life balance and scheduling) (Keyser, 2011); and influencers including: job and community fit, job and community social links (Bethune, Sherrod, & Youngblood, 2005); occupational and organisational commitments (Chang, Du, & Huang, 2006).

(d) Nurse Manager Role

Ulrich’s framework was applied to further identify the characteristics of the NM roles (see Figure 4) (Boroughs, Palmer, & Hunter, 2008) in influencing retention. The retained items support the importance of the NM role in influencing retention (80%) which has addressed one of research

questions framing this review. In 62% of the items, the dominant role of the nurse manager is aligned to that of Ulrich’s Employee Champion. As can be seen in Table 2, Cowden, Cummings and Profetto-McGrath (2011, p. 471) identified leadership practices, leader’s interactions and relations between NM and their staff which resulted in “different staff behavioural intentions” influencing Intention to Stay. This is an example of the people focus role of the NM. Chang et al. (2015, p. 475) found improved salary structures and the provision of professional development opportunities as positively impacting retention. Focussing on the operation and process characteristics align with Ulrich’s Administrative Expert role which was present in approximately 19% of the items.

Insert Figure 4 about here

To a lesser extent, but still present in the retained items, NM roles were also indicative of strategic focus roles - the Change Agent (11%) and Strategic Partner (8%). For example, NM who are equipped with the skills and tools to address bullying in the workplace can prevent unacceptable behaviour from becoming part of the nursing culture (Cohen, 2006) and make changes where needed. Similarly in their strategic role NM should have skills to determine turnover costs and its corporate impact in order to develop and implement strategies for redress (Contino, 2002).

Of the items that recognised the value of the NM in influencing retention, there was a further focus on the retention of a specific cohort - new graduates into the nursing profession. Of these items 14% focused specifically on this group of new recruits, i.e. the initial period of the nursing profession cycle including recruitment, orientation and induction phases. Of these 14%, the NM role mirrored most often that of the Employee Champion (84%) (Ashcraft, 2004; Kiel, 2012; Shepard, 2014; Byrd, Mullen, Renfro, & Harris, 2015; Lea & Cruickshank, 2017). While other roles including Change Agent (Hillman & Foster, 2011), Administrative Expert (Robinson, Murrells, & Smith, 2005), and Strategic Partner (Fitzsimons & Reinbeck, 2015) only accounted for 4% each.

DISCUSSION

The scoping review sets out to understand what is known in the literature about the relationship between the nurse manager and staff retention and to visually chart the evidence. Ulrich's HR business model was used to explore the NM role.

Most notably, in managing retention, the review highlighted the NM has an operational focus with dual attention to people and process and addresses the study's research question. Specifically, nurse managers "finding the right balance between demands and resources" (Ulrich, 1997, p. 148) and having a significant impact on the retention of healthcare professionals. This is achieved through advocating for employees and acting as an Employee Champion - meeting staff needs, building employee contributions, increasing commitment, and ensuring employees meet their expectations (Ulrich, 1997).

Furthermore, NM have the opportunity "to promote positive outcomes and shape health services" (Havens, 2011, as cited in Fulop et al., 2013). As Employee Champions, they can create "positive human experiences in [the] organisation" (Cameron & Caza, 2004, p. 734) by effectively "manag[ing] the employee contribution" (Boroughs et al., 2008, p. 14) in the organisation and the fulfilment of their function to increase staff commitment, develop and build staff capacity within the unit/ward and ultimately the organisation (Paschke, 2007; Kodama, Fukahori, Sato, & Nishida, 2016).

To a lesser extent, the review showed that NM take on the role of Administrative Expert. A focus on operational processes to develop an efficient infrastructure (for example, creating and providing a conducive work environment for staff) (Pinkerton, 2003; Ashcraft, 2004, Cohen, 2014, Fisher, 2016) also supports staff retention. In particular, the review showed healthcare organisations that adhere to stringent standards and measures, such as those with Magnet accreditation status, are able to evidence developments and changes made to improve retention and other healthcare deliverables (Friese, 2005; Drenkard, 2005; Ritter, 2011).

Both the Employee Champion and Administrative Expert have what Ulrich termed an operational focus (Heslin et al., 2008; Fisher, 2016). Retention is a key organisational outcome however, and therefore, concurrently requires the NM to function at the operational and strategic levels. The review identified that the strategic focus roles of Change Agent and Strategic Partner featured less prominently in the research to date. Considering NM hold a strategic position within the organisation structure (Martin, 2004; Henriksen, 2014; Bragg & Bonner, 2014), opportunities to act as a Change Agent and as a Strategic Partner - visionary, identifying long-term goals and objectives, and leading the team forward to meet corporate objectives (Cullen, 1999; Raup 2008; Baker, 2018) - will be needed to truly impact retention.

In examining the impact of new graduate retention, Fitzsimons and Reinbeck (2015, p. 52) suggest one way to move NM from the operational focus to the strategic focus is to foster greater collegiality and collaboration, and be part of “identify[ing] talent for various positions”. As each role within the Ulrich framework is essential to the success of the organisation, there is an opportunity for future research to explore how the NM can straddle an operational and strategic role in managing retention. This review supports that examining the strategic role of HR within the organisation may be a good starting point (Martin, 2003; Tsai & Ya-Ti, 2008; Gunnarsdóttir, Clarke, Rafferty, & Nutbeam, 2009). Furthermore, leveraging nurse manager capacity, and focusing on personal development opportunities to build social capital (McLarty & McCartney, 2009; Taylor, 2017) within the organisation, can be important in moving to this strategic role.

CONCLUSION

In conclusion, this scoping review set out to determine the evidence available in the literature about the role of nurse managers, and the relationship between this role and the retention of healthcare professionals in the healthcare sector as a whole.

An initial 988 items sourced from academic and grey literature resulted in 183 items examining the role of NM in retaining healthcare professionals. The findings highlight the complexity and heterogeneity of the research in retention in healthcare. To combat some of this complexity, Ulrich's HR business model was used to understand the role of the nurse manager. The thematic analysis recognised nurse managers play a vital role in staff retention through their focus on people and processes, but highlights the need to further investigate the potential impact of a strategic focus in developing and implementing initiatives and interventions that influence on staff retention. There is an opportunity therefore to address the following questions in future research:

1. What strategic initiatives and interventions influence staff retention in this context?; and
2. What are the factors that influence the strategic focus and actions of the nurse manager in retaining staff?

Despite these gains, the scoping review does not bring us any closer to an agreed upon consensus of retention – its definition nor its measurement. Reflecting on the measures of retention, the literature shows they are diverse making comparability of studies difficult (Crewe, 2017) further demonstrative of its complexity as a subject area. As suggested by Feather (2015, p. 728), future work has to take into account the “utilisation of multiple instruments of measurement” in identifying the specific NM behaviours that impact retention.

Whilst the items retained for the scoping review have inherent limitations, the review has gone some way in acknowledging and synthesising the diverse writings in both the academic and grey literature, and the large contribution from practitioners in the healthcare sector. Such an outcome necessitates that future work in this field consider more broadly the inclusion of diverse literature in reviews investigating staff retention which contribute to the understanding of the nurse shortage phenomenon.

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Table 1: Adaptation of the Arksey and O’Malley’s Scoping Review Framework (2005); and JBI Protocol (Peters, Godfrey, Khalil, McInerney, Parker & Soares, 2015)

Step 1	Research Question
	<p>What is known about the relationship between the nurse manager and staff retention?</p> <p>What does existing literature say about the role of nurse manager regarding retention?</p> <p>What role does the nurse manager play in retention of staff?</p> <p>Scope of Inquiry</p> <ul style="list-style-type: none"> • To determine what links nurse managers with retention • To map variables studied by: determinants, antecedents, proxies, etc. • To map themes from emerging data (by publication, country, date) • To identify any research gaps • To create a platform to launch a systematic literature review • To identify outliers in any area of this topic • To explore what needs to be done to retain new graduates, RNs?
Step 2	Search for relevant studies
	<ul style="list-style-type: none"> • Limited to electronic material only • Limited to use of English language only • Use e-databases accessible through University website • Databases to include those identified in summary of systematic literature reviews in this field of study: ABI Inform, Academic Research, Cochrane Library, EBSCOHost (CINAHL), Embase, ERIC, Health Source, HealthSTAR, Medline & PubMed, Proquest Dissertations & Theses Global, PsycINFO, and Scopus • Search strategy to include academic, non-peer reviewed, dissertations, journal articles, any available electronic items on the subject • Search to apply keywords and Boolean phrase: “nurse manager” AND “staff retention”
Step 3	Selecting studies
	<p>Apply pre-set inclusion and exclusion criteria which are developed further post hoc (for example, studies which provide useful information towards the question, solutions to the phenomenon, studies that may be “different” to the rest but which provide insights to the phenomenon, etc.) Details below:</p> <p>Inclusion and Exclusion Criteria</p> <p>Inclusion Criteria</p> <ol style="list-style-type: none"> 1 Title may include any of the following targeted participants: <ul style="list-style-type: none"> • nurse manager(s), line manager(s), first line manager(s) • nurse leader(s), nurse executive(s), nursing management • leader(s), leadership • nurse(s), healthcare worker(s), staff Title may include a word or words to indicate some aspect of retention: <ul style="list-style-type: none"> • Retention, Attrition • Retirement, Resignation(s) • Intent to leave, Intent to remain, Intent to stay, Turnover • Outcome(s), Staff outcome(s), Organisation outcome(s) 2 If the title is not clear or the title has no keywords (1) and (2), then the abstract MUST be relevant to the question for the article to be included 3 Abstract must include any aspect of retaining of staff and may include links and correlations using any of the phrases in inclusion criteria (2) above 4 All articles that measure retention or any related words in (2) 5 Articles that make reference to nurse manager(s)/leader behaviour or workplace relationships in the title or abstract 6 If the title broadly discusses the question in some way <p>Exclusion Criteria</p> <ol style="list-style-type: none"> 1 Articles that do not study NMs or nurses/healthcare workers 2 Articles that do not link relationships (NMs and nurses) with retention (or keywords related to retention) – see (2) in inclusion criteria 3 Articles that do not answer the question in any way “does leader behaviour of NMs influence retention of the nursing workforce and how?”

Step 4	Chart the data	
	Use excel spreadsheet with following headings: 1 author(s) 2 year of publication 3 country of origin 4 aims/purpose 5 study population & sample size 6 methodology 7 duration of the intervention 8 outcomes identified	Additional inclusion: <ul style="list-style-type: none"> • Database • Citation • Type of publication (peer-reviewed, non peer-reviewed, dissertation, etc.) • Journal • Date article retrieved
Step 5	Collating, summarizing and reporting the results	
	<ul style="list-style-type: none"> • Analysis (includes descriptive summary analysis and qualitative thematic analysis) • Report results and outcome referring to the research question and purpose of the review • How does the meaning of the findings relate to the overall review purpose, discuss implications for future research and practice • To include descriptive narrative where appropriate 	
Step 6	Consulting with stakeholders to inform or validate review findings (optional)	
	For the purpose of this review, consultation will not be undertaken	

Table 2: Extract of summary table showing analysis from findings

	Citation	Country	Year	Journal	Findings (extract from item)	Results	Themes
1	Bethune, G., Sherrod, D., & Youngblood, L. (2005). 101 TIPS TO RETAIN A HAPPY, HEALTHY STAFF. <i>Nursing Management</i> , 36(4), 24-29.	USA	2005	Nursing Management	Retention influencers include: job and community fit, job and community social links, and sacrifice - the ease with which nurses could break these links if they moved to another home or city. In this article, 101 strategies used by nurse managers at Centra Health, Lynchburg, VA, to maintain a positive, inviting work culture are provided	Influencers (job and community fit, job and community social links, and sacrifice - the ease with which nurses could break these links if they moved to another home or city)	Factors
9	Abualrub, R. F., & Alghamdi, M. G. (2012). The impact of leadership styles on nurses' satisfaction and intention to stay among Saudi nurses. <i>Journal Of Nursing Management</i> , 20(5), 668-678. doi:10.1111/j.1365-2834.2011.01320.x	Saudi Arabia	2012	Journal of Nursing Management	Saudi nurses moderately satisfied in jobs. Nurses more satisfied with leaders with transformational leadership styles (TLS). Satisfied nurses intended to stay at work. Variable: TLS & transactional style explained 32% of variation in job satisfaction'.	Transformational leadership style = effective L behaviours = enhanced job satisfaction NMs need T&D in effective L behaviours	Nurse Manager Capacity
28	Chang, H., Shyu, Y. L., Wong, M., Friesner, D., Chu, T., & Teng, C. (2015). Which Aspects of Professional Commitment Can Effectively Retain Nurses in the Nursing Profession?. <i>Journal Of Nursing Scholarship</i> , 47(5), 468-476. doi:10.1111/jnu.12152 Retrieved September 16, 2016	Taiwan	2015	Journal Of Nursing Scholarship	Analytical results indicate that continuance commitment predicts nurse retention in the nursing profession (path coefficient = 0.34, p < .01).	Improve nurse salary and employer-sponsored benefits	Role (administrative expert)
55	Al-Hamdan, Z., Nussera, H., & Masa'deh, R. (2016). Conflict management style of Jordanian nurse managers and its relationship to staff nurses' intent to stay. <i>Journal Of Nursing Management</i> , 24(2), E137-E145. doi:10.1111/jonm.12314	Jordan	2016	Journal Of Nursing Management	An integrative style 1st choice for NMs & dominating style last choice. Overall level of ITS for nurses moderate. Nurses tend to keep current job 2-3 years. Negative relationship between dominating style as a conflict management style & ITS for nurses.	Integrative style; negative relationship between dominating style as a conflict mgt style & ITS	Role (change agent)
82	Cowden, T., Cummings, G., & Profetto-McGrath, J. (2011). Leadership practices and staff nurses' intent to stay: A systematic review. <i>Journal of Nursing Management</i> , 19(4), 461-477. doi:10.1111/j.1365-2834.2011.01209.x Retrieved June 23, 2016	Canada	2011	Journal of Nursing Management	Relational leadership practices influence staff nurses[1] intentions to remain in their current position.	Relational leadership practice (theory) incorporated into management practice	Role (employee champion)
163	Blake, N., Leach, L. S., Robbins, W., Pike, N., & Needleman, J. (2013). Healthy Work Environments and Staff Nurse Retention. <i>Nursing Administration Quarterly</i> , 37(4), 356-370. doi:10.1097/NAQ.0b013e3182a2fa47 Retrieved September 16, 2016	USA	2013	Nursing Administration Quarterly	A total of 415 RNs completed the survey. There was a statistically significant relationship between leadership and the intent to leave (P < .05). There was also an inverse relationship between years of experience and intent to leave. None of the communication variables between RNs and among RNs and MDs or collaboration were significantly associated with PICU nurses' intention to leave.	Relationship between leadership & ITL; inverse relationship between years of experience & ITL	Role (strategic partner)
174	Andrews, D. R., & Dziegielewski, S. F. (2005). The nurse manager: Job satisfaction, the nursing shortage and retention. <i>Journal of Nursing Management</i> , 13(4), 286-295. http://dx.doi.org.libproxy.murdoch.edu.au/10.1111/j.1365-2934.2005.00567.x	USA	2005	Journal of Nursing Management	To accomplish this, an analysis of the literature using both national and international sources is used to formulate the lessons learned as well as strategies and future courses of action designed to address this shortage.	Strategies and nursing models, developmental research towards exploring factors related to nurse shortages	Strategic Partner (HR)

Further details of this available on request

Table 3: Summary of Results of Scoping Review

	Main findings	Results
1	Scope and Source of Studies	Total 183 retained items: <ul style="list-style-type: none"> 73% Scholarly journal articles 27% Grey literature
a	Source	Grey Literature included: <ul style="list-style-type: none"> 19% Dissertations 2% each approximately (newspapers, wire feeds, trade journals) 1% each approximately (book, magazine, periodical)
b	Type of research	Total 183 retained items: <ul style="list-style-type: none"> 66% Empirical research 34% Good practice
c	Publishers	Total number of academic journals (n=47) included: <ul style="list-style-type: none"> 57% Other journals 27% Nursing Management 16% Journal of Nursing Management
d	Distribution of publications	2 dominant journals: <ul style="list-style-type: none"> 43% of total publications from Nursing Management and Journal of Nursing Management 57% the remaining 45 publishers
e	Countries	25 countries worldwide: <ul style="list-style-type: none"> 61% USA 9% Australia 8% Canada 5% UK 16% Remaining 21 countries
f	Chronology	1990- 2018 Dates of publication of all items 2001 Distribution of publication show a marked increase 2006-to date Marked increase in dissertations
2	Measuring retention	<ul style="list-style-type: none"> 52% Retention 15% Turnover 16% Intent to leave 14% Intent to stay 3% Mix or none
3	Themes	Main themes: <ul style="list-style-type: none"> 80% Nurse manager role 10% Nurse manager capacity 6% HR Strategic Partner 4% Factors influencing retention
a	Ulrich HR Roles	Nurse Manager Roles: <ul style="list-style-type: none"> 62% Employee Champion 19% Administrative Expert 11% Change Agent 8% Strategic Partner
b	New Graduates	14% of total studies were specifically about new graduates, orientation and induction phase
		Nurse manager role re new graduates: <ul style="list-style-type: none"> 84% Employee Champion 4% Administrative Expert 4% Change Agent 4% Strategic partner 4% Mixed (Employee Champion/Factors influencing Retention)

Figure 1: Flowchart for Search Strategy

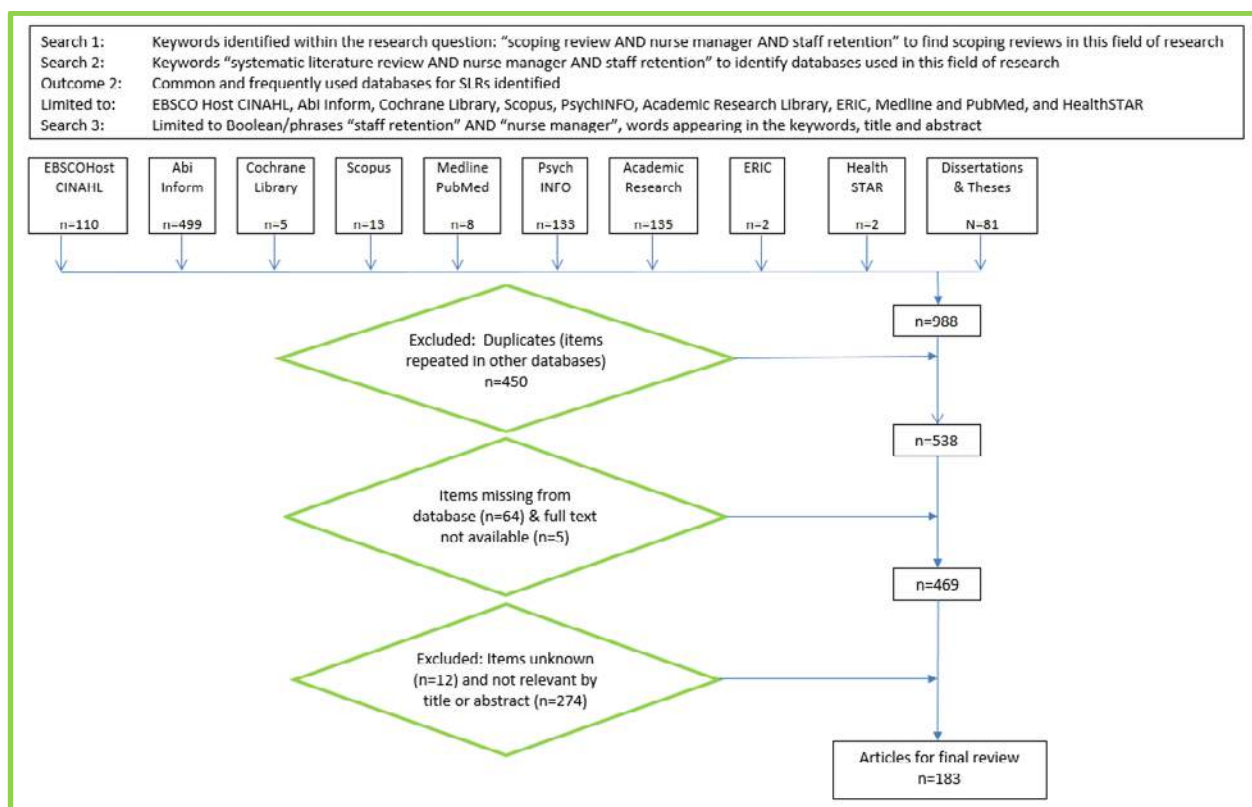


Figure 2: Flow Chart to explain Data Selection

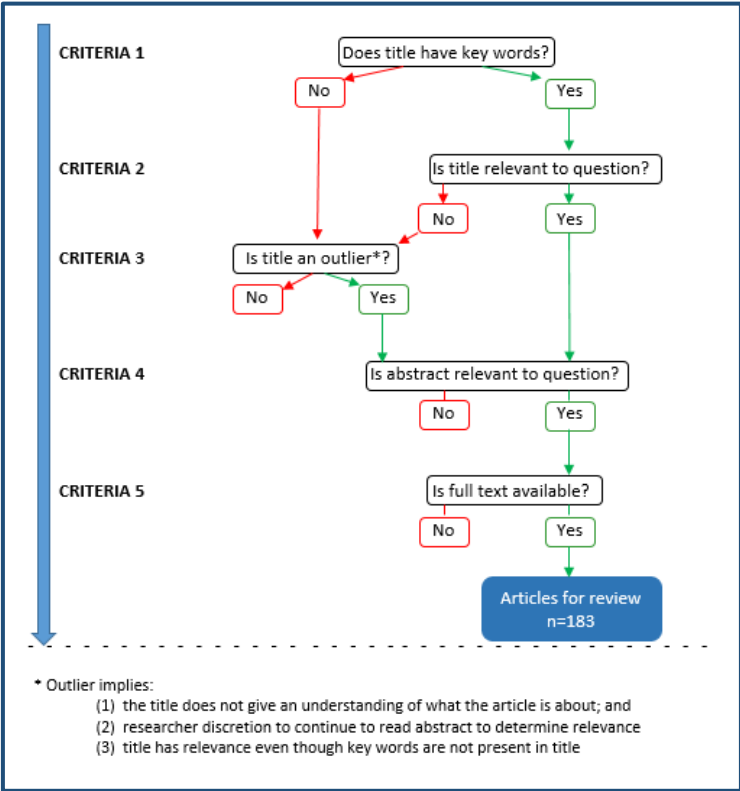


Figure 3: Proportion of dissertations and publications chronologically

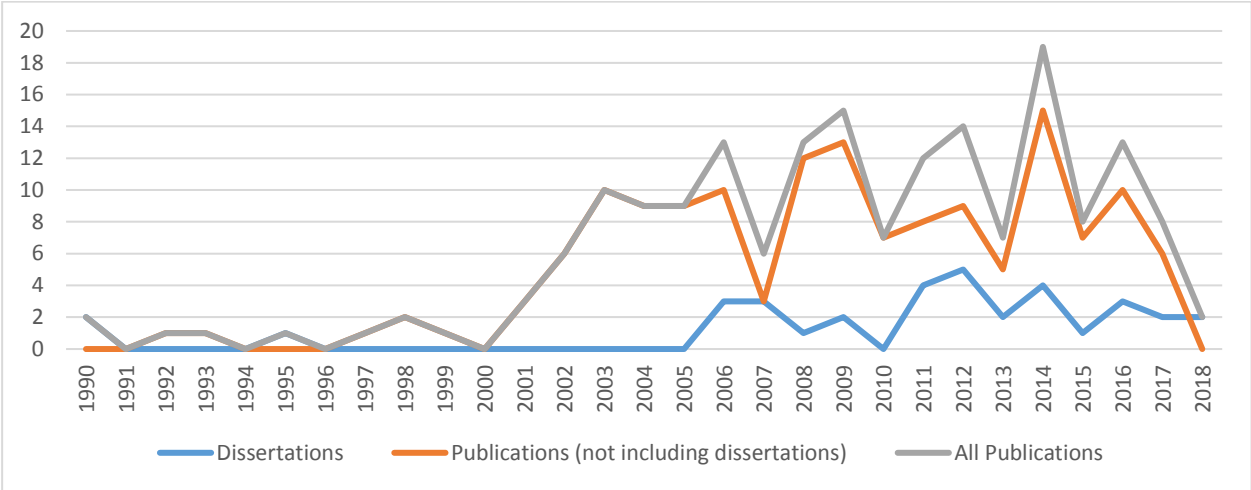
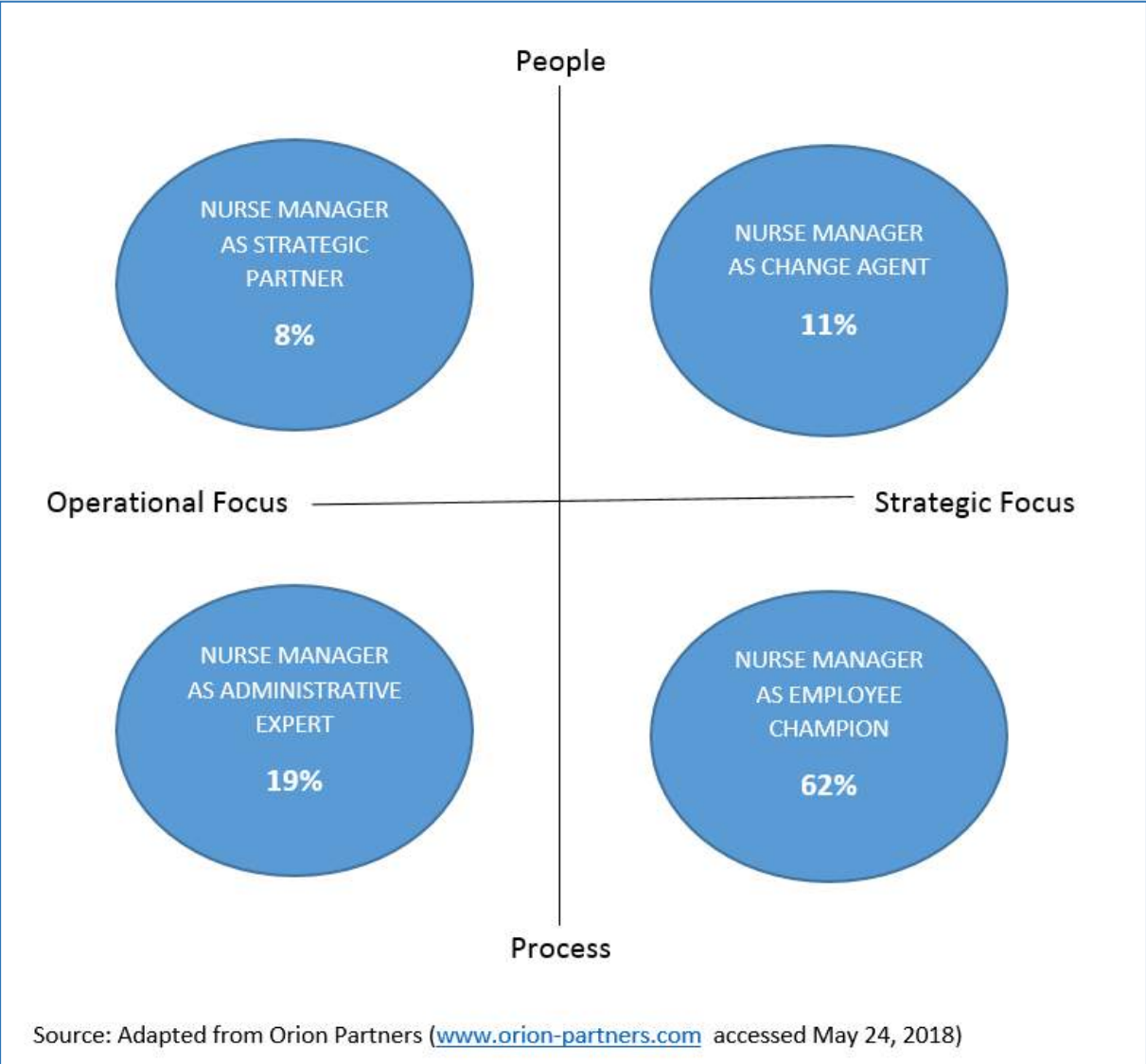


Figure 4: Ulrich Model demonstrating nurse manager roles



Stream 02. Entrepreneurship, Start-Ups and Small Business
Interactive Session

**A Systematic Review of the Literature on the Growth of Small Firms in BRIC
Economies**

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Stream 02. Entrepreneurship, Start-Ups and Small Business

Interactive Session

Abstract

The literature on the growth of small firms is heavily skewed toward developed economies. To tackle this issue, this article focuses on four emerging economies and seeks to explore how growth of small firms from these economies have been represented in the literature. A systematic review of the literature in this field indicates that: 1) Chinese scholars represent the main force driving this growing literature indicating a widening gap between the Chinese and non-Chinese side of the literature. 2) Institutional peculiarities of emerging economies have not received adequate attention 3) Micro-foundational view focusing on managers/entrepreneurs is the dominant theoretical view. 4) Conversation among theories is minimal and 5) cross-border comparative studies need more attention.

Keywords:

Small Business, Entrepreneurship, Emerging Economies

INTRODUCTION

Small firms account for the biggest portion of business establishment in the world (Kersten, Harms, Liket, & Maas, 2017; Najmaei, 2016). The worldwide predominance of small firms implies that growth of these entities shape and nurture the world productivity and economic stability. There is a preponderance of evidence suggesting that small firms form the backbone of global supply chain and act as the glue that holds the industries and markets together (Acs & Yeung, 1999; Day, 2000). However, regardless of their importance, world economy has been divided into two classes. On the one hand, research on the small and large firms from western developed economies led by the US has been dominating the literature for several decades. This trend has led to an overemphasis on the western side of world business and westernization (Americanisation) of management theory at the expense of neglecting and underemphasizing what is happening in less-developed economies and whether western views are followed in the east or not.

On the other hand, world economy has started a revolution, for quite some time, in which rise of the new economies resemble a metamorphosis of business landscape. These economies known as emerging economies satisfy two criteria. They are low-to-medium income countries experiencing rapid economic development and their governments are increasingly favouring economic liberalization and adoption of free-market systems (Hoskisson, Eden, Lau, & Wright, 2000). Therefore, as scholars (e.g. Xu & Meyer, 2013) have argued the gap between theory and practice of business is different in developed from developing economies. According to Wright, Filatotchev,

Hoskisson, and Peng (2005) there are at least four reasons for this critical difference: 1) developing or emerging economies suffer from institutional voids and less efficient and underdeveloped market structures that support and shape foundation of business strategies and practices. 2) Government and government-related entities exert more control and play more influential roles than markets in business landscape, which limit the scope of the role of managers and markets in formulating and executing initiatives. 3) Networks are very common and extremely important in organizational dynamism due to less efficient markets and traditional norms of societies and 4) risk and uncertainty are very high due to turbulence and volatility caused by changes in the social, political and economic side of the economies.

The magnitude of and scope of differences and their consequences for business research led scholars to argue that business research needs to incorporate these markets in a different frameworks focusing on strategy (Hoskisson et al., 2000; Young, Tsai, Wang, Liu, & Ahlstrom, 2014) or entrepreneurship (Marcotte, 2014) in emerging economies. The question that remains unaddressed is whether and to what extent do scholars have captured the essence of growth of small businesses in these contexts. This is a key question in two ways. First, growth of the firm is a phenomenon in the intersection of strategy and entrepreneurship (Foss, 1999; Larrañeta, Zahra, & González, 2013; Weinzimmer, Nystrom, & Freeman, 1998) which informs theories of firm emergence, excellence, success, survival and competitiveness (Weinzimmer et al., 1998). Second, due to their size and resource liabilities small firms have less control over markets and are more subject to changes in the economic, political and institutional dimensions of their markets than large firms are. Hence, they offer a more direct litmus test for the association between environmental conditions and firm growth. Notwithstanding this tenet, the lack of existing research in this context may lead one to argue that research on small firms in developing markets is no different from developed ones and runs no new framework, it is simply just putting old wine into new bottles, adding nothing new to our scholarly knowledge of global business.

Therefore, by examining how small business scholars have captured these peculiarities we can assess the extent to which growth of small business in emerging economies differ from developed

economies and what directions and avenue are open for further investigations. Consequently, this study can add to and extend the body of knowledge on the gap between business theory and practice in developed and developing economies. It is however, a starting point and perhaps the first step in this direction. The remaining part of this article is organized as follows. First, we explain the methodology and techniques used in selecting and reviewing articles. Then we discuss the analysis and findings and finally the article concludes with a discussion of findings and a set of directions for future research.

METHODS

Review approach

A systematic reflective review was adopted (Becheikh, Landry, & Amara, 2006; Crossan & Apaydin, 2010) because it uses an explicit algorithm, as opposed to a heuristic, to improve the quality of the review process and outcome (Crossan & Apaydin, 2010). This method consists of three sequential steps; selection of the representative literature, analysis using theoretical models and pre-defined coding rules and synthesis (Tranfield, Denyer, & Smart, 2003).

Selection process

This study used the ISI Web of Knowledge database as one of the most comprehensive databases for business and management research (Crossan & Apaydin, 2010). We searched keywords, titles and abstracts of articles for ‘Small Firms’, ‘Small Ventures’, ‘Small Business’ and ‘SMEs’, ‘Entrepreneurial Firms’ and ‘Business Ventures’ to create an initial list of publications in small firms.

This phase revealed an increase in both number of publications and number of citations in small business literature offering evidence for the fact that small businesses offer a fruitful field of research. The question that arises here is how does this heterogeneity and magnitude get explained by variations in the global economic landscape? In light of this question, we refined the search by focusing only on peer-reviewed journal articles published in English. This resulted in 4594 entries. In addition, a citation analysis reveals that We then narrowed search using the term ‘growth’ to capture articles that have focused on the growth of small firms which resulted in 2541 entries. In the last phase, we further filtered the search by focusing only on journals that are specialized in small business research and are ranked high in the prestigious journal ranking lists such as ABDC

(Australian Business Deans Council 2013). Journals that were included are: Entrepreneurship theory and practice (ET&P), Journal of Business Venturing(JBV), Journal of Small Business Management(JSBM), Entrepreneurship and Regional Development(E&RD), International Journal of Entrepreneurial behaviour and Research(IJEB&R), International Small Business Journal(ISBJ), and Small Business Economics(SBE).

To increase the validity of the search we then cross-checked the list of journals with the ISI Journal Citation Report. This resulted in 937 articles. Finally, we examined how many articles in each journal have been focused on Brazil, Russia, India and china by looking into their titles, abstract and keywords. This selection set contains all qualifying articles published in internationally-renewed journals on the growth of small firms in four major emerging economies. Table 1 shows a summary of the selection list.

 Insert Table 1 here

Table 1 shows that only 6% of articles published in high-ranked journals have addressed issues pertaining to the growth of small firms in major emerging economies. This is a surprisingly low and strikingly alarming value. Furthermore, there is a wide gap between Chinese and non-Chinese articles suggesting that Chinese scholars seem to be leading this growing yet very small strand of literature following by Indian researchers. Figure 1 is a schematic illustration of Table 1.

 Insert Figure 1 here

Having defined this set, the next phase is to analyse articles from a theoretical perspective. Our approach in this phase is conceptual rather empirical. Conceptual analysis means that articles would go through a conceptual lens to examine how each individually and then jointly in clusters are

based on a theoretical paradigm and contribute to a predefined theoretical view that dominates the field (Klang, Wallnöfer, & Hacklin, 2014; Tranfield et al., 2003; Vázquez-Carrasco & López-Pérez, 2012). To choose the suitable theoretical view we developed a unique model based on the framework proposed by Wright and Stigliani (2012) because it is the most recent and comprehensive model of small firms' growth (Najmaei, 2013) and the three key theoretical views (institutional, resource-based, and transaction cost) which explain organizational dynamics in emerging economies (Hoskisson et al., 2000).

Institutional and transaction cost views suggest that in emerging economies institutional voids and market inefficiencies result in high resource allocation and high enforcement costs and increases opportunistic behaviours that hurt effective growth of small firms in favour of large government-linked entities (Hoskisson et al., 2000). Resource-based view complements this view by suggesting that executives of small firms use various resources at their disposal such as their networks to reduce transaction costs within organizational settings to stimulate growth (Williamson, 1991, 1998, 1999).

The Wright and Stigliani's model incorporates four components of WHO (the business owner/manager/entrepreneur's personality, cognition, characteristics, etc.), HOW (resources, capabilities and strategies), WHERE (the context: institutional environment, markets, and industries, political, social and cultural conditions) and WHAT (growth outcomes and modes) into a holistic framework that explains dimensions of the growth of small firms. It is also superior to the integrative model proposed by Wiklund, Patzelt, and Shepherd (2009) in that it does not limit the growth strategies to the entrepreneurial orientation and extends the role of entrepreneurs to their personality and cognition.

By combining three theories of business in emerging economies with a four dimensional view of small firm growth we arrive at a unique framework for the growth of small firms in developing economies. It is also in accord with the view of small business as a complex organization and seems to subscribe to a complex adaptive system view of growth in which factors from different dimensions separately and jointly, sequentially or simultaneously can affect growth of the firm. This framework is illustrated in Figure 2.

 Insert Figure 2 here

In this framework we specify and distinguish seven areas of research that can explain key differences in the growth of small firms between developed and emerging economies as follows: 1) what resources and capabilities drive growth? 2) What are the key attributes of executives who lead growing small firms? 3) What are key strategies and initiatives enabling or impeding growth of small firms? 4) What institutional forces, norms and dynamism matter the most/the least in the growth of small firms in emerging economies? 5) How transactional differences between developed and emerging markets matter in the growth strategies of small firms? 6) What type of growth (i.e. employment, sales, market share, etc.) is more important in emerging economies? And 7) how the interaction between transaction costs factors and resource of the firm inform a better understanding of growth of small firms in emerging economies.

In light of the above, we believe this framework can serve as a pragmatic and sound ground upon which to analyse articles in our selection set. It is also to be noted that in order to avoid complexities associated with the concept of growth such as its definition and typology (Davidsson & Wiklund, 2006), we used the concept of growth in its general form referred to as an increase in the output of the firm in terms of sales, market share and employment (Anderson & Eshima, 2013). In addition, in adhere to the objective of the study we did not distinguish between modes of growth such as acquisitive and organic growth (Lockett, Wiklund, Davidsson, & Girma, 2011). Having defined the analytic basis, the results will be discussed in the next section.

SYNTHESIS OF FINDINGS

We coded articles individually according to their relevance to the seven areas of research defined in the research framework. Result as shown in Table 2 and Figure 3 suggest that the role and attributes of the entrepreneurs/owners/managers have received the most attention, followed by the

resource status of the firm whereas the role of transactions cost and the interactions between resource and transactional dimensions of growth have received the least attention.

 Insert Table 2 here

A very interesting finding was that, scholars have used both qualitative and quantitative methods to examine different aspects of small firm growth in emerging economies. More specifically, the coding revealed that survey methods have been employed in 29 studies while interviews and case studies were methodological choice in the remaining 25 and conceptual discussion in 2 leading us to conclude that there is no dominant methodological preference or design in the literature on the growth of small firms in emerging economies. These findings imply that there is a tendency among scholars to overemphasize the association between growth and attributes of managers at the expense of underemphasizing other factors that many impede or hinder managers' ability to lead growth.

 Insert Figure 4 here

It goes beyond the scope of this study to examine articles in each area. However, a summary of a selected list of highly-cited articles is presented in Table 3 and discussed in the following paragraphs.

 Insert Table 3 here

DISCUSSION

If management is a universal field of scientific inquiry, if it is to inform theory and practice at a global level, then management research should accommodate changes in the global context and expand its horizons accordingly. We endeavoured to examine this issue in the context of the growth of small businesses in emerging or rapidly developing economies. Results of a carefully planned systematic review of the extant literature show that management theory has not been adequately developed and distributed in this strand. More specifically, literature on small firms in emerging economies (four major namely Brazil, Russia, India and China) compose only 6% of the extant body of knowledge. This is alarmingly low and calls for more focused research. Despite this fact, China and Chinese scholars seem to dominate this growing literature. This asymmetry indicates a widening gap between the Chinese and non-Chinese side of the literature which poses a barrier for the development of accumulated knowledge this field.

A key difference between developed and emerging economies is their institutional settings (Hoskisson et al., 2000; Wright et al., 2005; Xu & Meyer, 2013). These differences relate to the governmental, research and financial institutions that nurture and support entrepreneurial initiatives (Marcotte, 2014; Xu & Meyer, 2013; Young et al., 2014). Our review shows that very little (Tonoyan et al. 2010; Welter & Smallbone, 2011). This deficiency calls for more investigations into the institutional settings of emerging economies and patriotically how, when and under what circumstances various institutions become more or less efficient to enhance or hinder growth of small firms. There are several studied done in the developed world (e.g. Davis, 2008; De Clercq, Danis, & Dakhli, 2010; Estrin, Korosteleva, & Mickiewicz, 2012) which could be used as conceptual starting points for such inquiries.

Furthermore, similar to the general trend in the mainstream small business literature (Davidsson, Achtenhagen, & Naldi, 2010, 2013) our review reveals that micro-foundational view of growth focusing on competencies of managers/entrepreneurs is the dominant theoretical view in this literature. There are however two key distinctions between literature on developed and emerging

economies. First, key micro-foundational theories have been developed for developed economies where entrepreneurs have more freedom and latitude of action and enjoy more advanced intuitions that enhance their choice making and buttress their growth competencies (Davidsson et al., 2013). Therefore, research on micro-foundations of small firm growth in emerging economies needs to take these differences into account and develop more specific accounts for the action and behaviours of entrepreneurs/managers. Second, personal values rooted in cultural systems affect both managers' growth aspiration and directions and growth opportunities in markets (Fey & Denison, 2003; Gupta, Navare, & Melewar, 2011; Leung, 2008). These issues pertain to three areas of research in our framework (1, 2, and 4) and show how managerial attributes and actions as micro-foundations serve as resources and interact with socio-cultural norms embedded in the institutional texture of emerging markets to stimulate growth. The socio-cognitive view of entrepreneurship and psychological dimensions of entrepreneurship (Wright & Stigliani, 2012) offer conceptual grounds upon which to base this line of research.

Another interesting finding of our research is the lack of conversation among theories and research areas. We conceptually predicted that transactional, intuitional and resource-based perspectives can interact to create a more comprehensive picture of small firm growth in emerging economies but evidence on these conversations is surprisingly absent from the literature in this domain. This issue may have led to incomplete and misleading accounts for causes and drivers of growth heterogeneity in the emerging economies. Hence, it is important to consider these interactions and develop integrative models for the growth of small firms in developing countries. Prior attempts in developed markets (Davidsson et al., 2013; Wiklund et al., 2009) offer initial insights into this line of research.

Finally, our review revealed no cross-border comparative study in this literature. Cross-border studies are important in management research because they offer an empirical ground for testing the applicability, international validity and scalability of management theory. These cross-border investigations can take different forms from within emerging economies context to between emerging and developed economies. Wright et al. (2005) offer four possible trajectories namely: (1) firms from

developed economies entering emerging economies; (2) domestic firms competing within emerging economies; (3) firms from emerging economies entering other emerging economies; and (4) firms from emerging economies entering developed economies. Future research can embark on developing cross-country comparative studies tapping into these four paths to develop a better picture of how small firms from emerging economies compete, collaborate and grow their domestic and international markets. This approach is an important undertaking because it leads to new insights into the dynamism of international management knowledge from unexplored domains.

CONCLUDING REMARKS

In this article, we documented findings of a systematic review of the literature. Our findings may offer interesting facts about the state of literature on the growth of small firms in emerging economies but because of several limitations caution should be practiced when interpreting and generalizing our conclusions. First, even though we focused on several journals published in English to achieve high internal validity and avoid complexity but this limited scope may have prevented us from drawing a comprehensive state-of-the-art picture of the literature. So, future studies can address this limitation and cross-validate our findings by focusing on a wider spectrum of publications outlet including an expanded list of journals, conference papers and books/books published in other languages. This seems to be a fruitful, ongoing domain of research.

We also did not distinguish between modes of growth (growth through organic development of productive capacity of the firm, acquisitive growth, and growth through strategic alliance and collaborative arrangements), industrial sectors (service and manufacturing), technological intensity of the firms (high versus low tech firms) and governance mode (family owned, private firms or government-controlled or linked firms). These typologies can be taken into account for more specific reviews when examining the literature on the growth of small firms in emerging economies and comparing them with their rivals in developed economies.

Overall, given the importance of small firms in the world economy and increasing power of emerging economies in shaping the economic landscape of the world, it is timely to examine the state of research on the growth of small firms in emerging economies. This study took the first step in this

direction and endeavoured to examine how scholars have studied this phenomenon. Our systematic review of top journals in this field published in the Web of Knowledge revealed that growth of small firms in emerging economies is a very small yet growing field of research with too many unanswered questions and unmapped territories. However, China is leading this strand followed by India. Finally, the role of managers and resources appeared to be the major research foci whereas key institutional factors that underpin metamorphosis of business landscape in these economies have received very little attention. It is our hope that this paper inspires further systematic research to connect notions from emerging economies with more fine-grained and specific perspectives of small business growth to shed new light on how the business literature capture the essence of differences and similarities between these two sides of world economy.

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Table 1: Summary of publications across journals

Journal	Total Number of articles	Entries on Brazil	Entries on Russia	Entries on India	Entries on China	Journal overall contribution to the field
<i>ET&P</i>	75	0	0	5	8	13
<i>JBV</i>	180	0	0	4	5	9
<i>JSBM</i>	199	1	1	2	2	6
<i>E&RD</i>	63	0	0	1	3	4
<i>IJEB&R</i>	30	0	0	1	2	3
<i>ISBJ</i>	140	1	2	0	2	5
<i>SBE</i>	250	1	1	6	8	16
Total	937	3 (0.32%)	4(0.42%)	18(1.92%)	31(3.41%)	56 (6%)

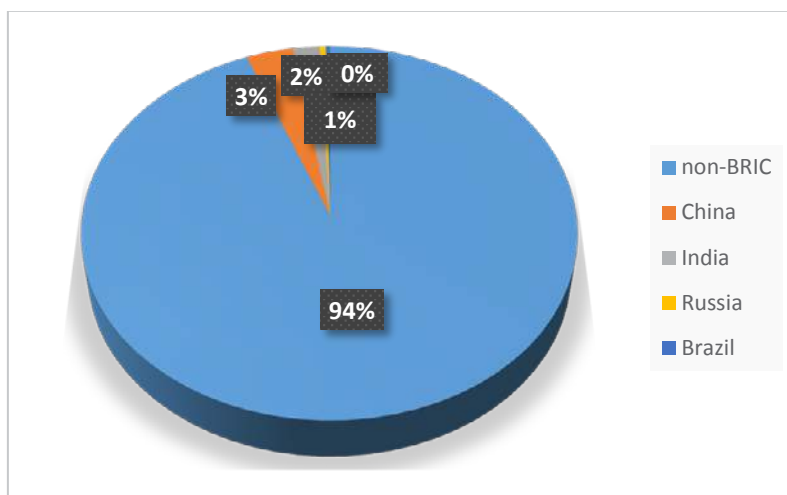


Figure 1: Pie chart of articles in selection list across four countries

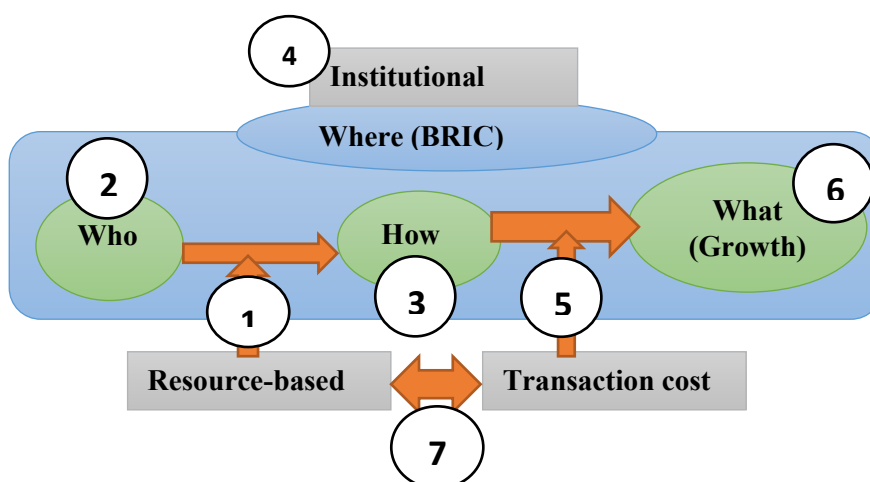


Figure 2: the theoretical view for the review

Table 2: Distribution of articles across countries coded based on the research framework

Country	Research Area (Framework)							Total
	1	2	3	4	5	6	7	
Brazil	2	1	0	1	0	0	0	4
Russia	2	1	0	1	0	0	0	4
India	5	6	0	4	0	3	0	18
China	8	10	6	4	1	1	1	31
Total	17	18	6	10	1	4	1	57

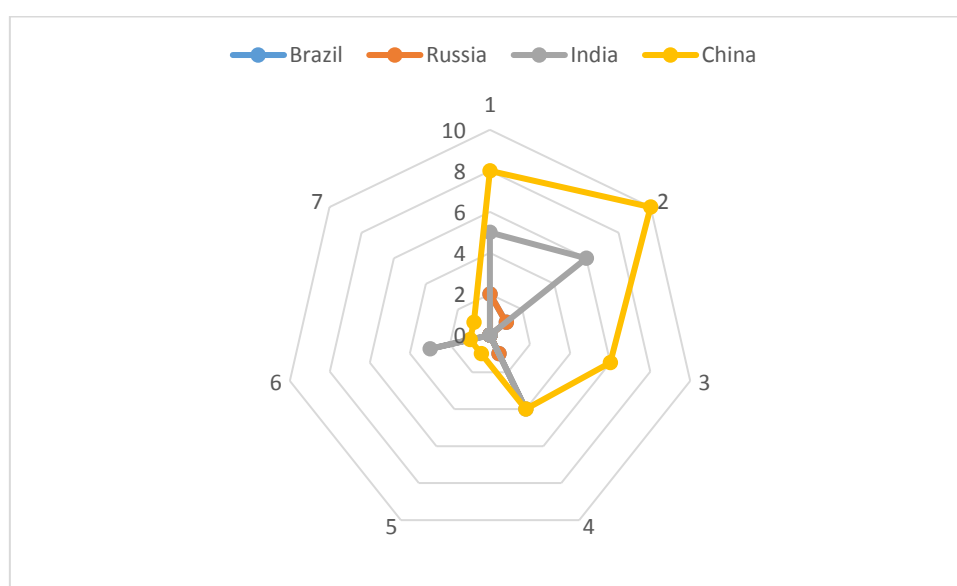


Figure 3: A schematic view of research distribution among research areas across countries

Table 3: Summary of highly-cited papers

No	Authors	Country	Research Area	Type of research	Description
1	Rachel Doern and Goss (2013)	Russia	2	Qualitative (interview)	Power relationships with government official may impair growth motivation.
2	Zhao, Frese, and Giardini (2010)	China	2	Two Surveys	Social capital of the entrepreneur or business owner enhances firm growth.

3	Thakur (1999)	India	1,6	50 case Studies	Resources available to the entrepreneurs may impede growth rate but managerial capabilities can reduce this adverse effect.
4	Capelleras, Greene, Kantis, and Rabetino (2010)	Brazil	1	Survey	Human and social capital of entrepreneurs positively affects growth speed of small ventures.
5	Li and Mitchell (2009)	China	4	survey	Institutional infrastructure enhancing knowledge spillovers enhance growth of small firms.
6	Tonoyan, Strohmeyer, Habib, and Perlitz (2010)	Russia	4	Survey	Formal and informal institutions affect corruption that in turn negatively influences entrepreneurs' practice of growth strategies.
7	Majumdar (2010)	India	3,2	Qualitative (Interview and Grounded theory)	Indian entrepreneurs use relationship-based growth strategy and planning to stimulate growth.
8	Siu and Liu (2005)	China	3,6	Survey	Customer-centric Marketing strategies focused on regional markets help firm grow their market share by avoiding direct competition with firm from other regions.
9	Thukral et al. (2008)	India and China	3	Qualitative (Case study)	Technology-driven and core competency-based strategies help small firms commercialize their products to tap into markets.
10	Chow and Fung (2000)	China	5,7	Longitudinal Survey	High transaction cost of external finance leads small firms to rely on the informal credit market to obtain investment for growth.

11	Coad and Tamvada (2012)	India	6,3	Quantitative (senses data)	Firm age and size affect growth rate of small firms, exporting strategies enhance growth rate.
12	Wing and Yiu (1996)	China	6	Survey	Small enterprises are growing faster than their larger counterparts in terms of employment and output.
13	Welter and Smallbone (2011)	-	4	Conceptual	Growth of small firms in emerging countries is embedded in the institutional settings as institutions affect managers' behaviour and managerial behaviour also affect institutions.
14	R. Doern (2011)	Russia	2	Qualitative (Interview)	Managers' ability to perceive growth barriers influence their growth intention in six different ways.
15	Schwartz and Bar-El (2004)	Brazil	1,4	Case Study	Targeted consultancy as an intuitional service is an important resource for the growth of firms in regional areas.

Managing knowledge across project boundaries: a holistic approach

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MANAGING KNOWLEDGE ACROSS PROJECT BOUNDARIES: A HOLISTIC APPROACH

INTRODUCTION

Knowledge is often linked to value creation, innovation and competitive advantage (Drucker, 2014) and a number of empirical studies have evidenced the potential contribution of KM to project success (Reich, Gemino, & Sauer, 2014; Yang, Chen & Wang, 2012; Yeong & Lim, 2011). At the same time, numerous studies document that projects repeatedly fail as the same mistakes are reproduced (Atkinson et al., 2006; Schindler & Eppler, 2003), either through decision-making bias (Flyvbjerg et al., 2009; Sanderson, 2012) or failures to learn and effectively manage knowledge (Duffield & Whitty, 2015, 2016). This paper argues that in order to progress academic knowledge and managerial practices in this domain, a more holistic approach is required, in particular tackling three areas, which are sometimes neglected and seldom discussed together:

- Much of the KM literature has an objectivist view of knowledge (Spender 2007), often leading to narrow, instrumentalist, conceptualizations of knowledge and naive prescriptions (Foss, 2007), thus a more interpretive view of knowledge (Habermas, 1984; Polanyi, 1966; von Krogh et al., 2000) is appropriate.
- Projects as temporary organizations do not have the same organizational memory and absorptive capacity as classical organizations (Kenis et al., 2009), and projects are embedded in an organizational context (Sydow et al., 2004) therefore the connections between levels of analysis (individual, project team, organization – Crossan et al., 1999) require careful consideration.
- Projects are increasingly delivered through external contractors across industries (construction, IT, aerospace, media, etc – Love et al., 2005), therefore knowledge management must be considered as happening across organizational boundaries, rather than within a classical organization (Helper et al., 2000).

LITERATURE REVIEW

Knowledge Management

Realist view of knowledge

Knowledge is an elusive concept, which has been debated by philosophers for centuries (Brown & Duguid, 2002; Flyvbjerg, 2001). Often authors omit to provide a clearly articulated conceptual definition of knowledge, and terms including knowledge, skill, capability, competence, information, learning or insight are used interchangeably (Alvesson & Karreman, 2001; Cossan et al., 1999; Van de Ven & Johnson, 2006). The epistemological perspective of realism assumes that there is an objectively knowable reality (Spender, 2007). This implies that knowledge is a static object or asset (Grant, 1996; Winter, 1987; Zack, 1999), to be leveraged or harvested for competitive advantage (Halawi et al., 2005). This is consistent with an information-processing view of knowledge management (Nonaka & Takeuchi, 1995), and an emphasis on codification, storage and transmission of knowledge using information technologies (Cowan et al., 2000; Chan & Chau, 2005). Whilst the information-processing view provides some insights, it has been critiqued as incomplete or simplistic. Nonaka & Takeuchi (1995) argue that whilst it contributes to understand how organizations process information from the external environment to adapt to changes, it does not explain innovation or recognize the numerous micro-level individual actions that need to occur in leveraging knowledge as an asset into competitive advantage (Fahey & Prusak, 1998).

Interpretivist view of knowledge

This view argues that knowledge is not an asset that can be stored (as information and data can be), but it is a process of interpretation (Nonaka & Takeuchi, 1995) that resides in the minds of individuals, and is embedded in organizational artefacts, processes, routines, and behavioral norms (Davenport & Prusak, 1998). In this context it is frequent to distinguish between explicit and tacit knowledge (Polanyi, 1966; Nonaka & Takeuchi, 1995). Explicit knowledge can be easily codified in formulae, documents, and artefacts (Nonaka & Konno, 1998). Tacit knowledge is personal, contextualized in experience, and laden with values and emotions which may be difficult to articulate and share with others (Nonaka, 1991). It is customary to distinguish between two levels of tacit knowledge: the first level captures individual skills and knowing how (Ryle, 1949), whilst the second level captures the cognitive mental models, values and beliefs in which knowing how is embedded (Nonaka & Konno, 1998).

In this research project, we follow Nonaka & Takeuchi (1995) who view explicit and tacit knowledge as complementary, interacting and interchanging with each other. Tywoniak (2007) conceptualizes the processual nature of knowledge as comprising three layers: structure, process, and complex system. The structure layer captures knowing how as knowledge is validated in action. The process layer captures the personal, contextualized, acts of sense-making that contribute to tacit knowledge. The system layer captures the embeddedness of knowledge in social and cultural experience. In the next section we review the implications of this view for managing knowledge.

Managing knowledge

In recognizing that knowledge management is more than information technology tools and systems, but incorporates the social and cultural aspects of knowledge, many authors highlight the overlap between knowledge management and the socially embedded notion of organizational learning as learning involves the creation, acquisition, and application of new knowledge (Easterby-Smith & Lyles, 2005; Soo et al., 2002; von Krogh et al., 2000). This convergence leads to shift the focus on processes of knowledge management, rather than knowledge assets.

Grant (2005), building on March's (1991) distinction between exploration and exploitation, categorizes KM processes into two sets. Processes of knowledge generation (exploration) include creation and acquisition, for example through research and development or intellectual property licensing. Processes of knowledge application (exploitation) include: integration, sharing, replication, storage and organization, measurement, and identification. It is of note that only one of Grant's processes (storage and organization) pertains to IT systems. Crossan et al. (1999) detail further the multi-layered nature of knowledge management and organizational learning across the levels of the individual, group and organization. Their subsequent "4I" model illuminates why knowledge management escapes the realist conceptualization of knowledge: the rules, processes and systems are enablers of knowledge institutionalization, but do not cover the whole of the 4I model. Sharing knowledge involves sophisticated social interactions situated in context (Hargaddon, 2003; Nonaka & Konno, 1998; Spender, 2007) which cannot be directed in a traditional sense. These approaches to knowledge suggest that it may be more helpful to think about knowledge creation plans and strategies,

rather than knowledge management (Hargaddon, 2003; Nonaka & Takeuchi, 1995; Spender, 2007, von Krogh et al., 2000).

If knowledge cannot be managed in a mechanistic way, it is possible to influence the context in which knowledge is created and used (Wenger et al., 2002). Foss (2007) and Foss & Michailova (2009) argue that incentive systems, sources of motivation, values and principles form the governance of knowledge, which influences the context in which knowledge is created, shared and utilized. But knowledge governance on its own, remains transactional and rationally economizing (Foss, 2007). Governance requires a knowledge strategy to assign meaning and direction. Spender (2007) and Zack (1999) argue that an identification of knowledge and capabilities gaps should direct the knowledge strategy of the organization, which should be expressed in the form of a knowledge vision (Nonaka & Takeuchi, 1995, von Krogh et al., 2000). In the next section, we discuss the implications of our conceptualization of knowledge and knowledge management for project based organizations.

Managing knowledge in project-based organizations

For the purposes of this paper, we argue that projects differ from classical organizations in two main ways: projects are temporary and they are also often hybrid organizations as they are often delivered through alliances or other contractual arrangements. We discuss in the next sections the implications of these characteristics for KM.

Managing knowledge in projects as temporary organizations

Lundin & Soderholm (1995: 439) define projects and temporary organizations (TOs) through four “basic concepts”: time, task, team, transition. A temporary organization is created for a limited period, to achieve a defined task, through a team, and it ends with a transition once the purpose has been achieved. In their review of the literature on TOs, Burke & Morley (2016: 1245) identify learning and knowledge management as one of the areas of tension: “there is a ‘doing versus learning paradox’ (Sydow et al., 2004: 1483), with TOs suffering from ‘organizational amnesia’ (Grabher, 2004b: 1492) because the knowledge combined to serve the goals of the TOs is often ‘thereafter allowed to disperse’ (Lampel et al., 2008: 10)”. Turner (2005: x) observes that KM in projects face additional challenges compared to classical organizations as “new ideas are created on temporary projects, but the project cannot select and retain new ideas” therefore the distribution of new

knowledge to new projects is a problem specific to TOs. At the same time, Reich et al. (2014) found that KM had a positive impact on project performance, provided that project managers can achieve shared understanding between project participants. Brookes et al. (2006) argue that connectivity, trust and respect are critical enablers of knowledge transfer between individuals, relationships and social networks in project-based organizations, highlighting the multi-level context of KM in projects.

The studies by Duffield & Whitty (2016) and McClory et al. (2017) propose systemic and iterative frameworks to capture, share and apply lessons learned. Their conceptualizations build on a number of key references reviewed here, in particular Crossan et al.'s (1999) 4I model, and transformation cycle that underpins Nonaka's SECI model. Duffield & Whitty (2016) argue that organizational learning occurs across two groups of three layers each: the people layers (learning, culture, social activities) and the systems layers (technology, processes, infrastructure). McClory et al. (2017) overlay a triple-learning loop model on top of Duffield & Whitty's model, consisting of six steps across the levels of project, process and organization: act – measure – evaluate – decide – react – learn. Taken together, these two models provide a more sophisticated conceptualization of how organizational learning can be enabled, but also disabled. From our perspective, these models present two limitations: they conflate KM to lessons learned when KM involves a broader set beyond lessons learned (e.g. IP, processes, technical know-how – see Solli-Sæther et al., 2015), and they consider organizational learning within a classical organization only. We turn to this issue in the next section.

Managing knowledge across project boundaries

The research on inter-organizational KM is growing and has attracted most interest in the context of alliances between competitors (e.g. Hamel, 1991), collaborative networks (e.g. Al-Busaidi & Olfman, 2017), or innovation (e.g. Ngai, Jin & Liang, 2008; Tsai, 2016). As projects are increasingly delivered through inter-firm collaborations, in particular for construction and infrastructure, IT, research and innovation, media and events (Von Danwitz, 2016), inter-firm project collaborations are critical to enable access complementary resources and capabilities (Bakker et al., 2011; Barker et al., 1996), maintain flexibility and spread risks (Alexander, 1993; Walker and Johannes, 2003). Managing knowledge across organizational boundaries present a number of challenges and opportunities. The enablers of values congruency, trust, and relationships highlighted

earlier are further magnified when seeking to collaborate across organizational boundaries (Berente et al., 2010; Ngai et al., 2008; Solli-Sæther et al., 2015): differences in (organizational) cultures, divergent strategic goals, and the need to protect valuable intellectual property have been identified as obstacles to knowledge sharing and transfer. Issues of contracting and governance also arise as contract terms will shape incentives and impact the ability to collaborate and build trust and relationships (Pemsel & Müller, 2012; von Branconi, & Loch, 2004). Extant research on KM in project based organizations does not fully address these inter-organizational issues.

Research question

In conclusion to the literature review, our question is therefore: “How do project-based organizations successfully manage knowledge within and across boundaries?” We present the research strategy in the next section.

RESEARCH STRATEGY

Consistent with our interpretive conceptualization of knowledge, the research strategy was designed as a series of qualitative case studies (Cresswell 200; Stake, 2005; Yin, 2009). Three case organizations participated in the research: Main Roads Western Australia (MRWA)¹, Western Australia Department of Housing and Works (WADHW), Main Roads Queensland (MRQ). All three are government organizations undertaking large construction and infrastructure projects, often through external contractors, and therefore are rich sites in relation to our research question. Exploratory interviews were held in each organization, followed by 8-11 data collection interviews in each organization, using a semi-structured interview guide, until saturation was reached at each site. Documents were collected whenever possible to triangulate interview data. Interview transcripts and documents were coded in NVivo, using coding themes drawn from the literature and emerging from the data. The list of coding themes is presented in Table 1. Inter-coder reliability was ensured by cross-coding sample interviews by the lead investigators. In the next section we present the findings from the cases.

¹ Since the study was conducted, MRWA merged with the Department of Transport to become Transport and Main Roads (TMR) – we retained the original name as it reflected the organization studied at the time.

- Insert table 1 about here

CASE STUDY FINDINGS

Department of Housing and Works, Western Australia (DHW)

DHW –at the time of the case study- had undergone a series of restructures, and had made the strategic decision to outsource more of the project and construction work, including design and studies. It was felt at the time that this was appropriate for an organization tasked with delivering traditional building and construction projects like housing, schools, or offices, usually for other government agencies and departments. As a consequence, DHW had a very traditional approach, using Design and Built contracts, and seeking the lowest price from their contractors –sometimes driven by the client agency. As a consequence, DHW had a traditional, fragmented approach to KM, reliant on individual initiatives rather than the systems, policies and strategies initiated by their leadership. We observed on a number of occasions the dedication of staff, and the willingness to do well, and innovate, but also a lack of support for investing in knowledge acquisition or creation. Before the restructure, DHW was a larger, more vertically integrated agency, and it had acquired significant expertise in its domain, however the informants’ perception was often that this capability, reliant on those employees that had stayed, was declining, and that the corporate knowledge was deteriorating, as it was only maintained through local, piecemeal initiatives. The quotes from the interviews that illustrate this description can be found in Table 2.

- Insert Table 2 about here

Main Roads Queensland (MRQld)

Similar to DHW, MRQld had undergone several restructures in the lead-up to the case study, most recently, its construction division had been separated into a separate company – RoadTek, still owned by the government- with a mandate to compete for work with private contractors in order to generate efficiencies. As a consequence, the volume of project work outsourced by MRQld had increased significantly, and the transition of personnel to RoadTek was perceived to have caused a

loos in knowledge and competence. MRQld viewed its position as a standard setter for its industry, and it had strategically committed to actively managing knowledge, through culture change, and a series of initiatives, including contractual innovations to facilitate problem solving, the activation and support of communities of practice, HR and mentoring initiatives, knowledge sharing events, capturing lessons learned, and investment in systems. At the time of the case study, Australia was experiencing rapid construction investment in its resources sector, and this was felt negatively by MRQld who found it difficult to retain skilled personnel and attract talent. This perceived under-resourcing, at a time when the organization was also delivering ambitious infrastructure projects, was felt to weaken its KM and learning efforts. We observed that MRQld was attempting to have a systemic approach to KM, however, the resourcing gap reported above suggested that some weaknesses remained in the organizations' approach, in particular in investing and maintaining the formal systems that supported the human/social KM activities. The quotes from the interviews that illustrate this description can be found in Table 3.

- Insert Table 3 about here

Main Roads Western Australia (MRWA)

Like the two other case organizations, MRWA had gone through a number of restructures prior to the case study. Where some years before, the organization had had the vast majority staff in its nine regional areas, the decision to outsource the delivery of projects, including the majority of design projects, had significantly altered the balance between head office and regional offices whereby 70% of staff were at headquarters. The loss of staff had triggered a loss of knowledge, and in some cases the perception of resource gaps –though many former employees had moved to work for contractors and continued to collaborate with MRWA in that capacity. Under the impetus of their new CEO, who had had successful with outsourcing and alliance contracting, MRWA had engaged in contracting innovations to address the knowledge and capability gaps. We observed that the leadership of the organization was committed to knowledge management, some positive outcomes had been gained from the alliance contracting initiatives, and aspects of the induction and mentoring

systems, as well as the values-based culture of client service and empowerment were supportive of knowledge management. However, the organization remained reliant on informal systems and personal connections, lacked integration between functional silos, frictions between regions and headquarters remained, and systems and processes had scope for improvement. The quotes from the interviews that illustrate this description can be found in Table 4.

- Insert Table 4 about here

ANALYSIS AND FINDINGS

The study revealed a range of values, strategies and practices across the three organizations. The empirical data confirmed that knowledge is perishable and requires continual investment and renewal to remain current and actionable. The cases also illustrate the distributed nature of the knowledge continuance work: vertically, horizontally, and across organizational boundaries. Our findings are articulated around three groups: a conceptual model of knowledge management as an iterative cycle; an inventory of good practices for inter-organizational KM; and a KM maturity model. We discuss each in turn.

Conceptual Model of Knowledge Management: Action-Reflection-Integration

Knowledge management as organisational learning is best understood as an iterative process (Nonaka, 1994; von Krogh & Roos, 1996; Weick, 1979) where the articulation between the individual and collective levels is critical (Tsoukas, 1996; Crossan et al., 1999). Following the analysis of the cases simultaneously with the prior reviewed literature, we propose a conceptualisation of knowledge management as a process in three stages: Action, Reflection, and Integration. The cycle builds on the sense-making cycle of enaction-selection-retention (Weick, 1979) and proposes that knowledge management is best understood as a process of doing (action), reflecting on the outcomes of action (reflection), and incorporating the lessons learned into new strategies for action and learning going forward (integration). The three stages are visually represented Figure 1.

- Insert Figure 1 about here.

Action

The action stage is concerned with implementing knowledge and the everyday knowledge practices of the organisation. Through repeated action, experience and tacit knowledge are acquired, leading to continuous improvement. From the case studies, we conceive the Action stage in three principal components: practice, leadership, innovation, see Table 5.

- Insert Table 5 about here.

Reflection

The reflection stage of knowledge management is concerned with turning action into learning and directing action for learning. The focus of reflection is to capitalise on action: through critical thinking in order to draw lessons to learn, through strategic thinking in order to plan knowledge management so that enabling practices, processes and systems are in place, and through the promotion of culture and values that promote and support effective knowledge management. See Table 6.

- Insert Table 6 about here

Integration

The integration stage completes the cycle by seeking to leverage off the lessons learned, and fostering future action aligned with strategic goals. The integration work is involved with learning across projects and organisation-wide knowledge management activities, incentives, systems and processes. The components of integration are: systems thinking, knowledge governance, and policies and processes. See Table 7.

- Insert table 7 about here

Inter-organizational knowledge management good practices

Managing knowledge across organizational borders adds complexity to the picture in the sense that bringing in external partners requires to deal with issues of teamwork, trust, opportunism, contracting and incentives. The cases evidence that the externalization of project work to outside contractors was traditionally managed in relationships that positioned the contractor as a subordinate to the contracting agency where communication was asymmetrical and cooperation was minimal. Such a configuration is detrimental to effective knowledge management as communication is restricted and feedback is not systematically provided. The empirical data shows that innovative partnering approaches contextualize externalisation in alliance terms where both parties cooperate as a team, sharing information freely and providing comprehensive feedback. The incentive structure of contracts can also create issues of trust and/or opportunism: traditional contracting terms which for example set punitive damages, lead to ‘win-lose’ arrangements where parties have incentives to act opportunistically to obtain a gain at the expense of the other. Appropriate incentive schemes must be in place for contracting partners to engage fully in knowledge sharing across organizational boundaries. Table 8 below sketches out indicators of good cross-organizational knowledge management practices, following our three stage model.

- Insert Table 8 about here

Knowledge management maturity

As with all organizational processes, there are levels of proficiency in knowledge management. Across the case studies we have observed that the performance of knowledge management was dependent on the type of practices implemented and also on the maturity of implementation. For most components of the three stages of the knowledge management cycle we have observed two or three levels of proficiency in implementation. For example, the implementation of systems thinking (Integration stage) can be analyzed through three levels of maturity:

- *Level 1:* priority to hard systems, knowledge primarily thought of as an asset stored in a database
- *Level 2:* acknowledgment of key processes in knowledge transfer and sharing, through presentations, and managed communities of practice

- *Level 3*: understanding of the role of social networks in knowledge management, formal and informal relationships within and beyond communities, nurturing two-way dialogue rather than one-way communication

While an organisation may not be at the same level of maturity for all of its activities, there is a cascading approach that requires firms to embed the lower levels into systemic routines before effectively moving to a higher level. For example, basic critical thinking processes based around obtaining written feedback and feeding this into systems is a first step in respect of critical thinking. Higher levels are likely to involve narratives that provide context to understand the context in which the learning may best apply. Finally, the process would integrate the action and the review process as the feedback would be ongoing and integrated via social networks. Table 9 provides examples of practices from the case studies according to their level of maturity.

- *Insert Table 9 about here*

6. CONCLUSION

This study build on existing work about knowledge management on project-based organizations in three ways. First we expand on existing lessons learned models (Duffield & Whitty, 2016; McClory et al., 2017) as our model embraces knowledge management and organizational learning in a more holistic conceptualization. Second, we offer a detailed consideration of inter-organizational KM practices. Finally, we provide the foundations of a KM maturity model. Together, these contributions provide an answer to the research question “How do project-based organizations successfully manage knowledge within and across boundaries?”. The consideration of inter-organizational boundaries is a major contribution of this study, as prior research mainly focused on intra-organizational issues. Further research is required to refine and develop the advancements presented here, involving further cases to better delineate the components of the KM cycle, and quantitative investigations to provide validation and generalization.

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Figures and Tables

Figure 1: Knowledge management cycle

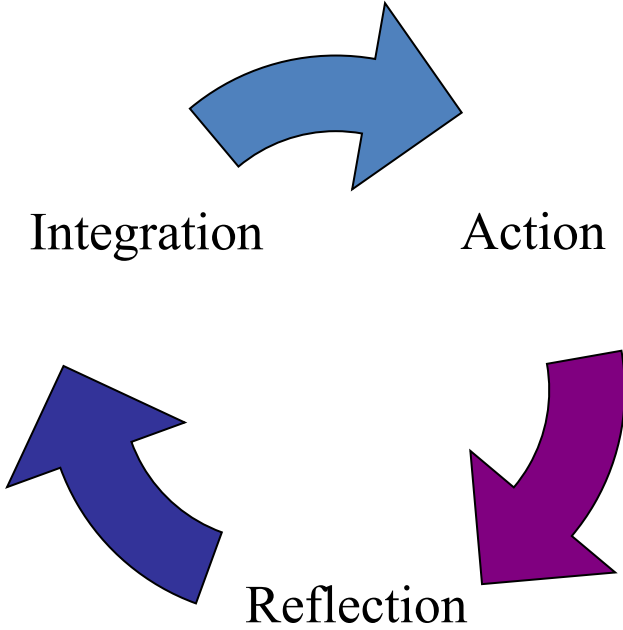


Table 1 – Coding Themes for Data Analysis

KM practices	Critical thinking	Systems thinking
Leadership	Strategic thinking	Governance
Innovation	Culture and values	Policies and processes

Table 2 – Representative Quotes – DHW Case Study

Theme	Representative quotes
KM practices / Knowledge exploitation	<i>“The way they learnt was to ask a lot of questions. Run around the place, who do I ask about this and that? Pretty frustrating exercise, but the information’s there if they ask the right people. I mean people are pretty supportive about answering those sort of questions.”</i>
Leadership	<i>“We have to somehow convince our own executive, our executive has come up in the housing culture and the housing culture is very much price driven. Then our client agencies, and some of them are more mature than others. Once you’ve got them convinced we would have to convince our minister and our client agency would have to convince their minister. So there’s a lot more players involved.”</i>
Innovation / Knowledge creation	<i>“I’d [like] to think that we are working towards true alliancing, but we aren’t, because of the state of the industry at the moment and all the rest. We were looking in a few situations to move away from the traditional design and build model which is what we’ve been built on and which is very adversarial based.”</i>
Critical thinking	<i>“We have a contractor performance report that can be done ... Generally, from my understanding, it seems to be with areas of failure, as opposed to, my old manager used to call it, a bouquet. It’s not too often we say good job.”</i>
Strategic thinking	<i>“Sustainability is one area we are putting in some effort, but there’s many other facets of design that we’re not able to put the same effort of resources in and so there are large gaps. Heritage has been variable, but it’s less well resourced, also it’s a specialised area. Materials are an enormous area of ignorance in the department and we have no effort to remedy that at all. Then there’s everything, remediation, pollution, are all related to sites and so therefore there’s no effort in there at all and no expertise”.</i>
Culture and values	<i>“... to a large extent, we had a stable pool of people who stayed with us, because the department was always downsizing, not upsizing. As a result, the people that stayed, stayed for a long time, most of them. Therefore, from those people’s point of view, there’s a lot of continuity and knowledge. But, at the same time, the numbers were reducing, so some people got older and retired. So, we lost information as they left. We never did have really good systems to try and capture corporate knowledge very well. I think there was a fair bit of loss of knowledge. But I guess held together by the fact that there was continuity of some people.”</i>
Systems thinking	<i>“There isn’t that team environment like there was back in the consultancy office days. So there isn’t the opportunity for the informal meetings and exchange of experiences and that ... So a lot of the people ... what they know is through their own experiences and that experience they tend to keep it to themselves today because the project management environment ... doesn’t promote that sort of informal interaction.”</i>
Knowledge Governance	<i>“But we still, if we’re still looking at capacity, expertise and passing on knowledge that process is still quite poor and having any interchange of knowledge and expertise between our service providers, architects, quantity surveyors, engineers but there’s by definition simply no exchange at a professional level between those organisations. However they’re selected, they basically do the work, we basically pay the bills and we generally only pay lip service to bring it up to capacity to have any professional knowledge of what’s going on.”</i>
Policies and processes	<i>“Rebuilding is the whole essence of this, rebuilding expertise capacity in an environment where essentially often lip service is paid to rebuilding a public service entity because I think that there is, for a start, our colleagues which is more than apparent, other engineering organisations, the PTA, the Main Roads Department, Landcorp were even on different pay scales.”</i>

Table 3 – Representative Quotes – MRQld Case Study

Theme	Representative quotes
KM practices / Knowledge exploitation	<i>“When we set up a job, a project on site to mentor, we set it up as mentored kind of pairs or threes and so what I’ll usually do is I’ll put a really experienced old geezer on their site and then I’ll probably put some kind of a middle grade engineer and a graduate, a baby. And basically the idea is that the three of them work together as a team and they spend their life picking the old fellow’s brain and the young one learns from the middle one and the middle one learns from the top guy.”</i>
Leadership	[involving employees in large projects] <i>“We’re using it as a learning experience and a way of bringing the experience of our staff up and exposing them to, it’s also exposing them to different and varied work, so that obviously that’s more attractive to them as well. But it’s increasing the experience and knowledge of our staff and how they apply the standards.”</i>
Innovation / Knowledge creation	<i>“We also have some R&D going on so in terms of that and work so any advances that happen in that regard get fed into the documents. We make sure we stay involved in Road Authority, Austroads type activities, Standards Australia type activities so we touch base on those various things.”</i>
Critical thinking	<i>“Senior leadership ensures that the project team take time out to reflect and document and capture those learnings. So that’s the only way it seems to ensure that it gets done. Project managers and project people are probably not going to do it on their own volition, they need some direction and support from senior management to show an interest in that aspect and ensure that we do capture learnings”</i>
Strategic thinking	<i>“See one of the things is that the information we want is just not for Main Roads, because contractors and all that aren’t in a position to do a lot of research or whatever. They look at us to actually provide leadership in the industry with regards to our systems, our processes, our manuals.”</i>
Culture and values	<i>“We’re pretty fortunate in the type of people that we’ve got and the fact that they do like, they’re all sharers. They all like to share their knowledge and help other people get good at things and stuff because I think they figure the more they develop the people beneath then the less work they’re going to have to do because they’re all ages apart. So I think they’re all just, the more competent that you can make the people underneath you the better you’re going to look. So I think most of us have this view that the more we can teach them the better it is. So we just keeping teaching them”</i>
Systems thinking	<i>“We do have mechanisms in place on larger projects to have, as I said, partnering processes, so we can talk and resolve issues together [with contractors] and use the knowledge that might be sitting around a table to the problem at hand. So Main Roads has a way of, has been developing up and you trying to utilise a way of ensuring people are talking and sharing their knowledge to issues, even in a contractual sense.</i>
Knowledge Governance	<i>“Main Roads has a technology transfer forum every year, so about a three day forum where the emphasis is on sharing knowledge and information on a wide range of issues, and that’s heavily supported by district and staff from around the State. So seeing the specialist people in Brisbane and also private industry, so that’s been going on for many years now”</i>
Policies and processes	<i>“We’ve got quite a large training program, so we generate the knowledge, we transfer the knowledge through training. That’s one part of our business. And as I say, we deal in, from road design theory to impacts, environmental impacts such as noise impacts on the community. Also air quality and those sorts of things”</i>

Table 4 – Representative Quotes – MRWA Case Study

Theme	Representative quotes
KM practices / Knowledge exploitation	<i>“At the moment we run, I have organised an annual principles of road design course which we run which is for graduates and for project managers within Main Roads and we did it within Main Roads last year. This year we will open it up and allow Local Government to send people along, so that again it just gives the spectrum of what is involved in this beast”</i>
Leadership	<i>“So the capability is not only about technical capability, it’s about management and leadership capability that goes throughout the organisation”</i>
Innovation / Knowledge creation	<i>“Knowledge enhancement/generation is a key part of the alliance. During the workshops we developed a strategic framework which included a commitment that everyone would come out of the alliance with enhanced skills. This is reinforced with non-cost KPIs which are written into the contract and relate to training (this includes individual training plans), indigenous employment, OH&S, stakeholder relationships and environmental issue. These are measured and rewarded financially by the client”</i>
Critical thinking	[knowledge management is just] <i>“another layer of stuff that I have to do in addition to my normal sort of work”</i>
Strategic thinking	<i>“I invited their sustainability people to come in here and give us a presentation. From there we have set up internally some working groups to start brainstorming what does it mean, how are we going to get this message across, what’s our policy, so we set up a policy and a strategy associated with what we are talking about and then how we are going to disseminate it and then we have presented that information through Corporate Executive to get high level [approval, which] ... is pretty fundamental if you are trying to get people to commit to something.”</i>
Culture and values	<i>“What we don’t want to undermine are those informal processes that we have in place, because the values driven management organisation that we have started to create, allows for more autonomy, more decision making, in the value type approach to how we do our business. Then you have got the technical requirements, the process driven elements of it, and it is the combination of the two that is probably the best outcome for us.”</i>
Systems thinking	<i>“The view in the past has been that we are just need to provide information. Rhetoric from head office can sound hollow when you have been hounded by nine different areas for information”.</i>
Knowledge Governance	<i>“Importantly we are documenting everything we do and feeding that back into Main Roads. We are documenting the contracting award process, all other processes and lessons learnt at each critical milestone, i.e. once we finalised the alliance agreement, preliminary design completion and target costs (this was done during the first 6 months). There will be a further lesson learnt process at the end of the detailed design phase.”</i>
Policies and processes	<i>“The lessons learnt sessions on the current alliance happen in an open forum – these haven’t always been good because they tend to degenerate into a bitch session. Also people might be careful about what they say because they are sitting next to someone from a different organisation”</i>

Table 5: Action stage of the learning cycle

Components	Case examples
Practice of knowledge	<ul style="list-style-type: none"> ▪ Bringing together teams to manage projects ▪ Updating manuals and databases ▪ Contributing to national standards or other forms
Leadership	<ul style="list-style-type: none"> ▪ Support for projects that will see existing knowledge leveraged in different ways ▪ Strategic plans that feature learning and development ▪ Identification of the need for changing relevant business processes
Innovation / knowledge creation	<ul style="list-style-type: none"> ▪ Making information accessible to far more people, both within and outside of the organisation ▪ Utilising alternative employment contracts for people that can contribute but cannot do so via a traditional on-site contract (e.g. retired, live interstate) ▪ Use of alliance and early contractor involvement contracting methods

Table 6: Reflection stage of the learning cycle

Components	Case examples
Critical thinking	<ul style="list-style-type: none"> ▪ Challenging assumptions such as the need to keep various data restricted (either internally or to external parties) ▪ Feedback and reflection activities that underpin learning ▪ Rethinking what characteristics a successful employee will need to have
Strategic thinking	<ul style="list-style-type: none"> ▪ Determining the nature and extent of feedback sought on different projects depending upon their potential to provide learning opportunities ▪ Envisioning what the future environment may look like and what the organisation will need to look like to effectively respond to the likely demands that exist ▪ Seeking out new ways to engage and learn from knowledgeable people/organisations
Culture and values	<ul style="list-style-type: none"> ▪ The level of reliance upon systems and processes to guide projects versus informal self-directed processes (with processes more likely to be updated and shared with others to assist with learning) ▪ Is the review process driven by the organisation determining what went wrong and thus what changes need to be made, or does the organisation open itself to criticism and seek feedback from contractors ▪ Are projects primarily managed by teams or by single individuals

Table 7: Integration stage of the learning cycle

Components	Case examples
Systems thinking	<ul style="list-style-type: none"> ▪ The multiple impacts of communities of practice that were established as a quality concern, but drove internal relationships and subsequent knowledge sharing activities ▪ The use of alliance contracting to both limit the adversarial approach to contracting, reduce costs, improve the quality of outcomes and act as primary driver of learning ▪ Making changes on the basis of the review process such that future projects are managed differently
Knowledge governance	<ul style="list-style-type: none"> ▪ Bringing people together to share experiences and ideas via symposia or other forums ▪ Developing processes that allow knowledge sharing to cut across organisational silos ▪ Determining how external knowledge will be accessed via different contracts/relationships
Policies and processes	<ul style="list-style-type: none"> ▪ Rewarding innovation to give it the visibility to be more widely adopted in the organisation. ▪ Setting up processes that ensure people attending training provide an informal debrief to other team members on their return ▪ Create incentives for those that support and engage with the different knowledge management activities instituted by top management

Table 8: Good practice examples across the learning cycle

Stage	Component	Cross-organization good practices
Action	Practice	<ul style="list-style-type: none"> multi-organization, multi-disciplinary teams, embedded stakeholders, coordination of work and practices across project partners
	Leadership	<ul style="list-style-type: none"> relationships strategically managed over the long term, beyond the scope and timescale of current projects; Leadership supports cooperation with outsourcing partners
	Innovation	<ul style="list-style-type: none"> resources available for innovation, small scale projects/pilots as ‘controlled experiments’
Reflection	Critical thinking	<ul style="list-style-type: none"> Project post-mortems (level of detail as appropriate), review of roles and performance across partner organizations
	Strategic thinking	<ul style="list-style-type: none"> Agency management of industry eco-system, environmental scanning for new trends and ideas from other countries and industries
	Culture and values	<ul style="list-style-type: none"> Trust and respect, tolerance of mistakes as learning events
Integration	Systems thinking	<ul style="list-style-type: none"> Learning across projects and organizations, transfer of best practices
	Knowledge governance	<ul style="list-style-type: none"> Project governance and contracting, sharing hard systems, connecting soft systems
	Policy	<ul style="list-style-type: none"> Incentives and performance indicators, cascade of measures down project structures, learning and knowledge management integrated in performance evaluation

Table 9: Examples of learning maturity across the learning cycle

	Action			Reflection			Integration		
	Practice	Leadership	Innovation	Critical thinking	Strategic thinking	Culture and values	Systems thinking	Organisational architecture	Policies and processes
1 -hard systems	updating manuals and databases	strategic plans that feature learning and feedback objectives	wide access to information	project post-mortems	planning nature and extent of feedback based on anticipated learning	values are stated and supported by leadership	support for communities of practice	sharing hard systems	incentive and performance schemes
2- processes	bringing together teams to manage projects	identification of the need to change processes	alternative employment contracts to leverage the knowledge of outside experts	challenging assumptions	systematic scanning of the environment	incentives and systems reflect values	multi-dimensional alliance contracting processes and objectives	bringing people together to share experiences	processes of team briefing and mentoring
3- social networks	participating in standards setting bodies	relationships managed strategically, beyond the scope of individual projects	early contactor involvement for problem solving	reviews across organisations	agency management of industry ecosystem	core values of trust, change and learning shared across organisations	learning across projects and organisations	connecting hard and soft systems across organisations	cascade of measures down project structures combining hard and soft indicators

15. Technology, Innovation and Supply Chain Management
Interactive Session

**The Effects of Manufacturer Structural Embeddedness on the Network Rent:
the Mediating Role of Supply Chain Governance**

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15. Technology, Innovation and Supply Chain Management Interactive Session

The Effects of Manufacturer Structural Embeddedness on the Network Rent: the Mediating Role of Supply Chain Governance

ABSTRACT:

The paper seeks to investigate the mediating effect of manufacturer structural embeddedness on the network rent through supply chain governance in triadic supply chains. In order to obtain this goal, we used a sample of triadic supply chains, followed by an empirically-based methodology. The findings of the study show that, although the manufacturers in the examined triads tend to use their superior position to have a stronger influence on supply chain governance, a 'balance' between contractual and relational governance is still preserved. This suggests that contractual and relational governance are two mechanisms that similarly contribute to supply chain governance. Furthermore, the results demonstrate that supply chain governance, to a large extent, determines the network rent.

Keywords: networks, performance measurement, supply chain management

LITERATURE REVIEW AND RESEARCH MODEL DEVELOPMENT

Nowadays, an increasing number of manufacturers in supply chains strive to employ a perspective broader than dyadic, in order to simultaneously engage its immediate supplier, and its immediate customer, to form a collaborative triadic arrangement (Li and Choi, 2009; Li *et al.*, 2010; Mena *et al.*, 2013). Such a structure, consisting of three subsequent actors (supplier-manufacturer-customer), establishing linear product and information flows, represents an intransitive type of triad, in which only the manufacturer forms direct relationships with the remaining two actors – the supplier and the customer (Mentzer *et al.*, 2001). In other words, the supplier and the customer that are part of the triad have direct ties to the manufacturer; however, they remain disconnected to each other (Madhavan *et al.*, 2004). In such an arrangement, the manufacturer occupies a gap between two disconnected actors which is demonstrated in literature as the structural hole (Burt, 1992; Burt, 1997, Burt, 2000; Markóczy *et al.*, 2013; Tan *et al.*, 2015). In consequence, the manufacturer sitting on top of the

structural hole is capable of exploiting, manipulating and arbitraging information flow, which gives it enough strength to impose certain requirements on two disconnected parties (Brass, 1995; Baum and Ingram, 2002; Shipilov and Li, 2008; Yang *et al.*, 2010). The structural hole can thus be a source of strength, that is, the stronger or weaker position of the manufacturer in a triad (Granovetter, 1995; Choi and Wu, 2009). The position that any manufacturer holds in a triad, which enables it to exert control, and thus bring substantial benefits, can be defined as manufacturer structural embeddedness. In other words, manufacturer structural embeddedness reflects the value of a manufacturer’s structural position in a triadic or more complex network (Kim, 2014). The stronger the manufacturer structural embeddedness, the larger control benefits, yielded by the manufacturer as the result of the use of certain norms and sanctions (Rowley *et al.*, 2000). The goal of the paper is to investigate the mediating effect of manufacturer structural embeddedness on the network rent through supply chain governance in triadic supply chains. The conceptual model of the study is depicted in Figure 1.

Insert Figure 1 about here

We argue that manufacturer structural embeddedness in triadic supply chains emerges to be one of the most important factors that determine supply chain governance. In particular, structural embeddedness enables the manufacturer to initiate and develop collaboration by applying certain forms of governance in a triadic supply chain, as indicated by the following hypothesis:

H1. Manufacturer structural embeddedness has a positive impact on supply chain governance.

Sako (2004) identified two ideal forms of governance that are applied in a supply chain, namely: contract governance and relational governance. The fundamental difference between them is that the first one puts emphasis on opportunism and bounded rationality, and relies on third-party enforcement of agreements, such as legal contracts, while the second one underscores trust, cooperation and reciprocity, and depends on self-enforcing agreements (Williamson, 2005). In line with the logic of Transaction Cost Economics (TCE), the supply chain actors establish contract governance to reduce costs and ensure other details concerning the exchange conditions to be specified in a formal agreement (i.e. product quality, product quantity, price of product, as well as time and place of

delivery) (Poppo and Zenger, 2002). On the other hand, relational governance is based on informal agreements and unwritten codes of conduct that significantly affect the behavior of individual actor in its relationship with others within a supply chain (Baker *et al.*, 2002). Drawing upon prior studies, we posit that supply chain governance plays a significant role in deriving the network rent, as it substantially reduces transaction costs (North, 1990) and can encourage the supply chain actors to engage in value-creation initiatives (Dyer and Sigh, 1998). Among the value-creation activities one may enumerate: investing in relation-specific assets, sharing knowledge, or combining complementary strategic resources (Poppo and Zenger, 2002; Wynstra *et al.*, 2015). The superior network position, as well as the capability of shaping the mechanism of supply chain governance, enable the manufacturer to yield certain benefits, which may take the tangible form of network rent. The concept of network rent demonstrates the outcome of reciprocal interactions among three actors and their relationships. As indicated by Choi and Wu (2009), although structurally triads are built upon dyads, the ability to yield a value as a result of interaction makes them more than just a collection of dyads. Therefore, to investigate the network benefits, one ought to concentrate on the reciprocal interplay of two dyads (i.e. supplier – manufacturer and manufacturer – customer) in an intransitive triad. In other words, one should capture how a link in one dyad affects another link in another dyad (Choi and Wu, 2009). The outcome of interplay among dyads enables to yield the network rent. In general, the concept of network rent is related to synergy which underscores an increase in the value of assets as a result of their combination (Luukkanen *et al.*, 2012). In the same vein, synergy is defined as an interaction among parties that creates an enhanced combined effect (The American Heritage Dictionary of the English Language, 2018). This definition makes the concept of synergy related to statistical interaction (Corno *et al.*, 2002). Therefore, through the lens of synergy, the network rent can be specified as an interaction – the product of two independent variables X_i and X_j , i.e. X_iX_j (Southwood, 1978). This is often accompanied by a coefficient to denote the sign and extent of interaction. Furthermore, the statistical significance of interaction can be tested (Luukkanen *et al.*, 2012). To reiterate, the network rent demonstrates a super-added value jointly produced through idiosyncratic contributions of all actors involved in an exchange relationship (Dyer and Singh, 1998). Consequently, the network rent cannot be produced by companies in isolation. Furthermore, when investigating the overall

performance, we employ the ‘ego’ network perspective (Carnovale and Yenyurt, 2015), and consider a triad from the standpoint of manufacturer. Given that, we strive to capture if the manufacturer is capable of yielding the network rent using certain form of governance. As such, we propose the following hypothesis:

H2. Supply chain governance (represented as a higher order factor) has a positive impact on the network rent.

Drawing upon the study of Nohria (1992), we allege that structural embeddedness can either support or hinder the ability of manufacturer to yield the network rent. Consequently, we expect structural embeddedness to have a positive or negative effect on the manufacturer performance (Choi and Kim, 2008). The network rent is never accomplished unconsciously, and as such, it requires certain managerial efforts to be made by the manufacturer with superior structural embeddedness. Mentzer *et al.* (2007) drew a definite demarcation line between supply chains as phenomena that exist in the business environment, no matter if it is managed or not, and the management of those supply chains. The latter takes evident managerial efforts by the supply chain actors. Similarly, Gupta and Govindarajan (1986) acknowledged that potential synergistic advantages derived from resource sharing are dependent upon how effectively the supply chain is really managed. Thus, yielding the network rent requires applying some form of supply chain governance. As depicted in our model in Figure 1, the governance mechanism in the examined triadic supply chains is implemented and controlled by the manufacturer. In the light of the aforementioned, manufacturer structural embeddedness determines taking certain managerial activities, and can serve as a powerful mediator for shaping supply chain relationships (Lambert *et al.*, 1999). The manufacturer can relatively easily exploit its superior position to maximize its own profit at the expense of others. We thus put forth the following hypothesis:

H3. Supply chain governance mediates the effect of structural embeddedness on the manufacturer’s network rent.

METHODOLOGY

Data collection and sample

In order to collect data from all three actors forming a triadic supply chain, the methodology advised by Wu *et al.* (2010) was applied. First, we conducted research in manufacturing companies that also provided detailed contact data on their first-tier suppliers and first-tier customers, selected on the basis of the following two criteria: (1) supply components are parts that go into the end item, received by a customer (Wu *et al.*, 2010), and (2) the end item pertains to the product yielding the highest value for the manufacturer. Then, after receiving a feedback from the manufacturers that provided high-value data, we circulated a survey questionnaire to the suppliers and customers indicated by the solicited manufacturers.

The whole process of data collection lasted for 8 months in 2017 and 2018. For this study, we developed a survey instrument that was then sent out to 340 respondent companies in Europe. The structure of the questionnaire and specific questions were customized to the roles of supplier, manufacturer or customer in a triad. For instance, the manufacturer answered the questions concerning manufacturer structural embeddedness, supply chain governance, as well as both relational and manufacturer performance. On the other hand, the supplier and the customer responded to the questions regarding supply chain governance and relational performance. The obtained response rate was roughly 38 percent (129 companies). However, only a portion of the raw data might be used for further analysis. Having merged and matched the responses from the supplier and the customer with their corresponding manufacturer, we ultimately obtained 72 triads. These triadic arrangements covered the manufacturer that established simultaneous relationships with its supplier and its customer.

Operationalization of variables

The variables included in the questionnaire are anchored in literature (Table 1) and operationalized on a five point Likert scale: from “strongly disagree” (=1) to “strongly agree” (=5). The measures were filled in directly by the respondents to develop items manifesting manufacturer structural embeddedness, supply chain governance (both contractual and relational), relational performance and

manufacturer performance. The first construct of structural embeddedness was based on the responses obtained from the manufacturers. The constructs of supply chain governance (both contractual and relational) were formed upon the average responses of companies in the triad. In order to capture the last construct in the model – the network rent, we first operationalized three constructs – two of them manifested relational performance of upstream and downstream dyad, whereas the third one demonstrated manufacturer performance.

Insert Table 1 about here

Construct assessment

Measuring the network rent

In order to verify the constructs indicating relational performance of upstream dyad, relational performance of downstream dyad and manufacturer performance, we assessed unidimensionality, reliability and validity. Table 2 shows the final items with detailed numerical characteristics. Unidimensionality was established through the Exploratory Factor Analysis (*EFA*) using the Principal Component Analysis (*PCA*) (Hair *et al.*, 1998). The analysis produced a clear pattern of constructs with minimal cross-loadings and loadings above .5 on each construct (Nunnally, 1988). Two constructs of relational performance embraced four variables each, while the third factor of manufacturer performance contained six variables. All three constructs demonstrated a high level of reliability with the *CR* indicator above .7 (Nunnally and Bernstein, 1994). The convergent validity, as measured by *Average Variance Explained (AVE)* for three constructs, also appeared to be satisfying (Chin, 1998; Fornell and Larcker, 1981). Three constructs showed the appropriate discriminant validity, as the value of *AVE* is larger than the squared correlations between the construct and any other considered construct.

Insert Table 2 about here

Having assessed the construct validity, we then developed the multiple regression model with interaction effects to check for the network rent to be yielded as the combination of relational

performance of upstream and downstream dyads. The factor scores, derived from assessing unidimensionality, were used to demonstrate relational performance and manufacturer performance. The network rent was manifested as a product of the factor scores of relational performance yielded by two dyads, as per Southwood (1978). Table 3 shows the estimates of multiple regression model with interaction effects.

Insert Table 3 about here

In general, the regression analysis for manufacturer performance showed that the adjusted *R*-squared explained slightly above 17 percent of the variance. More importantly, as indicated in the model, all three predictors were positive and significant at $p < .05$, including the network rent. This finding suggests that the network rent, interpreted as the product of interplay of relational performance generated by two dyads, might be revealed in the examined triadic supply chains. Moreover, it has a positive impact on the manufacturer performance. More specifically, the higher the network rent, the greater the manufacturer performance. The factor scores for the network rent were then fed into the PLS model, developed in the subsequent step of the analysis.

PLS Construct Measurement

In order to measure the constructs and then assess the model hypotheses, the Partial Least Squares (PLS) Path Model procedure was employed. The model consists of the inner (structural) model, which is comprised of the constructs and their hypothesized relationships, as well as the outer (measurement) model describing the relationship between latent (unobserved) and manifest (observed) items (Tenenhaus *et al.*, 2005). First, unidimensionality, reliability and validity of the measurement model were assessed – Figure 4, followed by the assessment of the structural model (Hulland, 1999). As depicted in Figure 4, all constructs showed a high level of reliability with the *CR* indicator above .7 (Nunnally and Bernstein, 1994). The convergent validity, as measured by *Average Variance Explained (AVE)* for three constructs, also turned out to be satisfactory (Chin, 1998; Fornell and Larcker, 1981).

In addition, all constructs demonstrated the appropriate discriminant validity, as the value of *AVE* is larger than the squared correlations between the construct and any other considered construct.

Insert Table 4 about here

RESULTS AND DISCUSSION

In order to assess the structural model and test the hypotheses, we employed the Repeated Indicators Approach, which is the most popular procedure when estimating higher-order constructs through PLS (Lohmöller, 1989). As illustrated in Figure 2, the structural model demonstrates support for *H1* and *H2*, as indicated by the standardized path coefficient (*p*) at the end of each variable. Specifically, the structural model shows the positive and significant effects of manufacturer structural embeddedness on supply chain governance (0.896; $p < 0.001$), and supply chain governance on the network rent (0.547; $p < 0.001$). Furthermore, supply chain governance with *R*-squared value of 0.803 and the network rent with *R*-squared value of 0.30 suggest a good predictive capability of the model (Cohen and Cohen, 1975). Specifically, the obtained findings showed that supply chain governance is highly dependent on manufacturer structural embeddedness. In other words, a far superior position of the manufacturer promotes stronger supply chain governance.

Insert Figure 2 about here

The research results suggest that the manufacturers in the examined triads tend to use their superior position to have a stronger influence on supply chain governance. This result may suggest that, even if not today, then in the future, the manufacturer might be willing to use its superior position to impose certain norms and requirements on the other supply chain actors. When the manufacturer tends to manage its triad in a more autocratic way, structural embeddedness might be used to exert control over its supplier and its customer, rather than to create opportunities for a supply chain to act as an emergent system. This issue is highlighted by Choi *et al.* (2001) who considered control to be generated through simple, non-linear behavioral rules that operate upon local information. In line with the findings, although the position of manufacturer strongly affects supply chain governance, the

manufacturer does not make formal control dominate over the ‘social’ factor. It is also worth noting that there is a specific ‘balance’ maintained between both forms of supply chain governance. More specifically, as indicated by our study, contractual as well as relational governance are two mechanisms that similarly contribute to supply chain governance. Furthermore, supply chain governance, to a large extent, determines the network rent. Obviously, the way the supply chain is managed affects its ability to yield the network rent. Interestingly, however, governance appears to only partly affect the supply chain performance. This suggests that there might be some other constellations of contractual and relational mechanisms, with different intensity and share, that could bring higher rents. For instance, when relational governance prevails, it is more likely that supply chains become more emergent, which, in turn, may help to increase efficiency, enhance rapid flexibility, prepare for external uncertainties, bear awareness of markets and competition, as well as improve decision-making (Pathak *et al.*, 2007). Moreover, when investigating supply chain governance, we employed only a limited number of variables reflecting two general mechanisms. Based on prior studies, we argue that in order to obtain a fuller picture of supply chain governance, it is necessary to deepen the investigation and include a larger number of variables reflecting governance in a more detailed way. The concept of network, which extends the view of supply chain governance on three interrelated mechanisms of market, hierarchy and clan, serves as a very good example (Guibert, 2006; Jones *et al.*, 1997; Capaldo, 2014).

Furthermore, to test for mediation (*H3*), we followed the mediator analysis procedure in PLS-SEM (Preacher and Hayes, 2008; Hair *et al.*, 2017). First, we built a null model with no mediation, depicting the direct effect of manufacturer structural embeddedness on the network rent. The findings show that if supply chain governance is not included in the model as a mediator, the direct effect of manufacturer structural embeddedness on the network rent is significant at $p < .001$. To conduct the significance test, we used bootstrapping. In the next step of the analysis, we included the mediator construct in the PLS Path model. The evaluation of the structural model depicted in Figure 2 confirms that a necessary (but not sufficient) condition of the significance of both relationships between manufacturer structural embeddedness and supply chain governance, as well as between supply chain governance and the network rent, has been met. Consequently, the indirect effect’s size is 0.49, and its

significance is again tested using the bootstrapping results. Hence, the empirical t value of the indirect effect of manufacturer structural embeddedness on the network rent is 7.152, and we conclude that this relationship via supply chain governance mediator is significant at $p < .001$. In the light of the findings, we infer that supply chain governance mediates the relationship between manufacturer structural embeddedness and the network rent. The size of the indirect effect in relation to the total effect, as indicated by the *VAF* index, equals 0.411; therefore, a partial mediation of supply chain governance can be assumed (Hair *et al.*, 2017). Consequently, in the light of the obtained findings, supply chain governance may act as a mediator to manufacturer structural embeddedness and the network rent (MacKinnon *et al.* 2000). Hence, although the superior position of manufacturer appears to be important to yield the network rent, the way the supply chain is actually managed using a certain governance mechanism ultimately determines the network rent. However, it is worth noting that the position stems from the fact that the manufacturer is sitting on top of the structural hole, and as such, it is the only actor in the triad to have direct relationships with the other supply chain partners. Accordingly, one may presume that in transitive triads, composed of three actors and three dyads, the position of the manufacturer is much weaker and its influence on supply chain governance will be significantly lower. Allowing supply chain governance in the model tends to considerably strengthen the positive effect of manufacturer structural embeddedness on the network rent. Therefore, the obtained findings support *H3*, demonstrating that supply chain governance mediates the effect of manufacturer structural embeddedness on the network rent.

CONCLUSIONS

The impact of manufacturer structural embeddedness on supply chain governance and, in turn, governance's positive influence on the network rent, emphasizes the significant role of the manufacturer for managing the supply chain. The superior position in the triad results from the control power possessed by the manufacturer that establishes direct relationships with the supplier and the customer, while both latter actors remain disconnected.

The impact of manufacturer structural embeddedness is twofold. First, manufacturer structural embeddedness has a positive impact on supply chain governance. It suggests that a more superior

position of the manufacturer leads to a higher impact on supply chain governance. In addition, stronger supply chain governance leads to better performance, as demonstrated by the network rent. However, the pure existence of manufacturer structural embeddedness in triadic supply chains is insufficient. Obviously, the manufacturer with the superior position in its triad ought to implement and develop some form of governance to have a real influence on other supply chain actors, which in turn brings the network rent.

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Stream 15. Technology, Innovation and Supply Chain Management
Product Development
Competitive Session

Mass Customization in the Supply Chain in the Era of the Fourth Industrial Revolution

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Stream 15. Technology, Innovation and Supply Chain Management
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Mass Customization in the Supply Chain in the Era of the Fourth Industrial Revolution

ABSTRACT: *Mass customization refers to companies using technologies and management methods that enable them to tailor products to customers in flexible and quick response to the reported demand. In the era of changes in the domain of new technologies and Industry 4.0, modern factories are undergoing constant transformation, which affects not only the organization of production, but also the functioning of entire supply chains. Therefore, it is interesting to explore the impact of using Industry 4.0 technology on mass customization in the supply chain, including product delivery time and production flexibility. The paper aims to discuss these issues, and in order to achieve this goal, the study presented in the paper includes multivariate statistical analyses, such as Exploratory Factor Analysis and Multiple Regression Analysis, supported by case studies.*

Keywords: mass customization, product management, supply chain, Fourth Industrial Revolution, Industry 4.0., new technologies

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INTRODUCTION

The subject of product customization has been recognized and repeatedly discussed in the literature (Davis 1987; Pine 1993; Chandra & Kamrani 2004; Fogliatto, da Silveira & Borensteinc 2012; Liu & Deitz 2011; Mikkola & Skjøtt-Larsen 2004). However, the world is changing, the market is changing, the customers' needs are changing and new technologies are being introduced. They give a new dimension to product customization (Gilmore & Pine, 1997; Fogliatto, da Silveira & Borenstein, 2012; Salvador, de Holan & Piller, 2009; Zawadzki & Żywicki, 2016) and directly affect the development of entire supply chains (Liu & Deitz, 2011). The influence of modern technologies goes beyond a single enterprise to the network of connections between organizations, where data are integrated in the so-called cloud, and the organization of processes in the entire supply chain occurs in the virtual space (MacCarthy, et al. 2016; Barata, Da Cunha & Stal, 2018). It is becoming more and more common to introduce 3D printers in

production, which allows to customize products to individual customer orders (Steenhuis & Pretorius, 2017). Not only production is changing; major changes are also occurring in the field of distribution (Lau, 2012; Ye, Lau & Kok Yang Teo, 2013). New distribution channels (the so-called omnichannels) are created and other possibilities of delivering products to the market are emerging, e.g. with the use of drones (Lim & Singh Srani, 2018). Another important change occurs in relation to customers, their needs and expectations regarding producers and distributors (Christopher, 2016). The ongoing changes force product managers to take a new look at the customization of products in the supply chain.

To investigate the relationship between mass customization and new technologies implemented in the supply chains, multivariate statistical analyses, such as Exploratory Factor Analysis and multiple regression analysis, have been carried out. Additionally, the case studies of four companies, namely: Procter & Gamble, Adidas, BMW and Stratasys have been described, which illustrates the phenomenon of customizing products in modern supply chains.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Gilmore and Pine (1999) define customization as the production of a product in response to the individual needs of a specific customer. Generally, customers do not expect the opportunity to choose from a variety of options; instead, they want a product tailored to their individual requirements. Product customization requires from the supply chain to be flexible and dynamically adaptable to the customer's needs (Jüttner, Christopher, & Baker 2007; Masson, Iosif, MacKerron, & Fernie 2007; Jüttner, Christopher & Godsell, 2010). This is a one-to-one adjustment, i.e. individual customer's needs and an individualized product that will be delivered only to this recipient, in precisely this form (Pollard, Chuo & Lee 2008; Malkanthie, 2011). According to Davis (1987) and Pine (1993), there are two main approaches to customization. The first one is the design approach, where an individual project is produced under individual customer orders. It is the one, unique product, manufactured once, for one client; for example, the construction of an airport in Wrocław, Poland. The second approach is the mass customization of products, which aims at combining customization with mass production and implementation of a personalized customer order, while taking

advantage of the economies of scale (Blecker & Abdelkafi, 2006). The term mass customization was used for the first time in 1987 by Stanley Davis in the publication entitled *Future Perfect*, in which he described the phenomenon of "tailoring" shirts in mass production without a significant increase in costs (Davis, 1987). When talking about mass customization, one cannot omit the issue of customization strategy. The literature on the subject distinguishes many criteria according to which the division into particular customization strategies is made, including: product, its representation, production stages, customer engagement and place of customization (Lampel & Mintzberg 1996; Duray 2000; MacCarthy 2003; Piller & Tseng 2010). However, regardless of the adopted approach, the leading criterion is the range of customized activities performed by participants in a given supply chain: from design, through production and assembly, to distribution.

In the era of the Fourth Industrial Revolution (Industry 4.0), the customization of products in the supply chain takes on a new dimension (Zawadzki & Żywicki 2016). It is perceived as a basic strategy that gives a competitive advantage, and new technologies only reinforce this trend (Piller & Walcher, 2018). According to Pfohl, Yahsi & Kurnaz (2015), Industry 4.0 can be considered on the process, technology or management levels in the whole supply chain, and is defined as the sum of all disruptive innovations derived and implemented in a value chain to address the trends of digitalization, autonomization, transparency, mobility, modularization, network collaboration and socializing of products and processes. Industry 4.0 is the collective term for technologies and concepts of value chain organization (Herman, Pentek & Otto, 2015). It is based on modern technologies that are used not only to improve work, but also to manage and automate processes (Lee, Kao & Yang, 2014). Industry 4.0. is a set of technologies and concepts in the areas of Internet of Things, smart factory and Big Data (Herman, Pentek & Otto, 2015; Ivanov, Dolgiu, Sokolov, Werner & Ivanova, 2016; Lee, Bagheri & Kao, 2015; Zawadzki & Żywicki 2016; Kopetz, 2011). Pfohl, Yahsi & Kurnaz (2015) distinguish more than 60 technologies and concepts related to this topic -

Figure 1.

Insert Figure 1 about here

Lately, an increasing number of publications on the subject stipulate that new technologies exert a great influence on the process of mass customization. Although mass customization was mentioned for the first time in the 80s of the twentieth century by Stan Davis in “Future Perfect” (Davis 1987), and was then further developed in the 90s by many researchers, mainly Pine (1993), it is still a topic worth continued discussion and additional research. Hitherto, customization was obtained thanks to an appropriate team preparing a product design, and then producing and delivering a finished product to a buyer. Currently, new technologies allow for a transfer of this entire process into the virtual world. This means that the product can be adjusted at any time, when the consumer deems it necessary, even after purchasing the product. (Büyüközkan & Göçer, 2018; Hofmann & Rüsçh, 2017). Such freedom offers consumers the ability to dynamically adapt the product to new needs, as well as to reflect their identity and effectiveness through creative design and modification throughout the life of the product. A new ecosystem of interacting objects, machines, cars and even entire factories emerges, capable of managing a new order, accepting it for implementation, producing and delivering it to customers by itself, practically without human intervention (Zhong, Xun Xu, Klotz & Newman, 2017).

In further discussion, technologies related to Industry 4.0 will be analyzed in the context of three mass customization strategies distinguished due to the range of activities performed in the supply chain (i.e. design, production and distribution). Based on the above considerations, the following hypotheses have been defined:

H1. Technologies from Industry 4.0 have a positive impact on mass customization in the area of product design.

H2. Technologies from Industry 4.0 have a positive impact on mass customization in the area of production.

H3. Technologies from Industry 4.0 have a positive impact on mass customization in the area of distribution.

METHODOLOGY

The data for the study were gathered through a questionnaire that consisted of three sections covering demography of the sample, Industry 4.0. technologies which are used in the supply chains and mass

customizations strategies¹. The research had a non-exhaustive character. The sample was compiled from surveys of European supply chains and consisted of 103 organizations. The study covered only the invited organizations that implement new technologies and offer the ability to deliver products to customers' orders in the strategy of mass customization. The questionnaires were usually filled in by the director of logistics, manufacturing, marketing or distribution. The data were retrieved from the included companies from Germany (37%), Poland (32%), Croatia (12%), the Netherlands (7%), Czech Republic (6%) and Slovakia (6%). The majority of companies were engaged in supply chains operating in the manufacturing industry (67%), whereas the others represented the transport and commercial sector (33%). In terms of the number of employees, the sample is composed of medium and large companies. 41% of the companies in the sample employed from 50 to 249 persons, whereas 59% of the companies employed above 250 people.

In order to investigate the effects of Industry 4.0. technologies on the mass customization strategies used in supply chains, a statistical analysis consisting of two stages was carried out (Hair et al., 1998). In the first stage, in order to highlight the major factors, independent variables through factor analysis were reduced. (O'Leary-Kelly and Vokurka, 1998; Sezen, 2008). In the second stage of the study, the multiple regression analysis was carried out (Hair et al., 1998). The use of multiple regression analysis allows to determine what type of technologies and concepts from Industry 4.0. are applied in particular mass customization strategies.

ANALYSIS AND RESULTS

The Factor Analysis was performed to summarize the information demonstrated by many variables and compress them into a smaller set of constructs (Hair et al., 1998). In order to perform the Exploratory Factor Analysis in the group of independent variables, the Principal Component Analysis (PCA) with the Varimax

¹ Description of questions in particular sections: (1) demography: general questions about supply chain (e.g. company size, localization, number of suppliers and clients) and product offer; (2) Industry 4.0 technologies: what kind and how technologies related to IoT, M2M, Big Data, cloud computing, Apps, mobile services, artificial intelligence, AIDC, Cyber Physical Systems, AR, machine learning, advanced analytics, data mining, smart data, BI, GUI, AR, VR, 3D printers, advanced robotics, embedded systems and process automation are used in the supply chains; (3) mass customizations strategies: in which entities of the supply chain the customization of the product occurs, what product characteristics it applies to (e.g. shape, composition, product description, packaging, name).

Rotation was employed. Based on the Kaiser criterion (Aczel, 1993), the analysis conducted on 21 items revealed four factors. As shown in Table 1, the obtained factors explain 68.29% of variance. As a result of the factor analysis, KMO coefficient was calculated. It accounts for .659, which is an average result, indicating the acceptable suitability of the sample for factor analysis (Bryman & Cramer, 1999).

Insert Table 1 about here

PCA allowed to specify the following factors:

- Factor 1: Data and connection (DC);
- Factor 2: Analytics and artificial intelligence (AAI);
- Factor 3: Human machine interaction (HMI);
- Factor 4: Automated machine park (AMP).

The first factor refers to data and communication. The analysis suggests that this construct generates the greatest value of 24.21%. The second factor includes the following two technological areas: analytics and artificial intelligence. The outcome of the analysis shows that this factor accounts for 18.25% of information. The third construct links to human-machine interaction and covers 15.61% of information. The fourth factor pertains to automated machinery park and explains the value of 10.22% of total variance. For the assessment of reliability, internal consistency and composite reliability, (*CR*) was calculated. For each of the four constructs, internal consistency, as measured by the Cronbach’s alpha, exceeded .7 and coefficients of *CR* estimated for the four constructs were above .7. Accordingly, the results of reliability may be considered satisfactory at this initial stage of the study (Nunnally & Bernstein, 1994).

In order to determine validity, both convergent and discriminant validity were calculated (Straub et al., 2004; Sezen, 2008). As depicted in Table 1, the average variance extracted (*AVE*) measuring the convergent validity was above .5 for all constructs. It indicates that all constructs are capable of explaining, on average, more than 50% of the variance of their indicators (Chin, 1998). Thus, a set of variables reflect one and the same major factor that may be depicted through unidimensionality (Fornell & Larcker, 1981). The constructs have the appropriate discriminant validity when the value of *AVE* for each construct is larger

than the squared correlations between the construct and any other considered construct. All constructs analyzed in the study met this criterion.

Insert Table 2 about here

Table 2 shows the values of *AVE* in the diagonal of the correlation matrix while the squared correlations between the constructs are placed off-diagonal. Consequently, the factor scores derived from the Exploratory Factor Analysis were used to develop the multiple regression models.

In the following stage of the analysis, a multiple regression model for each of the three variables indicating strategies of mass customization in supply chains was developed. It was used to test the hypotheses. Only the variables with the *p-values* of less than .05 were maintained in the model. In general, the regression analysis revealed that each analyzed type of mass customization has a model with significant independent variables and adjusted coefficients of determination ($R^2_{adjusted}$) ranging from .098 to .389.

DISCUSSION AND CONCLUSION

H1. Technologies from Industry 4.0 have a positive impact on mass customization in the area of product design.

The regression model developed for the mass customization in the area of product design demonstrates significant relationships with three groups of technologies from the Industry 4.0 field - Table 3. The obtained findings lend support to H1 and indicate that the new technologies contribute to shortening the delivery time of designed products to customers' orders, regardless of the industry type and company size.

Insert Table 3 about here

The most important tools for improving mass customization in the area of product development are technologies from the following groups: data and connection (.587, .000), analytics and artificial intelligence (.417, .000), as well as automated machine park (.512, .000). The remaining technologies, including human-machine interaction, have a substantially lower impact on mass customization in a supply chain in the area of product design (.150, .047). Cloud technologies and smart data facilitate fast transfer of necessary data and their processing for production. However, 3D printers give the possibility to manufacture products to individual customer's needs. These technologies allow to shorten the time of

product delivery to the market and ensure production flexibility. An example could be the American company Stratasys producing dentures to individual customer orders (Szozda, 2017). The traditional production of prostheses, including a process consisting of five stages, has been changed into a new dentures production model through the use of 3D printers. During the first meeting, the measurements are made and then processed in a computer system. This is where the prosthesis design is created, taking into consideration all medical indications and the patient's body structure. The prepared project is then printed on a 3D printer. The precision of the printout allows for preparation of a prosthesis that does not require any further adjustment, and the product is ready to be passed on to the patient. Standard production of prosthesis takes over 8 weeks before the finished product is given to a patient. Thanks to the use of new technologies, this period is shortened to one day, which is necessary for preparing a design and printing the prosthesis.

H2. Technologies from Industry 4.0 have a positive impact on mass customization in the area of production.

In case of this regression model, all four technology groups support mass customization in the production area; therefore, hypothesis 2 is maintained (the regression model supports H2). Moreover, the results depend on the size of the company - Table 4.

Insert Table 4 about here

Many companies can serve as an example of the use of all four technology groups from Industry 4.0. in mass customization within the production area. One of the applications used is configurator, which is available on manufacturers' websites. Among others, this solution is applied by Dell company, which implemented it already in the 1990s. The customer orders a computer on the Dell's website by selecting the model and available modules. Only when the order has been placed by the customer, the product is assembled and sent to the buyer. Very similar solutions are currently used by clothing companies. The Levi's company offers tailor-made trousers. The price of such a product is only 20% higher than the price of a standard product. Nike and Adidas offer shoes that can be designed by customers themselves – the buyer chooses, among others, the material and color of individual elements of the selected footwear model.

The companies producing sports footwear go a step further. In 2017, Adidas restarted production in Europe. In the 1990s, due to cost reduction, the decision was made to manufacture in Asia on a large scale. Now, for the same reasons, the production was transferred to Germany. On the area of 4,600 m², a fully automated factory was created, in which, among others, 3D carbon printers producing soles were installed. For now, they are produced in standard sizes, but in the future, it will be possible to adapt the product to the buyer's feet. Thanks to this solution, the manufacturer of sports footwear is closer to the market, and thus shortens the time of product delivery to the market.

Technologies from Industry 4.0 are also widely used in the production of goods of much greater value than clothing or personal computers. An example here is the automotive industry, where cars are configured to individual customer orders; however, all modifications are made within predefined product models. Customization in the automotive industry began in the 1990s. In 2010, customers could already create more than a few hundred different options for one car model from a given manufacturer. Customization of products in the automotive industry is supported by such technologies as production automation, robotics, cloud technologies, AR or IoT.

The leaders in the use of the latest technologies in product customization are German producers, including BMW company. The BMW customization strategy is implemented through: COSP (Customer-Oriented Sales and Production process), tools supporting customer service, supply chain management, development of ERP class systems and production automation (Khalek, Nirmal, & Loan, 2018). In 2002, the Customer-Oriented Sales and Production process, called COSP, was implemented. It covers all activities carried out in the supply chain, from the moment of placing an order until delivery of the product to the customer. The aim of COSP is to integrate and enable team operation of the producer, logistics operators and dealers in order to shorten the internal time needed to execute the order. Another element supporting the customization in BMW are sales support tools available for the customer online: interactive website, including an ordering system with the possibility of configuring the car to the needs of a given customer, E-brochure and the possibility of adding opinions and making a direct contact with the manufacturer. BMW strives to ensure that each car is highly individualized. The customers have an impact on an increasing number of elements,

including model, color, engine and interior equipment, which gives them the opportunity to create a large number of variants; for instance, for the BMW 7 Series, it is possible to create several dozen billion car variants (Adari, Thrane & Taube 2003). Another element supporting customization are the strategies implemented in the area of supply chain management. BMW establishes close cooperation with the suppliers of raw materials and components. In order to establish integration with the suppliers and dealers within the supply chain, BMW is constantly investing in the SAP ERP system. It also focuses on the automation of production and use of advanced robotics supporting the final stage of production. In 2016, BMW introduced a fully automated production line in Wackersdorf (Junka, 2017). The ultimate goal is to deliver the car in the shortest possible time (it currently takes 12 days from the moment of placing the order by the customer) and to reduce the production time by 50% (from 40 h to 20 h). In addition, BMW plans to lower the cost of electricity consumption by 50% and water consumption by 70%. All these activities are intended to reduce the costs of car production by 5%.

What can be observed in the case of technologies supporting mass customization in the area of production is that the size of the organizations implementing these solutions is significant. Big organizations seem to be more likely to take advantage of new technologies. This has been confirmed both by the case studies and the obtained results - Table 4.

H3. Technologies from Industry 4.0 have a positive impact on mass customization in the area of distribution.

As can be inferred from the results, there are only two groups of technologies that significantly affect mass customization of products in the supply chain in the area of distribution. These are respectively: data connection (.218, .000) and human machine interaction (.334, .001) - Table 5. The obtained results do not support H3 and show that a limited number of technologies from the Industry 4.0 field contributes to the promotion of mass customization in the area of distribution in a supply chain. The research also demonstrated the dependence of the obtained results on the type of industry in which a given supply chain operates.

Insert Table 5 about here

Increasingly, product customization takes place at the contact point between the producer and the commercial network, and it is the commercial network that dictates the customization conditions for the manufacturer. Mass customization in the distribution area is transferred into transport and storage processes. It usually applies to a very large number of products. Therefore, the implementation of automation becomes impossible due to retooling and the need to adapt processing lines to changing products, which are often very diverse in terms of physical characteristics. Diversity and flexibility limit the possibility to use automation.

An example is the Polish branch Procter & Gamble, where approx. 700 products are customized, which accounts for 18% of the company's turnover. The preparation of a product in the process of customization, from the moment when the order has been placed by the customer, until the finished product is delivered, currently takes an average of 10 weeks. Ultimately, the company wants to reduce this period to 4 weeks; however, Procter & Gamble does not plan to use modern technologies for this purpose.

In the process of customizing products in the area of distribution, companies also use the Internet of Things technologies. They allow for the collection of information about the product after it has been sold, and also give the possibility to adjust the product to the individual needs of customers. An example here is the solutions used in a household, such as an intelligent refrigerator, a washing machine, a heating control system, or a car. These are the devices that, thanks to IoT, can be combined with each other, which gives the possibility of individual adjustment and remote control of everyday items from anywhere in the world. Another group of technologies is Augmented Reality and the inextricably connected GUI. These are solutions that are primarily used by distributors and logistic operators. More and more often, the last stage of production, i.e. assembly, is transferred into the distribution area, and AR and GUI technologies allow for the correct performance of manufacturing activities by warehousemen. AR and GUI enable them to obtain remote instructions for the correct implementation of given operations.

IMPLICATIONS AND FURTHER RESEARCH

The results of the conducted research and the presented case studies show that technologies are increasingly used to improve the mass customization of products. This applies to all customization strategies, from

design, through production, to distribution. This is most noticeable in the area of production, where automation, robotics and centralization of management allow to increase flexibility and shorten the delivery time of the product to individual customer orders. The most limited is the use of technology in the distribution area, where often the impact of Industry 4.0 on product customization is narrowed only to improvement in the efficiency of communication between the customer and the manufacturer (Zawadzki & Żywicki 2016). The need for a flexible approach and a very large number of diversified products limit the possibility of using new technologies in this area. However, companies are constantly looking for new applications and solutions in the field of new technologies. Intensive research is continuing, and the software engineering market is one of the most evolving sectors. Among other factors, this is dictated by the difficulties in the labor market and the need to be closer to the client, in order to meet the individual demands more quickly.

On the basis of the conducted research, it can be noticed that the technologies that are of the least importance in the case of mass customization are advanced robotics and process automation, because they do not support the flexibility of processes. Simultaneously, the most widely used technologies include: Internet of Things, Augmented Reality, cloud technologies and 3D printers.

The conducted study focuses not only on the cognitive aspect. It also provides practical implications for the managers responsible for supply chains or their sub-suppliers. It allows for a better understanding of the changes taking place in the supply chains as a result of the fourth industrial revolution, in particular the use of new technologies. It gives an image of how new technologies affect the customization of products and, within its framework, the delivery time of products and production flexibility. As a result of the conducted study, it is possible to observe the progressive changes in organizations, including the need to change the competence of employees, who are less and less likely to do physical work and more increasingly deal with such tasks as operation and control of systems and devices. The presented research is also intended to be an inspiration for supply chain managers in the context of using Industry 4.0, which gives opportunities not only in the area of production, but also supply and distribution. Additionally, the results of the conducted study may serve as an indication for sub-suppliers in the supply chain, among others, logistic operators and

software delivery companies, since they allow to observe the needs of supply chains in the area of new technologies, allowing sub-suppliers to properly construct the right offer of services rendered within supply chains to become competitive on the market.

The conducted research can be treated as a pilot study, which should be extended to a larger group of supply chains and other processes in a supply chain. It is worth conducting such an analysis, not only on a group of European companies, but also with the extension to American or Asian organizations. According to the study carried out in 2000, not all societies desire customized products to the same degree. To a large extent, this depends on the market on which the products are offered (Williams, 2000)².

Therefore, consideration of cultural aspects in a given society and the characteristics of the markets on which the products are offered is an issue that requires an in-depth analysis.

It would also be valuable to examine the use of technology in mass customization in a group of small companies and to supplement the results of this article with the results obtained for the small companies, in order to recognize their specific character and compare them with the practices used in the group of medium and large enterprises.

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² In Europe, the sale of customized cars was only about 50%, the remaining cars were sold from the warehouse. In Japan, the sales rate of customized products was the highest - around 60%, while in the US was the lowest - just 6%.

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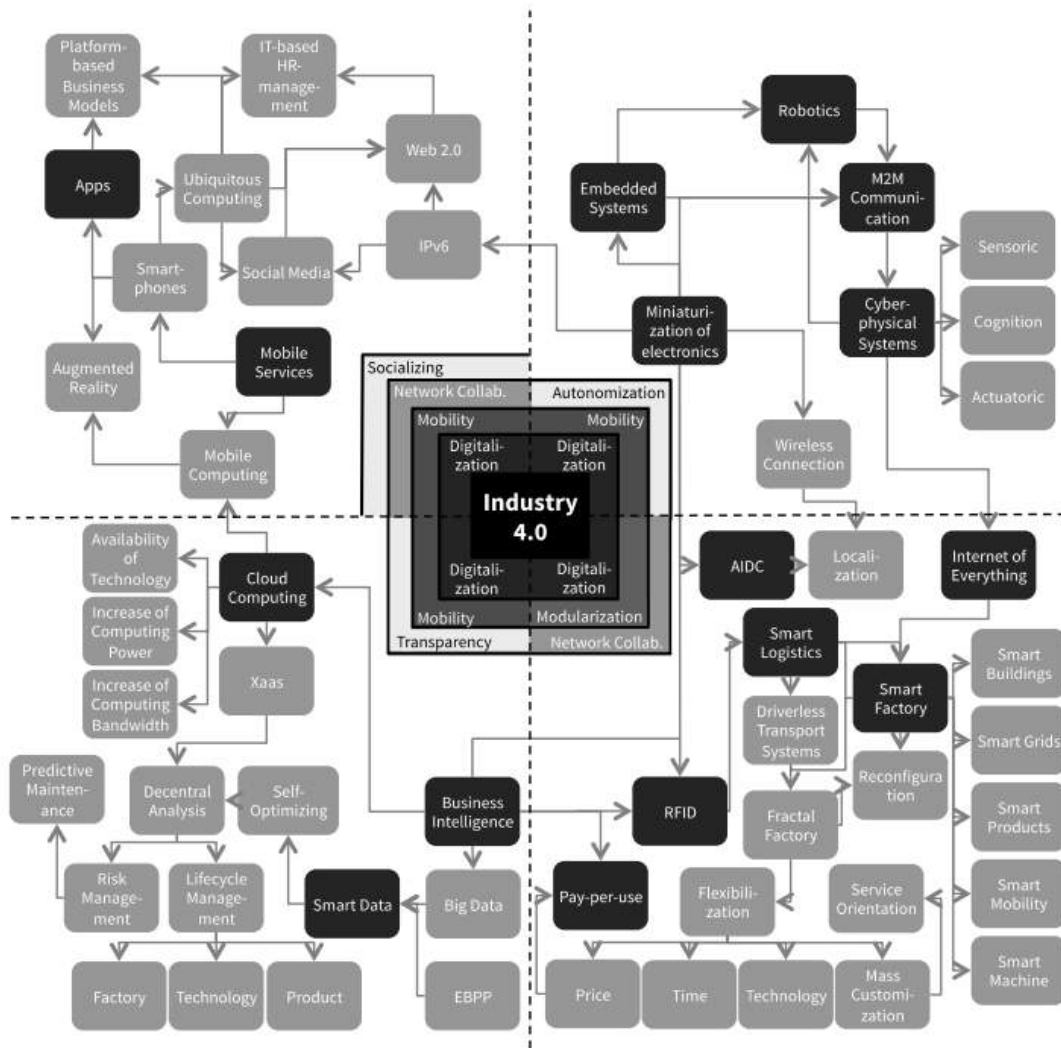


Figure 1. Mind-map of discussed technologies and concepts within the relevant literature.
 Source: Pfohl, Yahsi & Kurnaz, 2015

Table 1. Structure of the Constructs Obtained through the Factor Analysis

Factor loadings Extraction: Principal components Varimax rotation				
<i>Independent variables</i>	<i>Factors</i>			
	<i>DC</i>	<i>AAI</i>	<i>HMI</i>	<i>AMP</i>
<i>Use of Internet of Things technologies</i>	.863			
<i>Use of Machine to Machine communication technologies</i>	.721			
<i>Use of Big Data technologies</i>	.711			
<i>Use of cloud computing technologies</i>	.805			
<i>Use of Apps technologies</i>	.632			
<i>Use of mobile services</i>	.751			
<i>Use of AIDC (Automatic Identification and Data Capture) technologies</i>	.799			
<i>Use of cyber physical systems</i>	.645			
<i>Use of artificial intelligence</i>		.650		
<i>Use of machine learning technologies</i>		.615		
<i>Use of advanced analytics</i>		.780		
<i>Use of data mining</i>		.861		
<i>Use of smart data</i>		.741		
<i>Use of Business Intelligence</i>		.600		
<i>Use of graphical user interface (GUI)</i>			.615	
<i>Use of Augmented Reality technologies</i>			.914	
<i>Use of Virtual Reality technologies</i>			.683	
<i>Use of 3D printers</i>				.750
<i>Use of advanced robotics</i>				.620
<i>Use of embedded systems</i>				.843
<i>Use of process automation</i>				.610
Cronbach's α – should be lower than CR	.813	.901	.768	.722
CR	.907	.859	.787	.801
AVE	.554	.509	.560	.507
Eigenvalue	3.01	1.52	1.28	1.015
% total variance explained	24.21	18.25	15.61	10.22
Cumulative % variance explained	24.21	42.46	58.07	68.29

Table 2 Matrix of correlation coefficients among construct scores

Constructs	DC	AAI	HMI	AMP
Data and connections (DC)	.554			
Analytics and artificial intelligence (AAI)	.099	.509		
Human machine interaction (HMI)	.173	.410	.560	
Automated machine park (AMP)	.206	.291	.311	.507

Note: The values of AVE are provided in italics in the diagonal; the squared correlations between the constructs are given off-diagonal

Table 3. Regression analysis for H1

Dependent variable	Independent variables	Std. Coef.	t-value	Sig.	adj. R sq.*
Mass customization – product design	F1: Data and connection (DC)	.587	3.85	.000	.326
	F2: Analytics and artificial intelligence (AAI)	.417	4.55	.000	
	F3: Human machine interaction (HMI)	.150	1.99	.047	
	F4: Automated machine park (AMP)	.512	5.35	.000	
	<i>Industry type</i>	.013	.26	.698	
	<i>Company size</i>	.027	.31	.751	

Table 4. Regression analysis for H2

Dependent variable	Independent variables	Std. Coef.	t-value	Sig.	adj. R sq.*
Mass customization – production	F1: Data and connection (DC)	.675	4.08	.000	.389
	F2: Analytics and artificial intelligence (AAI)	.314	2.13	.034	
	F3: Human machine interaction (HMI)	.417	4.55	.000	
	F4: Automated machine park (AMP)	.324	4.42	.000	
	<i>Industry type</i>	.241	1.92	.055	
	<i>Company size</i>	.155	2.41	.023	

Table 5. Regression analysis for H3

Dependent variable	Independent variables	Std. Coef.	t-value	Sig.	adj. R sq.*
Mass customization – distribution	F1: Data and connection (DC)	.218	3.82	.000	.098
	F2: Analytics and artificial intelligence (AAI)	.041	0.85	.396	
	F3: Human machine interaction (HMI)	.334	3.25	.001	
	F4: Automated machine park (AMP)	-.019	-0.31	.756	
	<i>Industry type</i>	.185	2.31	.021	
	<i>Company size</i>	.016	.028	.789	

Understanding and Preparing for the Societal Impacts of Process

Automation

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Paper Abstract

Process automation methods and technologies are advancing and penetrating society and organisations at an exponential speed. Through a literature review, this paper aims to consolidate currently scattered discussions on the very important aspect on how process automation impacts society. It identifies themes of critical importance and highlights those that have been acknowledged but are under-addressed. It is intended for professionals who are essentially leading these digital transformations and process innovations; to be more aware of the societal implications and to provide some guidelines on what can be done to minimise negative and maximise positive societal implications of process automation.

Keywords: Future of work, Process automation, Sustainability, work design

Understanding and Preparing for the Societal Impacts of Process Automation

Abstract

Process automation methods and technologies are advancing and penetrating society and organisations at an exponential speed. Through a literature review, this paper aims to consolidate currently scattered discussions on the very important aspect on how process automation impacts society. It identifies themes of critical importance and highlights those that have been acknowledged but are under-addressed. It is intended for professionals who are essentially leading these digital transformations and process innovations; to be more aware of the societal implications and to provide some guidelines on what can be done to minimise negative and maximise positive societal implications of process automation.

Keywords: Future of work, Process automation, Sustainability, work design

1. INTRODUCTION

Digital technologies have the potential to replicate ideas, processes and innovations at extremely low cost (Brynjolfsson & McAfee, 2015). While this aspect of digitalisation brings many positive benefits for society it also carries the potential of reduced demand for various types of labour (Brynjolfsson & McAfee, 2015). Within an organisational context, the introduction of new, digital cognitive technologies such as Artificial Intelligence (AI), Natural Language Processing (NLP) and Machine Learning (ML) enable new, previously unimaginable business processes. It is now possible for smart robots to act as full-fledged members of a business process, automating both routine and non-routine activities and collaborating with humans in a variety of ways (Zarkadakis, et al., 2016). Cognitive technologies are beginning to explore unstructured and non-process context data (e.g. policies, regulations or emails), bringing new levels of process flexibility to organisations through the ability to automate unpredictable, fragmented and knowledge-intensive business processes (Hull & Nezhad, 2016; Kerpedzhiev, König & Rosemann, 2017).

Some suggest that society is now firmly engaged in a ‘race against the machine’ (Brynjolfsson & McAfee, 2011). In a widely cited paper, Oxford University researchers Frey and Osborne (2013), estimate that 47% of total US employment is at risk of automation in the next decade or two. The World Bank estimates that 77% of jobs in China are at high risk of automation, with similar numbers for India, South Africa and Brazil (World Bank Group, 2016). On a global level, research from McKinsey finds that approximately half of the activities performed by the world’s workforce could be automated using *currently available technologies* and almost every occupation having at least partial

automation potential (Manyika et al., 2017). The impacts of automation cut across many sectors and employment across all levels. MIT economist Erik Brynjolfsson states that the changing nature of the future of work is “*the biggest challenge of our society for the next decade*” (as quoted in Miller, 2014, p. 2).

Despite the high attention on how business processes could adapt to the emerging digital and cognitive technologies, there has been a lack of understanding on current societal impacts¹ of process automation. This paper explores “*What are the societal impacts of process automation?*” It aims to synthesize existing discussions, build awareness and trigger discussions, to form a springboard for future, deeper pieces of research into the societal impacts of process automation.

2. STUDY APPROACH

The review adheres to the grounded-theory-based guidelines of Wolfswinkel, et al. (2013). A Grounded Theory methodology was selected for this paper as it enables a more thorough and transparent review. The literature search commenced using the key words of; “Business Process Management”, “automation”, and “impacts” and synonyms thereof, focusing on Business Process Management, Business, Information Systems and Computer Science domains (given the study context). Association of IS e-Library (AISEL), ABI/Inform, Scopus and Emerald were targeted as the main data bases. After having analysed the collected papers (with further forward and backward searching), which resulted in only very limited number of papers, the search strategy was expanded to other domains such as Economics, Labour markets, Operations management, Government policy; to identify papers that referred broadly to processes and the societal impacts of process automation; which were carefully screened for relevance. Given the volume of material retrieved from this extended search and in recognition of the rapid pace of digital developments, a temporal frame of 5 years was set to limit the results and to make the analysed content more contemporary. The search took place in the second half of 2017, hence only papers from 2012 onwards were included. The only

¹ Societal impacts can be defined “*as the net effect of an activity on a community and the well-being of individuals and families*” (Centre for Social Impact, 2017, p. 1). Examples of societal impacts on a community are; those relating to employment, training & education, labour/management relations, the health & safety of workers, and diversity & equal opportunity

exception to this was the inclusion of Erik Brynjolfsson & Andrew McAfee's (2011) seminal and widely cited book "*Race Against The Machine*". Paper inclusion and exclusion guidelines were developed and adhered to. An explicit decision was made to exclude papers that focused only on the organisational impacts such as change management, cost, value and training of employees given that these are already well understood. This allowed to better focus on broader societal impacts; to consider impacts in terms of individuals, groups and governments etc.

All the extracted resources together with their bibliographic information were entered into ENDNOTE (a reference management tool). Microsoft EXCEL sheets were set up with corresponding coding rules (Saldaña, 2009), as the coding and synthesis support tools/ mechanism. The papers were read and relevant information captured as themes and recorded within the set Excel sheets (against the paper references). After having performed a first pass of all the papers key themes were aggregated into higher level groups for better sense making and reporting.

A second coder was engaged in the quality assurance of the paper selection, coding and synthesis of the papers (which was iterative in nature) with multiple coder corroboration sessions taking place at the different phases.

3. FINDINGS

We commence the presentation of the findings with an overview (derived from literature) which summarises the different eras of automation, and automation technologies applied for process automation (Section 3.1). Then the results of the thematic analysis is presented; summarising the main societal impacts (3.2), and actions been taken and/or recommended to date (3.3) to address some challenges.

3.1 Background: Eras of automation and automation technologies

Davenport and Kirby (2015, 2016) define three major eras of automation based on the types of work challenged by machines. *Table 1* is a summary of these three eras, their impacts and the reaction from society toward each wave.

<Insert Table 1 - The Three Eras of Automation>

Three major categories of knowledge-worker automation tools are driving the most recent era of automation: Robotic Process Automation (basic & advanced), Cognitive Automation and Social Robotics. In *Figure 1*, we have integrated research from Zarkadakis, et al. (2016) on the three most common categories of process automation technology with research from McGuire (2017) on the specific process & data input characteristics that each automation technology is best suited to.

<Insert Figure 1 - Automation technologies and their process characteristics>

3.2 Impacts

With the maturing of cognitive technologies, a much greater proportion of the tasks performed by knowledge workers will either be able to be replaced or augmented by machines. This future has significant impacts for society. The most popular and significant impact mentioned in the literature is on employment changes (see Section 3.2.1), and the other anticipated societal impacts (3.2.2-3.2.6) that closely relate to employment².

3.2.1 Employment implications of process automation

When widely cited Oxford University researchers Frey and Osborne (2013) released their findings into the susceptibility of jobs to computerisation, significant debate commenced into the increasing threat of unemployment and has continued (Pulkka, 2017). *Table 2*, summarises the key impacts to employment with jobs requiring minimal qualifications, repetitive activities and standardised environments being most impacted and jobs with creative intelligence, social intelligence or perceptual tasks in non-standard environments being least impacted.

<Insert Table 2 – Employment Implications of process automation>

² During the inductive data coding and analysis phase, the Global Reporting Initiative (2011) guidelines for Social Sustainability was used a reference framework to support with sense making and final grouping of the themes.

There is large debate within the literature about the impacts to employment of automation technologies. The debate has largely bifurcated into two groups with each presenting their own version of the future impact of automation. *Table 3* summarises the pessimist ‘this time is different’ scenario and the techno-optimist, ‘this time is no different’ scenario. It also presents a third ‘middle-ground’ perspective of ‘this time is *a bit* different’, which started to emerge in more recent times.

<Insert Table 3 – The future impacts of automation>

The pessimists, for example Davidow and Malone (2014), believe that “*this time is different*” (Pulkka, 2017, p. 3; Schwab, 2016, p. 9) because the exponential development of intelligent machines and robots will drive down the value of human labour, resulting in permanent high levels of unemployment (Brynjolfsson & McAfee, 2011; Davidow & Malone, 2014).

The second group, the techno-optimists, for example Autor (2015); Davenport and Kirby (2016), believe that “*this time is no different*” (Pulkka, 2017, p. 4; Schwab, 2016) and that new jobs will spring up to replace the ones that disappear. David Autor’s “O-ring model” (2015, p. 4), argues that any improvements in the reliability in one of the links, will lead to an overall increase in the value of the improvements in all of the others (Autor, 2015). By incorporating cognitive automation technologies into a process to support, for example, human doctors in generating accurate medical diagnoses, the overall effectiveness and accuracy of the diagnosis process is improved. Even as certain jobs will likely be replaced through automation, Autor (2016) argues that due to humans’ endless desire and inventiveness, new ‘needs’ will require new jobs that are almost impossible for us to conceive at the present time.

We also found a third likely scenario predicting the impacts of automation on employment that we describe as ‘this time is *a bit* different.’ This scenario describes a future where automation will fail to completely destroy the large numbers of jobs as predicted by Frey and Osborne (2013), but also one in which the quality and composition of jobs will change (Autor, 2015) and that middle- and low-skilled workers will be mostly and unfairly affected (Manyika, et al., 2017) leading a rise in inequality (Arntz, et al., 2016).

While there are various perspectives at either extreme of the spectrum on whether automation will be beneficial or detrimental for society, more nuanced analysis would suggest that even if automation does not affect the overall quantity of jobs available, it will still affect both the quality and task composition of jobs (Autor, 2015; Chui, et al., 2016; Pulkka, 2017). This view effectively calls for a re-examination of what a job actually is—how it's defined and structured in the context of automation technologies (Jesuthasan, Malcolm, & Zarkadakis, 2016).

3.2.2 *Training and education implications of process automation*

The rapid increase in the use of automation technologies in the workplace has significant implications (*see Table 4*) for training current and future workers across the different skills spectrums and at different education levels; including secondary, tertiary, vocational and professional. The literature indicates that there are some investigations by governments (The Economist, 2017) around developing new education policy that responds to the predicted impacts of automation. However, little has been written about the preparedness of organisations to invest in training and in preparing employees to deal with the rapid rate of technological change. At the same time, attitudinal readiness, being the readiness of employees to embrace working with and collaborating directly with machines, has not been discussed in the literature.

<Insert *Table 4 – Training and education implications of process automation*>

3.2.3 *Implications to Labour/management relations from process automation*

Decreased membership of unions, due in part to increasing levels of automation, diminishes the capability of unions to negotiate better contracts, attract more members and penetrate new establishments (Autor, 2014). A weakening in trade unions makes them less able to engage in bargaining or organising against any widespread displacement of workers (Pulkka, 2017). This means fewer strong voices to advocate on behalf of employees about the impacts of automation including fewer jobs, the needs for retraining and the health and wellbeing of workers. If the trend of decreased union membership continues, workers will need to find other mechanisms such as digital communities to collectively organise and negotiate.

3.2.4 *Implications to health and safety of workers from process automation*

Discussions of the health and safety impacts of process automation is minimal in the current literature, with only a few pockets of discussions. *Table 5*, presents some discussed effects of process automation techniques such as Lean Manufacturing and Just-in-Time scheduling. The literature concludes that if Lean Manufacturing methods are implemented properly, they can have a positive impact to employees. If implemented badly, the effects can be extremely harmful (Resta, et al., 2017). Just-in-time Scheduling relies on software algorithms and predictive analytics to ensure that precisely the ‘right’ amount of staffing is deployed when and where it is needed—often at short notice (Degryse, 2016). This ‘flexibility’ of working hours can lead to the combination of work and family life being severely disrupted and an increase in employee stress levels and work hours (Degryse, 2016). Given the limitations in the literature, further investigation is warranted into this much broader set of secondary societal implications for the health and safety of workers. These secondary impacts could include mental health conditions such as depression, which can lead to other societal disruptions such as an increase in drug and opioid addition rates (Gillespie, 2017).

<Insert *Table 5 –Implications to the health and safety of workers from process automation*>

3.2.5 *Implications to diversity & equal opportunity from process automation*

As intelligent technology is embedded into an increasing number of processes, there is greater potential for unintended discrimination against specific groups of people. In one example, Google had to apologise after an intelligent automatic photo tagging system labelled people of colour as “Gorillas” (Frankenstein’s paperclips, 2016, p. 8). In another separate perspective on the implications for male workers, Autor, Dorn, and Hanson (2017) find that as a result of local declines in employment caused by increased levels of manufacturing automation and a rise in trade with China, a fall in employment & earnings, an increase in the rate of male mortality from drug and alcohol abuse, a reduction in the proportion of young adults entering marriage and a weak rise in the proportion of births to teen and unmarried mothers. (Autor, et al., 2017, p. 37). The authors conclude that declining employment and earnings opportunities faced by young men are plausible contributors to a reduction in the marriage

market value of men and ultimately to a change in structure of marriage and childbirth in the US (Autor, et al., 2017).

3.3 Recommended actions to be considered

In this section, we present a range of recommendations (synthesised from current discourses and enhanced with our interpretations) for individual workers and governments on how to prepare and respond with the present and future-potential impacts of process automation technologies.

3.3.1 Individual workers/ employees in general

By understanding how automation puts certain activities more at risk, workers can rethink how they can best engage with their jobs and plan their careers (Chui, et al., 2016). Automation strategies typically involve starting with an existing process and then subtracting activities away from it to reduce costs and improve efficiency. Davenport and Kirby (2015) argue that this approach limits our thinking to within the parameters of the work that is currently being performed today. Augmentation, by contrast, means starting with the work or process that people currently perform today and finding ways that work could be *enhanced* rather than diminished by smart machines (Davenport & Kirby, 2015). For example, while workers employed in film processing were ultimately displaced, augmentation through digital technologies unleashed many photographers, allowing them to do more and at a lower cost than before (Hajkiewicz, et al., 2016).

For individual workers and those that are providers of work, Davenport and Kirby (2016) propose a change in mindset—a reframing of the threat of automation as an opportunity for *augmentation*. In a future of work where software performs the bulk of the cognitive ‘heavy-lifting’, Davenport and Kirby (2015; 2016, pp. 76-77) propose five paths toward employability for individual workers: 1) *Stepping up* – You invest in completing an MBA or PhD to move above the automated systems to develop big-picture insights that are too ‘vast’ or ‘fuzzy’ for machines to make. 2) *Stepping aside* – You build on your abilities to work with people and your non-codifiable strengths (e.g. creativity, humour, empathy) to move to a new type of work such as counselling, motivating people,

acting, dancing or writing. 3) *Stepping in* – You pursue some STEM³ education and build your business knowledge to become more engaged with computer systems’ automated decisions to monitor and modify their function. This could include learning a programming language and being able to implement the automation technologies that power organisations. 4) *Stepping narrowly* – You look for and, master a niche that is so narrow that no one is attempting to automate yet. An example we suggest of a niche role could be that of the Ecosystems Architect—an emerging role responsible for the planning and design the digital marketplaces of the future. 5) *Stepping forward* – You stay at cutting edge of developments in computer science and analytics to develop the next generation of smart machines.

3.3.2 Governments

In this third era of automation, governments do not have the luxury of time to study the impacts of a particular technology and create a necessary policy response or regulatory framework (Schwab, 2016). New structures are required to rapidly develop policies that can prevent a backlash against the increasing levels of labour market dislocation caused by widespread automation (Burkhardt & Bradford, 2017). Borrowing from agile software development practices, Burkhardt and Bradford (2017) propose a new policy development approach—agile governance. Adapting this, governments should be constantly reviewing and responding to: ‘which jobs are being automated under which economic circumstances?’, ‘which jobs can be elevated in skill (and wages) through cognitive software augmentation?’, ‘which skills are required for the new jobs and what retraining is required for existing jobs?’, and ‘what are the factors that prevent workers from retraining?’. Literature discusses how governments should prepare for changes in a range of areas including Education, Investment & Job Creation, and Welfare & Taxation.

Education: Lifelong learning programs are government policy solutions that allow workers to update their skills and training as required throughout their careers based on the needs of the worker, the industry and the impacts of new technologies (Burkhardt & Bradford, 2017). *The Economist’s*

³ STEM= Science, Technology, Engineering and Maths

(2017) report into lifetime learning highlights several initiatives being trialled (see *Table 6*) by various governments as a way of continually supporting their citizens in responding to the impacts of automation and to prepare for new technological developments as they occur:

<Insert *Table 6 – Examples of government education programs, in response to automation*>

Investment & Job Creation: If education policy is a long-term strategy for minimising automation's threat of a much smaller workforce, government job creation policy could be thought of as a more near-term response that deals with the immediate employment impacts of automation (Davenport & Kirby, 2016). Within the literature, various examples of job creation policies exist to address the immediate threat of automation:

- Government investment in projects that support peoples' desires to engage in artistic production and for the government to pay for many volunteer services that are currently performed for the good of communities (Davenport & Kirby, 2016).
- Government investment through the creation of new jobs in areas such as taking care of children and the elderly, health & environment, cities & community development (Hajkowicz, et al., 2016).
- Upgrades to infrastructure to absorb slack in the labour market and improving productivity by facilitating mixing of ideas, people and technologies (Brynjolfsson & McAfee, 2011).

In response to the impacts of automation, we find that the literature contains only general policy recommendations around investment and job creation with little detail on the feasibility of their implementation or their practical effectiveness.

Welfare & Taxation: If the pessimists as described in Section 3.2.1, are correct in their dismal prophecies of machine-human substitution, our chief economic problem will not be one of lack of wealth but one of distribution (Autor, 2015). In *Table 7*, we summarise the leading policies found in the literature that aim to address the lack of a fair wealth distribution exacerbated by automation.

<Insert *Table 7 – Welfare and taxation policy responses to automation*>

A popular policy response to the impact of job losses and distribution conflicts caused by automation is the Universal Basic Income (UBI) or guaranteed minimum wage (Hendrickson & Galston, 2017; Pulkka, 2017). The UBI is designed as a practical measure to make work pay and diminish economic disincentives in social security such as low-paid work (Pulkka, 2017). Opponents of the UBI argue that employment itself has value beyond generating an income in being able to provide meaning in life (Davenport & Kirby, 2016) with guaranteed jobs beating guaranteed incomes. With so much of one's identity placed around their job and the contribution that they are able to make being in that job, it would seem extremely unlikely that society would function effectively with an army of machines and software generating all the value, leaving humans without a purpose and reliant on the government for their existence.

4 DISCUSSION AND CONCLUSION

This review aimed to collate and synthesize existing discourses on the societal impact of process automation, to gain a deeper understanding of the impacts process automation brings to society as a whole, to see where the gaps were and to also see what specific actions professionals leading process-centric reforms should consider.

Prior to our work, a synthesised discussion of the societal impacts of process automation was very limited. Our analysis presents a broad range of findings on the societal impacts of process automation. On the potential long-term question of whether process automation will be beneficial for employment, we did not find the pessimist 'this time is different' scenario or the techno-optimist 'this time is no different' to be more plausible than the other. This led us to propose our own third future scenario that we summarised as 'this time is *a bit* different' (see Section 3.2.1 and *Table 3*). In this scenario, we found it possible that automation will not have the effect of causing mass unemployment but one in which certain components of workers' jobs are either replaced or augmented by machines and one in which many new, currently inconceivable jobs are created to provide people with income, but more importantly, with meaning in their lives.

Some authors acknowledge the impacts of this topic but rarely give specific guidelines on what needs to be done. Our work consolidates the diverse ‘remedial-actions’ taken and recommendations made to date and presents them in two groups. Actions/recommendations for both individual workers and governments. However, we recognise that further work must be performed as part of a much larger program of investigation into the societal impacts of process automation.

This review pointed to a range of gaps in the current literature where important areas are under researched. These include:

- The impacts of process automation to developing nations—a very large proportion of the research appears to be biased around a US-centric view with a lack of investigation into the direct and indirect societal impacts within other country contexts; especially developing nations;
- the impacts to human identity and purpose as a result of job loss;
- implications of automation technology for education and training at all levels;
- the secondary health and safety impacts to workers including mental health and possible opioid addiction (due to changes of mental conditions);
- impacts to women in organisations/society; and
- a lack of details on the implementation and effectiveness of government policy solutions to the impacts of automation.

Our work is intended to act as a springboard into much larger programs of investigation into the societal impacts of process automation. This paper is timely because we cannot delay any further our discussions on the broader impacts that people will feel only as an after-effect of the decisions that we make now around how we use process automation technology.

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TABLES

Table 1 – The Three Eras of Automation

AUTOMATION ERA	TECHNOLOGIES	IMPACTS TO JOBS & INDUSTRY	SOCIETAL ANXIETY & RESPONSE
ONE – 19th CENTURY	Steam engines, Spinning frames, stocking frames and power looms (Davenport & Kirby, 2016).	Machines relieve humans of manually exhausting, dirty and dangerous work – factories, looms and steam engines (Davenport & Kirby, 2015).	A machine-trashing rebellion in response to the rapid automation of textile production. (Autor, 2014; Frey & Osborne, 2017).
TWO – 20th CENTURY	Semiconductors, mainframe computing, personal computing and the internet (Schwab, 2016)	Machines replace dull, routine service transactions and clerical chores – airline kiosks, self-service call centres and automated teller machines (Davenport & Kirby, 2015).	Ford motor company workers rise up against unprecedented automation of assembly lines in Brook Park, Ohio (Davenport & Kirby, 2016).
THREE – 21st CENTURY	Machine Learning, Artificial Intelligence and Natural Language processing (Davenport & Kirby, 2015).	Intelligent machines take away decisions from humans & learn to automate judgement-intensive processes – autonomous drivers, medical diagnosticians, paralegals and other “knowledge workers” (Davenport & Kirby, 2015).	Strong support for Donald Trump in the 2016 Presidential election in middle-income electoral districts most exposed to automation. (Frey, Berger & Chen, 2017).

Table 2 – Employment Implications of process automation

IMPACTS	KEY FINDINGS	REFERENCES
Implications for the USA	<p><i>Perspective 1:</i> Within the next decade or two, 47% of total US Employment is at risk of being automated.</p> <p>Jobs most at risk: Workers whose jobs are most at risk include transportation, logistics, office administrative & support workers and service occupations.</p> <p>Jobs most at risk: Occupations that involve performing activities or operating machinery in a predictable environment (e.g. packaging products, welding & maintaining equipment, data collection/processing and interacting with customers).</p>	<p>(Frey & Osborne, 2013, 2017)</p> <p>(Chui, et al., 2016)</p>

	<p><i>Perspective 2:</i> Automation and digitalisation are less likely to destroy large numbers of jobs.</p> <p>Jobs most at risk: Low qualified workers are most likely to be impacted as the automatability of their jobs is higher compared to highly qualified workers.</p>	(Arntz, Gregory, & Zierahn, 2016)
Implications for Europe	<p>Between 45% and 60% of jobs over the coming decades are at risk of being significantly impacted by technology.</p> <p>Jobs most at risk: Those involving little creative intelligence, social intelligence or perceptual tasks.</p>	<p>Bowles (2014a)</p> <p>(Bowles, 2014b)</p>

Table 3 – The future impacts of automation

KEY FINDINGS	REFERENCES
<i>The techno-optimists view of ‘this time is no different’</i>	
<ul style="list-style-type: none"> • This time is different and we're heading for permanent high levels of unemployment. • Moore’s law continues to dictate the doubling of computing power every 12-18 months, this rate of progress is embedded into the development of intelligent machines and robots that will dominate the economy and drive down the value of human labour. Faced with the exponential gains in technology, it becomes more difficult to see how workers can update their skills and education quick enough in what may become a “nowhere left to run” situation. 	<p>(Davidow & Malone, 2014; Pulkka, 2017; & Schwab, 2016) (Brynjolfsson & McAfee, 2011; Davidow & Malone, 2014). (Pulkka, 2017, p. 3).</p>
<i>The techno-optimists view of ‘this time is no different’</i>	
<ul style="list-style-type: none"> • This time is no different and new jobs will spring up to replace the ones that disappear. • Tasks that cannot be substituted by automation are generally complimented by it. • Autor’s (2015) “O-Ring model” describes a situation whereby a failure in any one link in the (process) chain leads to the entire production process to fail. Conversely, any improvements in the reliability in one of the links, leads to an overall increase in the value of the improvements in all of the others. For example, augmenting human doctors with cognitive automation technologies to generate more accurate medical diagnoses. • Autor's (2016) “never-get-enough” principle argues that due to humans’ endless desire and inventiveness, new ‘needs’ will require new jobs that are almost impossible for us to conceive at the present time. For example, no one during the first industrial revolution would have predicted the need for mobile application developers in 100 years’ time. 	<p>(Pulkka, 2017; Schwab, 2016) (Autor, 2015). (Autor, 2016)</p>
<i>A new view that ‘this time is a bit different’</i>	
<ul style="list-style-type: none"> • A future where automation will fail to completely destroy the large numbers of jobs as predicted by Frey and Osborne (2013). However, the quality and composition of jobs will change (Autor, 2015) and that middle- and low-skilled workers will be unfairly affected (Manyika, et al., 2017) leading a rise in inequality (Arntz, et al., 2016). 	<p>(Autor, 2015); (Manyika, et al., 2017); (Arntz, et al., 2016).</p>
<ul style="list-style-type: none"> • Even if automation does not affect the overall quantity of jobs available, it will still affect both the quality and task composition of jobs. • 50% of the tasks performed by the world’s workforce could be automated using currently available technologies, but that only 5% of jobs could be automated • The easiest activities to automate include tasks involved predictable physical work, processing data and data collection. Middle-income sectors such as manufacturing, food service, accommodations and retailing, based on technical considerations alone, these are the industries that are most susceptible to automation. 	<p>(Autor, 2015; Chui, et al., 2016; Pulkka, 2017). (Manyika, et al., 2017). (Chui, et al., 2016) (Autor & Dorn, 2013; Chui, et al., 2016).</p>

<ul style="list-style-type: none"> • The hardest activities to automate include many that are typically found in low-income jobs that require greater flexibility in unpredictable environments, visual and language recognition and in-person interaction Examples include, preparing a meal, driving a truck through city traffic, collecting rubbish, and cleaning hotel rooms (Autor & Dorn, 2013). • The “barbell effect,” otherwise known as employment polarisation, is a phenomenon that results in the concentration of jobs at both the low- and high-end of the labour market and the ‘hollowing-out’ of middle-income jobs. 	<p>(Autor, 2014; The Economist, 2016).</p>
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Table 4 – Training and education implications of process automation

KEY FINDINGS	REFERENCES
<ul style="list-style-type: none"> • A decreasing proportion of ‘routine work’ due to automation will require effective collaboration models to support ad-hoc and unstructured processes. • As cognitive technologies begin to make more of the ‘routine’ decisions for humans, work will require greater cognitive, creative and entrepreneurial capabilities. • Workers will be increasingly connected and, due to the rapid advancements in automation technology, will be required to learn constantly on the job. • The work not replaced by machines will be both communication- and knowledge-intensive. 	<p>(Kerpedzhiev, Lehnert & Röglinger, 2016)</p>
<p>High-school educators focus on teaching students three sets of soft skills:</p> <ol style="list-style-type: none"> 1. Human-machine partnerships – collaborating with machines; 2. Wise decision-making – knowing which decisions can be made by machines and those best left to humans; and 3. How to become entrepreneurial learners – being constantly on the lookout for new methods, resources and mentors to help learn new things. 	<p>(Davenport & Kirby, 2016)</p>
<p>Emphasise and expand the focus of collaboration by recognising that the teams students will join in the workplace will include machines. From primary school age, educators should teach what is required to form an effective human-machine partnership, with each partner effectively complimenting the strengths and weakness of the other.</p>	<p>(Davenport & Kirby, 2016)</p>
<p>University and high-school students should be taught earlier how to make wise decisions under uncertain conditions and how to determine which decisions are best made by machines and those that require human intervention.</p>	<p>(Schwab, 2016); (Davenport & Kirby, 2016).</p>

Table 5 – Some observed implications to the health and safety of workers from process automation

KEY FINDINGS	REFERENCES
Example 1: Lean Manufacturing	
Lean Manufacturing can have a positive effect on workplace health & safety thanks to methodologies such as 5S, Jidoka, TPM and the idea suggestion system.	(Longoni & Cagliano, 2015; Resta, Dotti, Gaiardelli, & Boffelli, 2017)
Lean Manufacturing techniques such as Total Quality Management, Total Preventative Maintenance and Human Resource Management contributed to reduced risks for employees, lower stress levels and higher engagement.	(Resta, et al., 2017).
Example 2: Just-in-Time Scheduling	
Just-In-Time also contributed to higher workplace safety and lower accidents but <i>higher</i> stress levels for employees.	(Resta, et al., 2017).
The ‘flexibility’ of working hours created by just-in-time scheduling can lead to the combination of work and family life being severely disrupted and an increase in employee stress levels and work.	(Degryse, 2016)

Table 6 – Examples of government education programs, in response to automation (The Economist, 2017)

Country/ Initiative	Description
Singapore: Skills Future initiative	This initiative engages employers to map out the required industry changes over three-to-five years and identify the skills that they require. The government then provides vouchers to citizens that can be used at a range of training providers and generous education subsidies of up to 90% for citizens 40 and over.
Denmark: ‘flexicurity’ system	This system offers unemployed workers a list of up to 258 vocational training programs as a way of re-training into a different career that may have more employment opportunities.
UK: UnionLearn initiative	This initiative supports workers through union workers informing them of training options available and liaising with employers on workers’ requests for training.

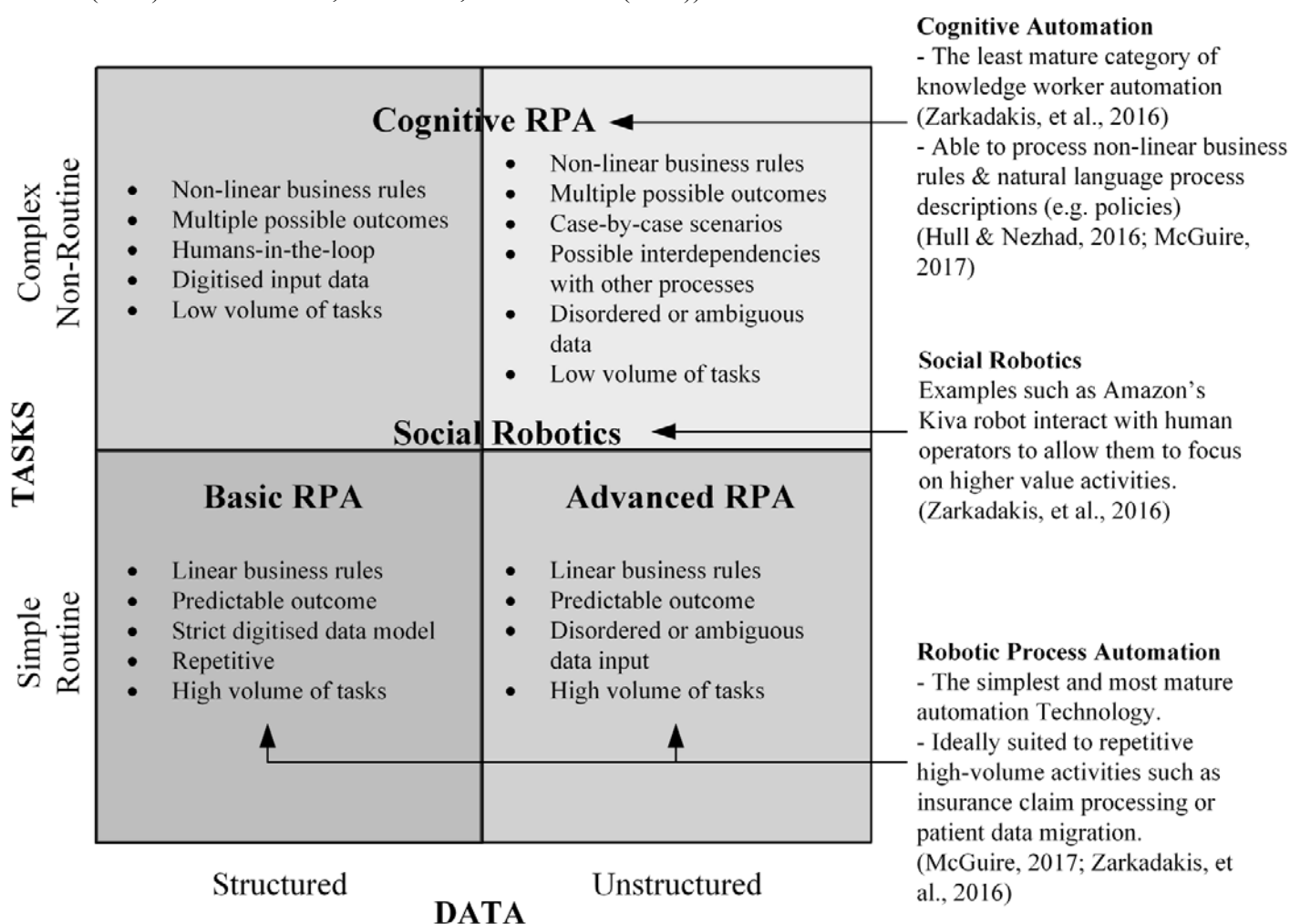
Table 7 – Welfare and taxation policy responses to automation

KEY FINDINGS	REFERENCES
Universal Basic Income (UBI) – A practical measure to make work pay and diminish economic disincentives in social security such as low-paid work that does not increase one’s disposable income.	(Hendrickson & Galston, 2017; Pulkka, 2017).
Guaranteed Jobs – Unemployed people are less happy and that compensating them through a UBI or other welfare mechanism, doesn’t make them as happy as putting them back to work.	(Davenport & Kirby, 2016)

<p>Negative Income Tax (NIT) and a variation on the UBI called a Universal Basic Adjustment Benefit – Specifically target workers moving back into the labour market</p>	<p>(Hendrickson & Galston, 2017; Pulkka, 2017).</p>
<p>Functional Finance—central banks funding infrastructure and social welfare; and Robot taxes—taxes paid by employers that use robots instead of people for generating value.</p>	<p>(Hendrickson & Galston, 2017)</p>

FIGURES

Figure 1 – Automation technologies and their process characteristics (adapted from McGuire (2017) and Zarkadakis, Jesuthasan, and Malcolm (2016)).



11. Project Organising
Interactive Session

**Sustainability of Off-Grid Community Energy Projects: A Case Study of the
Management of Micro-Hydro Projects in Nepal**

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11. Project Organising

Interactive Session

Sustainability of Off-Grid Community Energy Projects: A Case Study of the Management of Micro-Hydro Projects in Nepal

ABSTRACT: *The crucial role of reliable and affordable energy services for economic growth and wellbeing of rural people has been widely acknowledged. Off-grid renewable energy technologies (RETs) can have dramatic benefits for rural families and communities. However, experience with such services developed to date suggests that their sustainability is questionable. A qualitative study was conducted in Nepal to analyse such off-grid micro-hydro projects and reviewed various managerial aspects of their operation. This paper highlights some important project attributes such as involvement of local people, project size, tariff structure, growths in consumption and sales revenue, post-installation support, characteristics of management team and a financial system. The research focus is on how these input and process variables drive the sustainability of such schemes.*

Keywords: project development, off-grid energy service, project management, sustainability.

Introduction

The critical role of affordable and reliable electricity as a driver of economic development and wellbeing of people is widely recognised (Müller, Thompson, & Gadgil, 2018). A new theory of economic growth explicitly recognises energy, as one of the three factors: capital, labour and useful work (product of energy and efficiency), in a production function (Ayres, Turton, & Casten, 2007; Warr & Ayres, 2010). An increase of 1% in per capita electricity consumption is associated with a 0.22% increase in human development index (HDI) (Ouedraogo, 2013). Yet 1.16 billion people (16% of the world population), mostly from Asia and Africa, live without any electricity services (WEO, 2016). Of these, 660 million remain out of reach of central electricity grids (van Ruijven, Schers, & van Vuuren, 2012; World Bank & International Energy Agency, 2015). New off-grid alternatives, the Renewable Energy (RE)-based off-grid services, offer them a more realistic option. Furthermore, declining costs of the technology make this option attractive.

Despite the fact that RE-based, off-grid services have brought positive results and success in reaching the neediest people, the present functionality of such off-grid systems in Nepal and other parts of the world is a major concern. Many of these off-grid systems have been found to be unsustainable in terms of performance, service delivery and/or revenue generation (Bhattacharyya & Palit, 2016; Dornan, 2014). Often these programs are focused on short-term physical targets and outputs rather than long-term sustainability, particularly overlooking after sales service. As a result, after some years of

operation, such off-grid services often fail to supply electricity reliably and thus limit power access and local economic activities (Aguirre & Ibikunle, 2014; Dornan, 2014).

Management issues of RE-based off-grid services have received limited attention in the literature. In the context of *ex-ante* evaluation and selection of off-grid RE systems, various sustainability indicators and criteria have been employed (Mainali, Pachauri, Rao, & Silveira, 2014; Maxim, 2014). In contrast, the *ex-post* assessment of operational off-grid RE systems has received less attention. The *ex-post* sustainability assessment of such services is limited to situation analysis, comparative studies, case studies and few action research studies (Chmiel & Bhattacharyya, 2015; Engelken, Römer, Drescher, Welpe, & Picot, 2016). Most of these assessments were focused at a local context level with specific project objectives and requirements rather than addressing the broader sustainability issues of off-grid energy services.

It is important to learn how particular project attributes or, more likely, a combination of these attributes fit together and why bundles of local management practices lead to sustainability. Understanding the factors that affect the sustainable operation of RE-systems is the expected contribution of our research paper. Thus, the key research question probes: “Is it possible to discover using qualitative methods the critical combination of factors that lead to sustainable operation of micro-hydro projects (MHPs) in Nepal? The remainder of the paper sets out to identify the criteria for such sustainable operation of Nepal’s MHPs. Section two describes the methodology. The theoretical concept is presented in section three. Section four highlights key findings. A short conclusion is presented in section five.

METHODOLOGY

Justification: The research employs both qualitative and quantitative methods. The qualitative study is reported here, and was employed in the first phase to identify key project attributes of Nepal’s micro-hydro projects¹ (MHPs). This research study was reviewed and approved by the human research ethics committee of Charles Sturt University, Australia.

¹ Small-scale hydroelectric power plant up to 100 kW capacity. The power is generated by using the natural flow of water and supplied to local villages.

Attributes of a typical community-based micro-hydro project are a hybrid of human, social, institutional and technical elements. Further, many of these variables of interests are difficult to measure and cannot easily be described with numerical analysis. Therefore, qualitative methods were employed to obtain the required detailed information. It was expected that the research design would help both to capture the first-hand experience of local people, and identify a full list of relevant project attributes. The semi-structured interviews and focus group discussions were designed to ensure that findings were obtained in as structured a manner as possible. The classic problem of ‘going native,’ or the researcher not being able to distance himself from the group to observe and analyse objectively (Le Compte, Preissle & Tesch, 1993), was overcome by withdrawing from working in Nepal work full time on his thesis (2015-2017). This enabled the researcher to stand back and be a detached researcher.

Setting: This qualitative study was conducted on the management of Nepal’s off-grid micro-hydro projects. The country has more than 50-years’ experience with this technology where the power from small streams is harnessed and the electricity generated is supplied to local villagers. More than 1,000 such micro-hydro projects with a total capacity of over 30,000 kW have been constructed across the country and about 360,000 families are connected to such electricity services (Ghimire & Kim, 2018).

Samples: Through purposive convenience sampling, altogether 12 micro-hydro projects were selected for the study. Across the 12 studied projects, the average capacity was 58 kW with a range from 22 kW to 115 kW. Except for one, the projects were owned and managed by local communities. Among these, eight were developed under the Nepal government’s subsidy program, three were supported by the Annapurna Conservation Area Program (ACAP) and one was directly funded by a child health project. These projects had a wide range of experiences with a length of operation from 3 to 25 years.

Data collection: Primary data were obtained through 12 Focus Group Discussions (FGD), in-depth interviews and project site observations. A semi-structured FGD and interview format enabled us to ask participants a set of standard inquiries. Each question set was composed of ten open-ended main questions. To facilitate the conversation, probes and supplementary questions were developed for each main question. The question sets were made available to all the participants at least one day before the meeting (see Appendix 1). In total 72 people, including community leaders, micro-hydro managers,

plant operators and electricity users participated. The number of participants in individual FGDs ranged from three to nine. Among the participants, 21 were females. Four in-depth interviews were also conducted with the chairpersons of the micro-hydro schemes who could not participate in the FGDs. The lead investigator was the sole facilitator and interviewer. In addition, he visited all 12 project locations and interacted with technical staff, local business owners and villagers to obtain additional information including: level of consumers' satisfaction, quality of electricity service, responsiveness of the management team to power supply interruptions, transparency in financial management, and physical condition of the powerhouse and distribution network. For this purpose, a separate checklist was used. This additional information was also audio recorded and transcribed, and considered during the analysis phase.

Data analysis: The FGD and interview sessions lasted from 52 to 75 minutes and the average length was 65 minutes. All the FGDs and interviews were audio recorded with the consent of the participants. These recordings, which were originally in the Nepali language, were transcribed first and then translated into English. The information obtained from the field study was analysed by open coding, primary coding, axial coding and selective coding. The coding process was done separately for each project. Next, thematic analysis was employed in identifying the themes. The analysis involved five basic steps (Braun & Clarke, 2006): (i) transcribing audio recordings of all the FGD/interview sessions and becoming familiar with the data, (ii) initial coding of interesting features across the entire data set, (iii) collating codes into potential themes and gathering information on each relevant theme, (iv) checking, modifying and improving the initial themes and checking whether the themes work in the context of the entire micro-hydro data set, and (v) generating clear definitions and names for each theme. After the eighth project was analysed, there were few additional attributes identified and there were no additions in the last two (of 12) transcripts. This evidence clearly demonstrated that the data had achieved its saturation, and hence we were confident that the key attributes of such micro-hydro projects had been captured.

THEORETICAL PERSPECTIVE

Off-grid energy projects can neither export to other load centres nor store the excess energy. The power generated by such a project has to match the local electricity demand (Müller et al., 2018).

Every off-grid energy service is an independent entity and local villagers and small enterprises within the project vicinity are the load centres of such distributed generators. While a reliable and affordable electricity service is a pre-requisite for a virtuous circle within the economic system, there are many endogenous and exogenous variables that influence the economic system that drive the overall sustainability of such off-grid energy services (see Figure 1). Moreover, in the absence of, or weak performance of any components, the economic system of the entity may not be able to sustain a virtuous circle, thus the project becomes unsustainable.

*****Insert figure 1 about here*****

As shown in Figure 1, the inner circle of the diagram represents an economic system of a typical off-grid renewable energy service being implemented in the developing countries. This figure, and particularly the links between its components, represents the theoretical lens of the study. Sustainability of the system described in Figure 1 is hypothesised to depend on a number of critical aspects and their interactions, including project management, business development, growth of the local market, and socio-economic development. A generator that performs well ensures high quality and reliable electricity that both encourages households to own and use more electrical appliances and establish more small and medium enterprises (SMEs). Higher consumption of electricity directly contributes towards the well-being of people, and higher electricity output (productive uses of electricity) supports additional income and creates more job opportunities. The improved economic status of a local village will eventually help to increase electricity demand thus improving the plant factor of the generator. With a higher plant factor, the plant will be operating more efficiently and be able to secure more revenue, which can be utilised for better operation and maintenance services.

FINDINGS

There are eight overarching themes in the 37 attributes identified: MHP planning and development, investment costs and funding, use of electricity, billing systems, growth, project management, operation and maintenance, and financial management (see Appendix 2). Performance of the MHPs visited was also evaluated on four indicators: (i) growth in domestic power demand, (ii) growth in revenue, (iii) profit and a maintenance fund, and (iv) plant factor. Further, a relationship between these

performance indicators and project attributes was also assessed. Without ranking them, the rest of this section summarises the set of attributes that were observed to influence performance of the off-grid schemes and highlights some important output variables.

Involvement of Local Communities

It was revealed from the study that some communities actively participated in all aspects of planning from developing the concept to conducting the detailed feasibility study and fund mobilisation, while villagers in other projects were totally unaware about these activities. Instead, representatives of local NGOs and donor-funded projects carried out the initial tasks without engaging any local people. It was clear that the first type were more successful.

Optimisation of Project Size

The study revealed that the selection of the project capacity (kW) in the village was influenced by both the technical parameters and preferences of the local community. Across the 12 projects, the average number of customers served by one kW was seven households, with a range from 2 to 16 households per kW. In the subsidy-supported projects, this number was found to be guided² by the subsidy policy. Some other projects could not generate the required capacity due to the limited amount of water in the stream or low head. One of the respondents, in his response explained:

“the available head and dry-season water flow in the stream did not allow us to produce more than 26 kW. But we could not say “no” to anyone in this village. Therefore, we, 365 families, made an agreement to construct the project and use it only for lighting and charging mobile phones”.

Unlike this, some other communities such as at Bhujung Khola, Ghandruk and Girandi Khola MHP preferred a medium-size project at the beginning. Once the electricity market was developed in these villages, they have installed additional plants to meet the growing power demand. This seemed to be about the best level for the sites visited.

Significant growth in the SMEs, domestic consumption and electricity sales revenue were evident in those projects where the project size was optimally selected prior to construction. It was learnt from the study that villagers in the small-size projects (HH/kW) were generally established to support lighting and charging mobile phones. However, this not only limits the domestic power growth, it

² The subsidy is based on the number of HHs electrified. But there are some thresholds so that project planners can't increase the numbers just to obtain a higher subsidy.

might eventually attract the users to shift to being customers of a larger neighbouring project. During the FGDs at Sadh Khola and Togo Khola, where the electricity was used only for lighting and charging mobile phones, participants were found to be desperate for the national grid. Over-sizing projects, on the other hand, cannot guarantee sufficient sales revenue at the beginning and that could lead toward a financial crisis. During this study, there were two such projects (Baddighat Khola and Chotte Khola MHP) that could hardly sell 50% of their total capacity, and had large loans overhanging them.

Funding Arrangements

The owners of the micro-hydro projects are primarily responsible for obtaining the funds and managing the total investment requirements. These funds were mobilised through four different sources namely (i) government subsidies, (ii) grants from donors, NGOs and local institutions, (iii) credit and (iv) users' contribution. Experience from the projects visited suggested that subsidies and grants typically cover 70% or more of the total project costs. Local users are largely responsible for paying the remaining costs. More than 50% of the projects used credit and the proportion of the project cost covered ranged from 5% to 25%. The funding arrangements that were associated with highest performance were those that avoided long-term, continuing debt servicing.

Electricity Tariff Systems

The electricity tariff rate and billing system were found to be fixed by the local communities for each micro-hydro project. Three different billing systems were practised in the visited projects: (i) a fixed and equal tariff for all the villagers, (ii) stepped tariffs for various amounts of power purchased and (iii) electricity tariff rates based on the consumer's actual consumption of energy. One of the respondents, in support of the fixed and equal tariff system, voiced the opinion:

“we - all the villagers equally contributed to the project so we all deserve equal access. Our tariff is enough for the operator's salary. For any repair works, we collect from the users. By doing this, we saved our money. Otherwise, we would have to buy energy meters and pay for a meter reader.”

In contrast to this, another manager explained:

“different people live in our village with different interest and purchasing capacity. Therefore, we offer four different tariff rates for our users. In our village, the very-poor families can also use two lighting bulbs and pay only NRs 75 per month (less than AUD 1). The remaining three schemes are for others. Our customers enjoy the electricity and our revenue is ever growing.”

Hence, projects that have introduced a smart tariff structure in a way that ensures automatic growth in sales revenue as the consumption of electricity increased have produced more sustainable outcomes. For instance, the Daram Kholā MHP introduced five different tariff rates for domestic customers. Without any increments in the rates, this project is now earning NRs 2.1 million annually, up from NRs 1.1 million in 2010.

Ownership and Daily Management

Nepalese micro-hydro projects are owned/managed through three different institutional set-ups, namely: (i) registered community organisations; (ii) cooperatives and (iii) private companies. In our sample, the projects are community-based and are managed by a local users' committee. The government subsidy policy does not favour private developers.

Experience from these projects showed that these executive committee members are diverse and each holds a unique characteristics from the following set: (i) level of technical know-how; (ii) dedication and accountability; (iii) ability to establish clear job descriptions, team spirit and coordination; (iv) interest in client relationship and responsiveness; (v) understanding the need for proper documentation and infrastructure; and (vi) experience and interest in institutional development. In some projects, they clearly defined the job responsibility of each team member and technical staff and worked in a coordinated manner. One of the plant operators during the FGD stated that:

“our management committee members do not interfere in the day-to-day operation of the plant. We clearly understand our job descriptions and we always follow them. We never crossed our line and engaged in management issues. This is how we work on our project.”

Similarly, in another FGD, one of the participants, who also runs a hotel in the village, argued:

“our community has developed a management system for our project and we all honestly follow it. Our staff probably don't get a competitive salary, but they are happy and highly motivated. We all feel that this is our project. This is why we have been successful in running our project for more than 25 years.”

Similarly, one manager proudly shared his experience by saying:

“we never wait for the next morning, when it comes to restoring the power supply in the village. Many times, we have had to wake-up at midnight, walk across the canal alignment and fix the problems. An uninterrupted power supply was and will be our top priority.”

The number of technical staff and the team composition differ from one project to another. The evidence demonstrated that the recruitment of staff is primarily driven by the amount of sales revenue rather than the number of users to be served or the plant capacity. Overall, the operational management was good, but there were some exceptions where the management team had not held a single meeting during the previous seven months. The evidence suggested that performance of many micro-hydro projects in the study was associated with management practices, characteristics of the committee members, and experience and motivation of technical staff.

Post-installation Support

Post-installation support for Nepal's micro-hydro projects appears inadequate and inconsistent. The post-installation support in the subsidy-supported projects is limited to some capacity building activities like operator training and grant support for establishing end-uses. In some projects, local NGOs, like the Annapurna Conservation Area Project-ACAP, continue their support even after project completion. There were other projects that did not receive any kind of support after their commissioning. A stock of essential spare parts appears necessary to ensure a more reliable power supply in the micro-hydro projects. Experienced operators who have essential spare parts in stock can repair minor problems and restore the power supply almost immediately, compared to less experienced operators who usually do not carry any spare parts.

Growth

The electricity from these micro-hydro project is primarily consumed by domestic users. Besides lighting, which is a common use in all projects, electrical power is also used for operating other household appliances such as TVs, mobile chargers and rice cookers. Further, the power demand of individual users in all the micro-hydro projects was reported to increase slowly over time, though the magnitude of change was influenced by many factors. Also since their commissioning, most projects have increased their customer numbers.

The number and type of SMEs vary substantially across the micro-hydro communities. These local SMEs can be grouped into two broad categories: (i) common enterprises like agro-processing mills, sawmills, poultry farms, and bakeries; and (ii) specialised business like hotels/restaurants and tea factories. The growth of SMEs as a result of the micro-hydro projects was found to be influenced by

many factors, but an adequate supply of electricity is an important one. Partly related to a lack of SMEs, the plant factor³ of a majority of the micro-hydro projects was found to be low. There were a few high performing projects with a plant factor of up to 50%, but most were found to be utilising less than 30% of the available energy.

Electricity Sales Revenue and Financial Management

The monthly income, expenses and savings of micro-hydro projects vary significantly. Among the 12 projects studied, the monthly collection varied from NRs 12,700 in Sadh Kholā (22 kW) to NRs. 290,000 in Parppakar (100 kW). In some projects, the monthly revenue was just enough to cover the project salaries, whereas other projects were able to save significant parts of their income. It was also found that some projects used a significant part of their savings for unexpected maintenance work.

Various financial management practices are evident across the different micro-hydro projects. Some projects regularly maintain financial systems and have recruited staff to carry out this task. In many projects, the project managers were found responsible for billing, collecting revenues and preparing monthly financial statements. These financial reports were then checked and approved by the regular meetings of the management committees. It was also revealed that, in a few projects, such financial disciplines were not adequately maintained. A regular financial audit was another important milestone for the proper and transparent financial management of micro-hydro projects. Most of the projects conducted such financial audits on an annual basis and committees disseminated the resultant audit reports to the local communities. In addition to this, some communities also organised public audits in the villages. Despite collecting this data, it was difficult to reach a definite conclusion on the influence of financial management on sustainability.

Productive Uses of Electricity

Besides lighting, the micro-hydroelectricity enables local villagers to use Wi-Fi and computers. Local schools are able to teach computer-based and other new subjects, some local clinics have been able to install an x-ray machine and local people can buy fresh bakery items in the village. Furniture and metal fabrication shops are now available in the village. Local people own poultry farming and fresh

³ The plant factor is a ratio of energy consumed and available energy.

meat houses. The SMEs in the villages create employment opportunities and offer a wide range of services and facilities. Most importantly, such SMEs contribute substantially to generating additional revenue for the micro-hydro projects.

While a reliable and high-quality electricity service is a pre-requisite for the SMEs, there are many exogenous variables that eventually affect the overall growth of SMEs in the project areas. It was reported that road accessibility helped significantly in SME growth by expanding markets for their services and products. Post-installation support such as grants for the establishment of enterprises, transfer of technology and local capacity development, were also found to be critically important input variables for sustainable operation of the micro-hydro plants. In Ghandruk village, the electricity added value to the existing tourism business. After the micro-hydro project was constructed in the village, all hotels and restaurants immediately switched to electricity. With better lighting, Wi-Fi and mobile charging facilities, many trekkers preferred to stay a night at that village. This encouraged the villagers to open more hotels and cater to more tourists. To become competitive, local hotels improved their services which eventually increased the local power demand. A similar experience was seen in another village, Bhujung, where the funding agency –Tokoshima Friendship Association, Japan – has been continuously supporting the local community in promoting enterprises. As a result, the rural community has a variety of local businesses including, bakeries, tea factories, and rope-ways. To meet the local power demand, both of these villages have installed a second micro-hydro project. Overall, the development of SMEs was critical to sustainability of the micro-hydro schemes.

CONCLUSIONS

It is possible to provide a partial answer to the key research question: is it possible to discover using qualitative methods the critical combination of factors that lead to sustainable operation of micro-hydro projects (MHPs) in Nepal? The qualitative analysis performed does reveal important attributes that affect performance of Nepal's MHPs: (i) project management (ii) finance/economic considerations, (iii) technical aspects and (iv) contextual factors.

A given set of attributes and a bundle of management practices are important to sustainable operation of such energy services. The domestic load has increased slowly over time, under the influence of

many factors. The growth of SMEs in such communities is critical and driven by external parameters such as road, post-installation support and readily available market. A flexible and smarter tariff structure can automatically translate the growth in local electricity consumption into increased sales revenue, and thereby promote sustainability. A dedicated and enthusiastic management team with coordination capacity is critically important for sustainable operation of a micro-hydro project. Similarly, a transparent financial system and its effective implementation is a pre-requisite for efficient daily operation of the plants. Further, level of experience and motivation of technical staff, a stock of essential spare parts and good accommodation facilities for the plant operators influence the daily operation. A contingency maintenance fund is required in these communities to pay for any unexpected and expensive repair works.

We must acknowledge various limitations of the methods employed here. Although the thematic analysis is relatively simple and straight forward, and while key themes have been revealed, there are instances where precision is lacking. For example, a list of attributes affecting performance was obtained, but little could be said about the relative importance of these. We anticipate that this problem can be overcome in the second, quantitative component of the study.

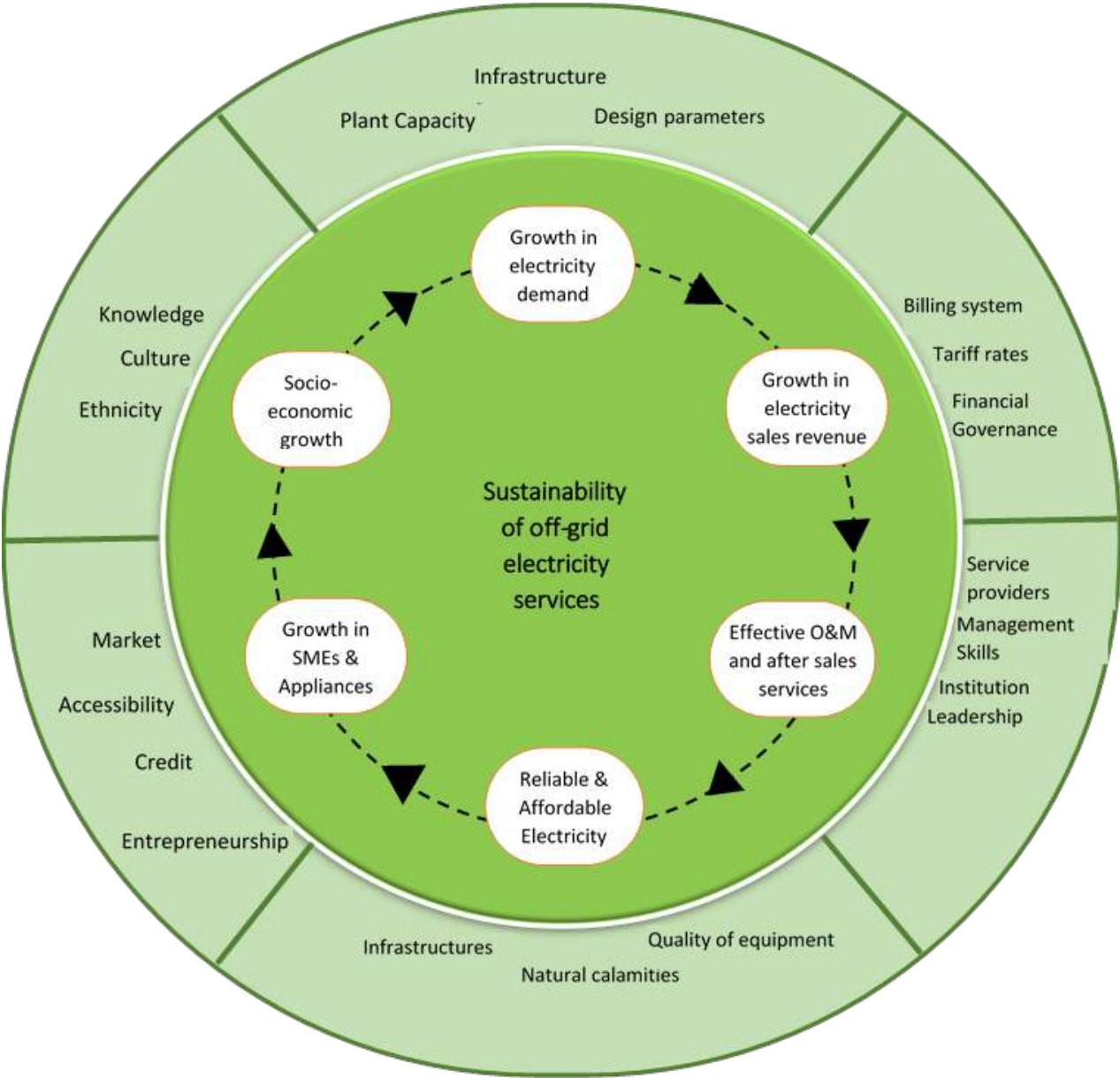
In terms of further research, it is possible to do some higher-level qualitative analysis that examines combinations of the management factors that we considered. Sustainability might be a result of some critical combination, and interaction between factors might be important. Also, the idea of sustainability itself may differ between micro-hydro projects so that for small-scale projects, for example, a given set of factors is important to sustainability, while for larger-scale projects it is some other combination of factors. (Or instead, what is important may differ by location or some other characteristic rather than size.) Our own research will now move on to examine these and other issues more closely as a quantitative study is established based on surveying managers at 173 micro-hydro sites, and using econometric methods.

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Figure 1: Theoretical Framework for Sustainability of a Typical Off-Grid Renewable Energy Service.



Appendix 1

Qualitative Study on Criteria for Sustainable Operation of Off-grid Micro-Hydro Projects.

Set of Questions for Focus Group Discussion

Describe how does the electricity service changed your daily life? Can you please explain those changes (differences) with examples (probes: better light for children's education, watching TV, agro-processing facilities, etc.)?

[Spend up to 10 min for this question. Encourage each participant to talk, as this is relatively easy question and everyone should have something to say.]

Question 1: Describe how you (as a community) decided to develop an energy project at your village? [10-15 min]

1. What was the process by which you got your project concept (*own idea, replication of nearby project, expert help, etc.*)?
2. What was the content of the initial project concept (*domestic lighting, agro-processing, run enterprise, etc.*)?
3. What were some of the main steps you have followed to come up with your final project proposal (*location selection, discharge measurement, survey and DFS report, funding, etc.*)?
4. What was the form of the community participation during that phase of project development (*optimistic, full participation, proactive, willingness to contribute, etc.*)?

Question 2: Describe the capital investment costs and different funding sources. [10-15 min]

5. Where did you get the funds (*government subsidy, DDC/VDC grant, local NGO, etc.*)? Have you had difficulties in mobilising funds? Have you also mobilised cash and in-kind contributions from local communities?
6. Did the project taken any loan? If so, how difficult was that? How did you repay the loan?
7. Did you experience any fund deficit during that time? Do you think the project could have been built differently (*canal, poles, equipment, and other structures*)?

Question 3: How does your project [management] supervise local customers and manage load growth? [10-15 min]

8. How did you select your customers? Did you ask them for a mandatory cash and in-kind contribution? Do you have HHs not having electricity connection? If so, why?
9. How did you determine expected load demand for households, commercial buildings and enterprises? Have you developed criteria for this purpose?
10. How do you manage your additional load demand (*connecting new appliances*), new connections and disconnections?

Question 4: How does your project utilise electricity in the productive sector? Do you notice small and medium enterprise (SME) growth at your village? [10-15 min]

11. Is there sufficient capacity for energy to be supplied to SMEs?
12. Do you think your location is more appropriate for some particular SMEs? Why?
13. Have some of you already involved in and/or are you considering setting up any business? What are the difficulties in setting up a new business?

Question 5: How does your project manage local power supply and demand? [7-10 min]

14. Do you know how much electricity (kW) is produced? Is there any seasonal variation in the electricity production? If so, why?
15. What is your maximum electricity demand? What time of the day does that happen?
16. Can your project supply the peak load demand now and in all other months? If not, explain how do you manage the situation?
17. Have you ever tried to shift/ reduce the peak load demand?
18. Have you ever introduced any financial incentive package for load management? Do you encourage local businesses (like agro-processing mills, furniture, etc.) to operate during off-demand hours?

Question 6: Have you noticed any growth in the plant factor? If yes, describe why and how the growth was possible? [7-10 min]

19. Do you know what percentage of total available energy of your project is utilised now? Have you ever noticed any changes (*higher utilisation in certain months, improved over the last 3 years, etc.*)
20. How can the plant factor (*energy utilisation*) be improved? Explain what are the constraints to plant factor growth (*use of CFL and more efficient appliances, no SME growth, economic status, etc.*)?
21. Have you ever taken initiatives for improving the plant factor (*increasing operation hours, additional benefits for off-hours uses, SME promotion activities, etc.*) ?

Question 7: Describe revenue sources of your project explain how you monitor the financial transactions? [7-10 min]

22. Describe the revenue sources of your project (*domestic customers, business and SMEs*)? How much tariff do you collect every month?
23. How often is the electricity tariff revised?
24. How do you ensure timely collection of tariff? Do you have any reward/punishment policies for timely/untimely payment?
25. Describe your financial audits and public audit practices, if any?

Question 8: Can you tell me about the project ownership and explain how do you manage your project? [10-15 min]

26. Who is the owner of the project? Is it a legal entity (*registered users committee, NGO, cooperative, company, etc.*)?

27. Can you tell me more about the leadership selection practices?
28. Who is responsible for daily management of the project activities (*executive members, staff team members, consultants, etc.*)?
29. How do you ensure reliable and high quality electricity services? Can you give me an example? Explain how you retain trained staff (*pay more salary, hire local people and train, etc.*)? Who and how do you supervise their work?
30. How do you communicate with your customers (*mass meetings, sharing of meeting minutes, feedback collection mechanism, etc.*)?

Question 9: Explain the daily operation procedures of your power plant. Tell me more about how scheduled/sudden maintenance works are being managed? [7-10 min]

31. Who is responsible for daily operation of your power house and distribution system? Can you explain how you got after sales services (*from equipment suppliers and/or Installation Company*)?
32. What was your experience doing scheduled/ sudden maintenance work? Were the O&M costs affordable? If not, how did you manage?
33. Can you please describe the major challenges you have faced to ensure uninterrupted power supply?
34. How do you get informed about blackout and other fault notices? How quickly do you respond to those faults?

Question 10: What is your overall experience in developing the energy project? What are the key challenges you have experienced for sustainable operation of the project? [10-15 min]

35. Describe the technical and financial support you have received. What was the role of government in building your project? How did the local government agencies support the project?
36. Is your project sustainable? What are the important aspects of the project for overall performance?
37. How do you compare your project with others, if any? Why is your project different? Is there anything else you can add?

Thank you for your precious time to talk with us!

Appendix 2

Themes and List of Attributes

SN	Themes	Key Attributes
I.	Micro-hydro project planning and development	01 Base-line situation of local community
		02 Involvement of local communities
		03 Project size and settlement types
		04 Technical features of the project
		05 Optimisation in project sizing
II.	Investment costs and funding	06 Initial investment costs
		07 Investment cost variations
		08 Funding arrangements
		09 Loans for project construction
		10 Repayment of loans
		11 Cash and in-kind contribution by local communities
		12 Project completion period
III.	Use of electricity	13 Residential users
		14 SEMs and local businesses
IV.	Billing system	15 Different billing systems
V.	Growth	16 Growth in domestic power demand (growth in domestic customers)
		17 Growth in SMEs
		18 Growth in the plant factor
		19 Growth in sales revenue
VI.	Project management	20 Ownership and institutional types
		21 Leadership in micro-hydro projects
		22 Characteristics of the management committee
		23 Institutional development
		24 Daily plant operation
		25 Staff management
		26 Technical standards and guidelines
VII.	Operation and maintenance	27 Post installation support
		28 Selection of suppliers
		29 Power output
		30 After sales service
		31 Key technical issues
		32 Stock of spare parts
		33 Demand side management
VIII.	Financial management	34 Revenue collection systems
		35 Monthly income, expenses and savings
		36 Daily financial management
		37 Financial audits

1. Sustainable Work
Refereed Interactive Session

**Trusting Friend or Complacent Foe: Perceptions of Automation within the
Human Agent**

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1. Sustainable Work

Refereed Interactive Session

Trusting Friend or Complacent Foe: Perceptions of Automation within the Human Agent

Presenter: Patricia R. Hubbard

Abstract:

In relation to the theme of Managing the Many Faces of Sustainable Work, this session will aim to immerse participants into the new, ever changing world of automation. Automation is changing the way humans perform job duties and affecting the human agent's perception of automation. This evolution will influence the future of work and innovation. The concepts of trust and complacency will be posed to participants for feedback and discussion.

This refereed interactive paper has three primary aims: (1) To raise awareness of the importance of automation in the future of work; (2) to share strategies for acknowledging overlap in the literature; (3) to foster an ANZAM scholarly community around automation, complacency, trust, perception and the future of work.

Keywords: automation, future of work, job and work design, precarious work, organisational productivity

OBJECTIVES OF THE SESSION

In recent decades, and especially in recent years, significant attention has been paid to automation and the future of work. Efforts to understand the impacts extend back to Adam Smith's time and forward to the innovators of today (Aspromourgos, 2011). In fact, research has stressed the importance of looking forward to automated processes and value added. Impacts on the workforce have been studied and analysed to include recommendations for the future. This session will engage in dialogue about the importance of considering the difference between automation and the human agent. For the purpose of this session, we will focus primarily on trust and complacency in relation to the human agent. In addition, the interactive nature of this session is designed to lead the formation of a scholarly community within this field. Further, other disciplines have begun to pay attention to the complexity of automation and the future of work. Studies across industries have provided a foundation to be built on in relation to the human agent. In particular, the perceptions of the user prior to automation

implementation, this is a crucial time in the process due to adjustment. The work of this session will contribute to the special attention that needs to be placed on the human aspects of automation.

OVERVIEW OF THE LITERATURE

Automation has contributed to New Zealand enterprises through innovative manufacturing and organizational processes. This increase in efficiency offers firms value creation through automation of processes previously done by humans. Automation can create value through innovation enabling businesses to direct resources to other areas. We know that automation changed the way businesses operate day-to-day. It can be seen in industries such as shipping, airlines and business (Billings, 1997; McLeod Jr. & Jones, 1987; Parthasarthy & Sethi, 1992; Westlake, 1990; Wiener & Curry, 1980). Automated machines forced humans to adapt into a different context by challenging the current process. Human centered automation is changing the world by incorporating new aspects including ethical considerations. To humans, automation is a threatening phrase that possesses negative feelings of trust (Parasuraman & Manzey, 2010), however some argue automation is changing work and labour in a positive way.

Perceptions in automation is not a new topic but one of new quality. In completing automation in new ways, perception has gained momentum and greater ambiguity in the definition. It can be acquiring, interpreting, selecting and organizing the various information provided to the human agent (Bruckner, Velik, & Penya, 2011). This combination has provided perception with new life in relation to automation and the human agent interaction. In contract, attitudes towards automation are from the human agent and not taking into account the interaction scenario. Also there is a lack of research dedicated to the phase of perception previous to implementation of automation.

Perception of automation varies by the human agent agreeing or disagreeing with the faith (motives) of the system. In automation, the perception is interpreted as grounds for a moral violation. If the perceiver can explain away a violation, the perception is altered (Shank & DeSanti, 2018). In the sense of perception in automation, the human agent may also interpret the complexity of the system. This interpretation affects the perception of the automation and provides the user with analysis on

whether to agree or disagree with the automated process. The perceived effect from the machine will affect the user making sense of the technology and abilities to have faith in motives.

The nature of work itself is evolving as automated systems are implemented (Millman & Hartwick, 1987). Perceptions of jobs and work changes are based on aspects of the position being updated. This shift in job and work design brings on new concerns for managers and employees. In this design change, characteristics of work shift to accommodate how the work is completed. This includes analysing the results of the work, trust components and feedback.

Trust is a term that connects people globally, in recent times it has taken on new meaning in relation to automation (Hoff & Bashir, 2015). People interact with technology in a variety of ways and it is part of that relationship. It plays a key role in determining if humans rely on an automated system. Humans create a cycle for the variable and place it on a spectrum; trust can range from complete to no trust from the perspective of the human. Another view is that trusting another non-human agent builds a model about the agent behaviour. This creates assumptions about the non-human agents and the intentions in the given scenario. Undertaking trust in automation assumes the human agent has a sense of the function and an extent of complacency in the system. In contrast, some researchers argue that trust is an expectation with impact on the future. The “expectation related to subjective probability an individual assigns to the occurrence of some set of future events” (p.96) displays the projection to the future (Rempel, Holmes, & Zanna, 1985). This shows an aspect of trust that can be tied to behaviours or outcomes (Lee & See, 2004).

Automation, is a function previously done by a human that evolves with time as technology advances (Parasuraman & Riley, 1997) – this demonstrates the dynamic nature of the term. The term automation is not static which indicates it is ever changing in a business setting. This evolution evidenced in New Zealand businesses such as Air New Zealand and Kiwi Rail, shows the business model adapting and incorporating automation overtime. Dynamic models of trust in automation describe the relationship between machine and human over time and process (Gao, Lee, & Zhang, 2006), such as autopilot airplanes and self-driven trains. The human makes a decision to trust the automated result or alter the process to produce the desired outcome. The level of trust is determined

by the human agent in the context of working with the automation. Humans instill a level of trust in automation when performing job tasks such as creating financial statements and processing jobs. Trust is an important consideration in automation due to human nature and the process of decision making.

Complacency is described as a human agent over-relying on automation (Onnasch, Wickens, Li, & Manzey, 2014). This results in the operator exhibiting signs of complacency or a sense of comfort with the automation. Complacency results when the operator of automation fails to sample or monitor the variables enough (Moray & Inagaki, 2000). This phenomenon not only involves trust in the automation but also suggests a highly reliable machine. A failure to be in a constant state of questioning the automation may result in errors or bias. Human performance at various levels of automation rely on variables to interpret results and come to conclusions.

Human centered automation brings the human agent in as a key player in the process (Parasuraman & Riley, 1997). Human agents rely on the machine to automate the process to produce an output. Opportunities arise in the area of automation and the mediating variables (Goff, Rey, & Berberian, 2015). An example of this relationship is an accounting system that produces financial statements. The human user enters the initial data while the computer processes it into statement form. In the process, the computer will make decisions such as asset placement and allocation. Once the statement generates, the human will need to reflect on the result and decide to accept or reject the output.

As the example above shows, the output produces trust and complacency challenges for the operator (Sauer, Chavaillaz, & Wastell, 2016; Yang, Unhelkar, Li, & Shah, 2017). Trust in automation relates to the relationship the operator holds with the output device. The operator must scrutinize and analyse the machine outputs to verify accuracy and reliance (Lee & See, 2004). As trust builds, the operator gains confidence in the outputs. Complacency creates an environment in which the operator will state “all is well” (Parasuraman & Manzey, 2010). This statement exhibits a scenario that can lead to incidents in the workplace and a sense of false security. An example would be in the airline industry, a pilot might trust the autopilot setting to fly the plane, which could lead to errors that may be fatal. In this scenario, the automated process gained a high level of trust from the human however; the system

needs monitoring for safety reasons. A current example of this is the self-driven Uber vehicles that have been involved in accidents in the USA. They maintain a human monitor for the beta testing but look to the future of human-less vehicles.

Reliability is defined as a specific level of performance that is expected to be produced by a machine (Panovski et al., 2008). This level of performance determines specific conditions as defined by the human agent. Reliability is the ability of software to maintain a standard that the user can measure. Other aspects of this variable are maturity, fault tolerance, recoverability, availability and reliability compliance, which can contribute to the interpretation. This variable is one of many software quality factors considered in the McCall Software Product Quality Model (Panovski et al., 2008). This model provides a framework on product quality and assessment factors. Automation is concerned with quality and therefore reliability will be necessary in the future development.

Humans play a role in automation (Parasuraman & Riley, 1997), involving emotion, process management and feedback. This emotional tie brings in the condition of the human seeking reliability. Emotional intelligence (EQ) incorporates itself into the automated process. The operator draws on emotional intellect to interpret the outputs. Automation connects to EQ by providing supervisory control to the operator. Supervisor control permits the human operator to interconnect with the process (Sheridan, 1992). Operators continue to control the process or task environment while looping feedback to the machine (Berberian, Somon, Sahai, & Gouraud, 2017). Research from over 20 years ago stated that automation is performing better than humans (Parasuraman & Riley, 1997). This research engages the notion of operator sense of control and in the loop status (Goff et al., 2015). Humans are a necessary agent in the automation cycle and the mediators contribute to the outcomes. In controlling tasks the human agents seek reliability in the outputs to demonstrate the level of performance (Panovski et al., 2008).

Organisational productivity is related to automation in the context of output activities and performance (Culnan & Bair, 1983). Productivity within an organisation can be defined as processes being completed on schedule. These outputs may be improved when obstacles are removed such as utilising automation in the workplace. Automation can enable the process of productivity to be

streamlined by mitigating errors and bias. Human agents can remove obstacles in the automation process to improve productivity.

Precarious work studies edge into automation and the impacts on the future of work. This type of employment enables flexibility in the use of semi-skilled workers (Krzywdzinski, 2017). Flexibility is a result of new technologies being used including automation in the workplace to complete tasks. These precarious employment relationships offer employees instability and a different sense of mistrust. In relation to new technology and automation there is uncertainty and ambiguity for the human agent (Howcroft & Taylor, 2014).

In the future, humans can choose to rely on automation alone or evolve to embrace the enhanced capability (Stubbs, 2017). Stubbs (2017) describes two scenarios; one in which humans maximize cognitive capacity or another where inequality emerges. Intelligent robots is a discussion to fill the gap of inequality. Speculators of artificial intelligence (AI) contend that robots can perform human tasks in the future (Stubbs, 2017). AI research saturates the area of robotics (Nilsson, 1997) and has been spreading to other disciplines over time. Outside this area is research on AI and the automated process in a business setting (Brougham & Haar, 2017). Research shows adaptation is necessary, however, the unpredictable factor of human centered automation remains.

IMPORTANCE OF THE SESSION TO ANZAM MEMBERS

The session will discuss the exploration of automation in practice within the New Zealand healthcare industry. This exploration will focus on conceptualising the concepts of trust and complacency within this industry context. Sustainable work is ever changing, as is automation, this process will be analysed in this research to contribute to existing literature. As the future of work evolves, the automation and human agent aspects must make progress. Through this process of moving forward, the human agent needs to recognise the complexity and challenges faced. Perceptions of the human agent in the automation process impacts sustainable employment and the future of work.

Session Objectives:

- Participants will be presented with examples of automation in the workplace and how these examples relate to trust and complacency conflicts.
- Participants will learn how human agents can, with the support of technology, improve the process of information sharing and innovation.
- Participants will be provided examples of ways that human agents can overcome trust and complacency issues in the process of automation.
- Participants will be encouraged to engage during the session to explore how they can collaborate with the automation process to enhance the human agent experience.

PRESENTATION FORMAT

The session is directly relevant to the conference themes, most notably sustainable work. Within this theme lies automation and this session seeks to fill a gap in the current literature on trust and complacency within perceptions of automation. This presentation will be a roundtable discussion format to allow for more interaction with session participants. Throughout the presentation, the participants will be engaged in the topic with the use of examples and problem solving. The session will aim to gather feedback on the research in a collaborative setting.

PRESENTER BACKGROUND: PATRICIA HUBBARD

Patricia is a PhD student in the Graduate School of Management at the University of Auckland. Prior to this, she was a chief financial officer for an educational institution in the United States. Upon completion of her MBA, she became interested in the process of automation and engaging with the human agent. In her prior research, she aimed to create efficiencies in automated processes within a business setting. This included field-testing and implementing pilot programmes. She has learned that concepts such as trust and complacency add complex components to the automation process. This led to the current research within the theme of sustainable work. This research will be the basis of her PhD dissertation within a qualitative study – she began her doctoral journey in October 2017.

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Requested stream: 01. Conference Theme: Managing the Many Faces of Sustainable Work

Requested format: Refereed delivered paper

Sustainable management control – capturing the dynamics of the management control field

ANZAM December 2018, Adelaide

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Sustainable management control – capturing the dynamics of the management control field

Academic and management literature, as well as practice, is teeming with management control concepts, tools and ideas, like New public management, Value-based management, full costing, budgets, (key) performance indicators, strategy maps, kaizen... New varieties, and sometimes even new species, keep appearing. We who are in the game, attempt to keep a grip on the existing flora, while scanning to detect what is on the rise – new or merely rebranded. Which new ones are merely varieties in already existing families, which ones are rather to be considered as new subfamilies, or even new families? It is unlikely that we will wake up tomorrow to find that a new concept has completely taken over – processes are much slower than that. But it can still feel reassuring to be familiar with the novelties when new concepts are trending. A comfortable way of keeping abreast, is to follow the management control literature – both via central management control journals and via management books¹. However, if we are not content to just follow, but really want to approach the front and perhaps even participate in driving it, what alternatives are then available?

Below, we present an ecology view of management control tools and concepts as a way to capture the dynamics in the field and grasp where it comes from. In so doing, we propose an alternative way of structuring management control terms to provide an overview of the field and facilitate an analysis of the dynamics. We start on such an analysis with both historical examples and attempts at looking forward. The proposed structure does not reveal any clear group of concepts or tools for sustainable management control. Therefore, we draw on a model for human-centred organising to guide the assessment of imbalances and the sustainability of management control packages. Exemplifying with current organisations, we demonstrate that from a narrow organisational perspective, human-centred control is not necessary for success or survival; strict economism can work for a high-profiled company, even if it appears to be detrimental for society. And value-based, trusting, non-monitoring management control also seems to be for particular, high-profiled (and possibly not very large) companies, rather than a realistic mainstream alternative in our mainstream world. We end by identifying plausible trends and future challenges for management control.

Ecology views

Ecology, often more precisely termed business ecology, is a concept that has been rapidly gaining ground the past decade². According to one interpretation (e.g. Moore, 1993) it is simply a new (and possibly somewhat wider-scoped) term for what used to be called network (more of collaboration between equals) or virtual organisations (collaboration directed and organised by a strong party, or at

¹ This text is written from a Western-world perspective, with Europe and the English-speaking actors center stage. The short-term, profitability-focused, increasingly numbers-preoccupied and certification-extolling business ideals that are mainstream in these circles are not the only ones possible – and in some other circles, not even mainstream. This should be kept in mind by the reader. Thus, some of the more sustainability-oriented ideas that we present, could appear to be closer to current practice when viewed from some other perspective than the one we use as our starting point.

² Ecology views, drawing on the organismic conceptualisation of organisations, that was introduced by Burns & Stalker (1961), and on the open-systems idea developed by the biologist von Bertalanffy (1968), have led to the introduction of the terms *business ecology* and *business ecosystem* in business studies. Google Ngram can be employed to show how the terms started to be used in the 1990s, but unfortunately, the available Ngram data series stops in 2008. Searches on Google Scholar for “business ecology” (2018-09-29) provide hits from the end of the 20th century, a quintupling in 2000-2009, and a further doubling in the present decade. A similar search for “business ecosystem” shows an almost 20-fold increase in hits from the 1990s to the 2000s, and a further quintupling in the present decade. Searches in academic databases provide fewer hits, but similar patterns.

least by a party with a strong and selling vision). An in our view more interesting interpretation of the ecology concept, views it as something more profound. It then seeks to capture a world with many communication possibilities and many opportunities for border- and limit-transcending business initiatives and travelling ideas (Westelius & Lind, 2016). Like the ecology concept in botany and zoology, an ecology (or an ecosystem) is something that no one controls. There may certainly be stronger and weaker actors, but no one has the complete picture or complete control, and it is the dynamics, not the stable and constant, that serves as foreground. It is always possible that new, viable mutations arise or that immigration from other ecological niches unsettle the existing balance.

The management control flora is not just populated and controlled by management control specialists. There are many philosophies with more or less obvious control ambitions that give rise to new control schools or tools, and which can come to affect what is in vogue or passé at present. At the same time, the management control flora is rather rich in species and the species rather resilient. Management control models seldom become completely extinct (and it is rather unusual that additions are entirely novel).

In this article, we provide a first draft of an ecology overview of management control. We focus on concepts, philosophies and models, but proponents, advocates and users – and opponents – are of course also important components in the ecology. We welcome suggestions on what more the ecology contains. Our aspiration is that the ecology will contribute to both an overview of the management control field, and an improved possibility to see how the field develops – what grows, shrinks, is added or possibly even disappears.

Management control concepts and models

From a start relatively poor in species, with double Italian bookkeeping, DuPont diagrams, payback time, full and marginal costing, the field now overflows. There are concepts, such as Lean, New Public Management, process orientation, CSR, value-based management, different types of multi-goal approaches, and tools, such as ABC, BSC, CMM, TBM, VBM, LCC, EVA, SROI, etcetera (**Error! Reference source not found.**).

Some have come from quality management, with zero-fault philosophies, target costing, kaizen and continuous improvement as ideas for controlling operations. In pursuit of efficiency, norms and standards have become important, not only for output, but also for processes.

The ISO family is gradually expanded and since the 2000 generation of ISO standards, there should be a learning component, an improvement process, as part of each standard. In this process-focused tradition, CMM, capability maturity models, has become an ideal. Worst is not even thinking process at all. Best is to have fully identified processes that you live by. The advantage is reliable quality according to the norm. The disadvantage is the lack of flexibility and the focus on the map, the norm, ahead of the surroundings. Learning and improvement processes are included in the approach, intended to deal with the shortcomings, but they too risk being myopic and formalism-focused.

In a capitalist society, it is not surprising that much of governance thinking has come from a shareholder's value perspective, but economic-man thinking has gradually given rise to more elaborate

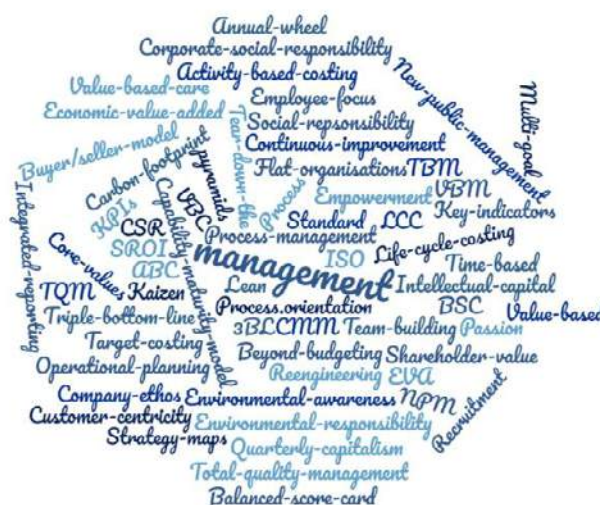


Figure 1 Management control terms

tools to counteract gambling behaviour and short-sightedness – Economic Value added, Life-cycle costing – or to better capture causation, tools such as ABC, activity-based costing. The rise to prominence of NPM, new public management, in public management since the 1980s, this more commercial, business-derived and performance-indicator-based brand of control, has also caused much debate. Simplified ideas from the quality track, such as time-based management, that eliminating time wastage is the best way to efficiency – and costing-inspired tools, such as TBABC – Time-based ABC – and value-based care are current approaches that are advanced as The teachings of salvation – and arouse resistance from practitioners who perceive that in their eyes important values are not taken into account.

In the public and non-profit sectors, much of the management control effort has instead been activity-focused with a one-year perspective. The annual wheel describes the work with operational planning, which normally results in a document with intended activities, possibly mainly described in text, and where also the results are outlined in text rather than numbers. Of course, there is a budget, but its importance for the planning and execution of activities at local level has not necessarily been predominant. However, management by numbers, often NPM-inspired, continues to gain ground in public and non-profit organisations. But that development is not homogeneous – there are endeavours in other directions. In Sweden, with the successful bank Handelsbanken at the forefront, the value of budgeting was questioned (Wallander 1994) and during the 1990s, a beyond-budgeting movement (Hope & Fraser, 1997) grew, however, without becoming dominant.

Part of the rationality track has, within the scope of shareholder value, tried to find ways to handle even parameters that cannot easily be translated into monetary terms. Multi-goal approaches have come to be popularised, for example as balanced scorecards and strategy maps, where different dimensions are needed for the long-term success of the business. But while promoting a multi-goal logic, there were also efforts to show how the different dimensions together lead to economic viability (Kaplan & Norton, 1996). Others have, from a stakeholder perspective, argued that multi-goal approaches are needed because different stakeholders have different values and strive towards different goals. Therefore, in order to maintain a negotiated balance between different stakeholders, management control needs to take into account multiple, possibly incompatible objectives. Perhaps this balance is something that not only comes through more regular negotiations; the moral compass of those in charge should also include values that do not have a clear negotiating voice (Brytting & Westelius, 2014).

Social responsibility (and CSR governance) could be seen as an intrinsic value to consider. Social return on Investment (SROI) is even trying to put the social consequences in the foreground, within the framework of a business rhetoric (Nilsson & Gordon, 2012; Jannesson & Jonsson, 2015). To this, Triple Bottom Line adds the environmental ecological perspective, and the Integrated-reporting movement (which for better or worse has also won Prince Charles' support) goes on to add also manufacturing, intellectual and human perspectives. The environmental issue is unfortunately much more serious than just being a temporary focus on management control, but it is no daring guess that we will see additional perspectives intermingled with financial, social and environmental in the future. Gender, ethnicity and various political considerations can be expected to take on greater prominence in management control in a not too distant future.

Thus, economic governance has long been far more than financial values and key indicators. Not only practitioners (from high-profile Swedish managers Janne Carlzon and Percy Barnevik in the 1980s to Yvon Chouinard and Elon Musk) but also academics (such as Ouchi (1979), Simons (1994) and Malmi & Brown (2008)) see social influences, values, recruitment, etc. as key areas for levers of control. Values management, Customer centricity (moment of truth), clans, communities, etc. make the choice of employees to a question that partially replaces, partly complements classical financial control tools. In recent years, not least start-ups and tech companies have emphasised the importance of engagement, and passion has become a watchword. With people passionate about the business focus

(and possibly with good access to risk capital that finances the business?), governance becomes more a matter of finding and releasing (or not thwarting) the passion. A poster-name such as Patagonia may largely work according to such principles, but that passion can replace more traditional forms of governance in the long run, can be difficult to imagine in the vast majority of companies.

Concepts and tools

The unsorted mass of management control terms depicted in the tag cloud in Figure 1 may be descriptively valid as an ecology-view of the current state. They, and more, exist, are used in different combinations – with or without central overview and careful considerations. But as Linnaeus started systematising the study of plants by creating a taxonomy based on similarity and difference, according to which individuals could be sorted, we will try to help make sense of the mass of management control terms by proposing a framework for sorting them. One dimension to use is to arrange the terms by abstraction level. Some are more of a concept, or basic approach (economism, stakeholder perspective, management by values). Others are more of specific tools (full costing, target costing, burndown chart). Yet others are in between, with a more or less clear connection to a basic approach and have – or have inspired – one or more tools. Thus, it would be possible to plot them in a two-dimensional space, where the vertical dimension goes from the more comprehensive, conceptual ("concept" in Figure 2) to the more concrete ("tool" in the figure). There is therefore some form of ordinal scale, but the horizontal dimension is more of a nominal type, with classes (families of concepts), not a clearly traceable scale. Placing tools or concepts within a family does not necessarily mean that they are compatible with each other (a characteristic whose importance is emphasized by, for example, Grabner & Moers, 2013). And that they belong to different families does not mean that they are necessarily incompatible. However, because the idea of families is an attempt to arrange concepts and tools based on ethos, compatibility can probably be expected to be greater within a family and the risk of collisions increase if tools are combined between families.

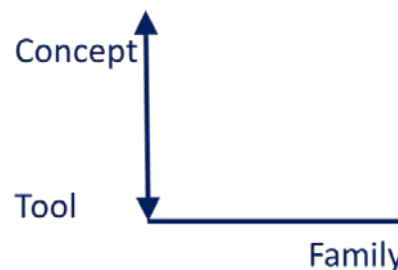


Figure 2 Two term dimensions

An attempt to plot management control terms on this plane could look like Figure 2. The most classical management control terms, with tools such as budget and product costing, have been arranged under *Economism* and the concept shareholder value. High up, KPIs and NPM have been placed. Multi-goal

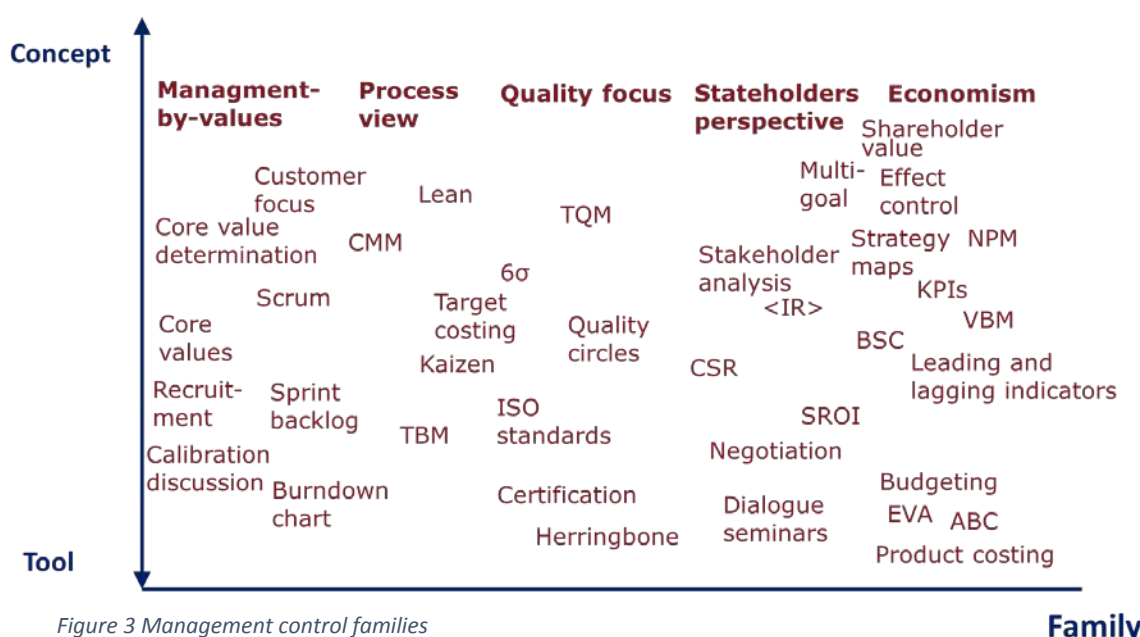


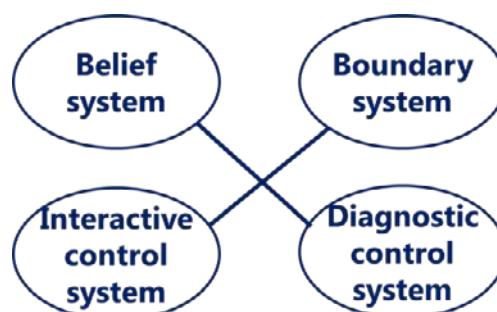
Figure 3 Management control families

control may, as noted above, either be within the scope of a shareholder value view or more descended from a multiple stakeholder perspective. Multi-goal has therefore been placed in the borderland between the "families" economism and *stakeholder perspective*. Strategy maps and balanced scorecards originated in shareholder-value thinking, but have come to be used also for public and non-profit enterprises, but usually based on the view that it is the organisation's principals who legitimately determine the content of the map and the cards, rather than that they should be a negotiation result influenced by different stakeholders on a more equal footing. The stakeholder perspective includes, for example, integrated control (IR) and CSR, where the idea is that stakeholders in the surrounding society, not just direct principals, should be given a clear priority in the governance.

Quality focus can of course be seen as something that can occur in many traditions, but seen as an overarching concept, as in this figure, it is about governance traditions that really put product quality first: If the quality is the overarching goal for everyone, the business will be profitable, customers and staff will be satisfied and unfavourable external impact can be kept down. The more tool-related manifestations include quality circles and herringbone analysis. ISO standards and certifications are quality concepts and tools with more affinity to the *process view* as a general principle. Here, maximum quality is no longer the focus, but rather the standardised business processes that generate clearly predictable results and products with clearly and steadily defined characteristics. Norm fidelity and certification are important elements of governance. Squarely in the process-view family we find, for example, Lean, where the trimming of processes and the elimination of waste (time and other) are in focus. The process-view family also includes CMM (capability maturity modelling) – the elevation of process fidelity to primary concern.

Within the *management-by-values* family, customer centricity (or customer obsession, even) can be found – the idea that if customer focus is the guiding principle for everyday choices, the business will be successful in the long term. Further down, Scrum with Sprint backlogs and Burndown charts is also available as a way to ensure in everyday action that customer priorities govern (usually product development, but also, for example, management work). Scrum has large elements of processes, but not in the same detailed controlling manner as traditional process orientation. In Scrum, it is rather conceptual processes in the form of management and coordination principles and activities: scrum meetings, sprints, back logs. These principles are intended to promote agility, workgroup coordination and awareness, and step-by-step customer- or user-centric prioritisation, rather than form the basis for detailed processes that should be meticulously followed.

At the far left of the picture is the concept of management by values where the guiding principle is that agreed values should govern the individual employees' actions; detailed job descriptions or product and process standards are unfit to handle the changing and challenging business environment. The employees' judgement will frequently be exercised, and what can then hold together and focus the business in the right direction are the fundamental values. Note the plural form, values, unlike, for example, quality focus or customer focus, where one overarching value is to govern. In the management-by-values family, values may include respect, thrift, honesty, environmental awareness, etc. But it is not just a list of desirable values. As in the top half of Simons' levers (1994) (see Figure 4) values concern both what is desirable (belief system) and what is to be avoided (boundary system).



Core values determination and calibration and (documented) values are popular tools (often even in businesses that do not rely primarily on values management, and often without any effect on the business). More effective tools are to be found in the recruitment process (to find people with the "right" values, rather than believing that you can shape people's values) and calibration conversations

(to frequently meet colleagues and discuss challenging situations: how you have handled them, how colleagues would have handled them, and how to be able to manage them in future or learn from them to better cope with new challenges. What is being calibrated is the interpretation-in-action of the fundamental values. Calibration conversations can be a planned part of the work, for example in activities where other forms of governance do not have a prominent role (Gullberg & Westelius, 2015), but can also be a spontaneous everyday activity (Westelius, 2001), even for example in enterprises with clear instruction-control ambitions (Ekman, 1999).

A critical examination of **Error! Reference source not found.** can give rise to questions about the placement of individual terms, and to complementary or alternative ideas about what are relevant 'families'. Furthermore, such an examination can lead to question marks about how two-dimensional the space really is – individual concepts could fit (perhaps in different ways) into different families and more than two families may be connected to each other. So, unlike Linnaeus taxonomy, it is by no means a pure hierarchy. The plane in the graph is also not a perfect classification space that can provide a "MECE" classification: mutually exclusive and collectively exhaustive classes. On the other hand, it is possibly meaningful and useful by providing some structure to the flora of terms, and by encouraging thoughts about how concepts relate to each other.

The graph could easily be extended to a three-dimensional space by adding another dimension – Organisational function (**Error! Reference source not found.**). This added dimension can be used to capture where in the organisation each management control term is (most) current. Scrum is more topical in R&D than in a repetitive manufacturing environment; 6σ may be particularly useful in the manufacturing environment; IR at the business management level; SROI in product development and HR, rather than in the internal work of the accounting unit, etc. Perhaps there are also different preferences regarding family of control concepts in different functions? "Function" in the conceptual space is then once again a nominal scale – classes without an obvious order.

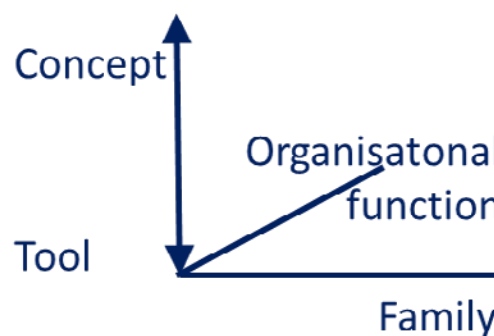


Figure 5 A three-dimensional space for organising management control terms

It can be noted that sustainability is not a family in figure 3 or figure 5. Different organisational functions may have different views on sustainability, even if most functions would have some type of going-concern aspiration; they want the organisation to keep operating, well into the future. To make this possible, HR may foremost think of recruiting and handling organisational members in a way that keeps the “human resources” healthy and properly trained. R&D may seek to develop products that meet present and future customer needs and have a low environmental footprint. Production may be concerned with maintaining productive capacity of sufficient quality and at competitive cost, etc. To accomplish this, they may be employing different tools from different families – and, as noted above, perhaps be inclined to have different preferences at the concept level. It is unclear if this leads to sustainable management control, or if it is more likely to result in faddism or unreflective traditionalism that generates unintended conflicting signals.

The dynamics of the management control portfolio

If you want to be able to capture the dynamics, development over time, in the graph, it would be valuable with a Rosling-style animation³, with size indicating the importance of the respective concepts (adoption or impact), and perhaps geographical and/or sectoral classification.

³ Professor Hans Rosling, MD, became a public figure through his presentation of animations of the health situation over time in different countries, preferably in relation to economic development.

In the introduction, we advocated an ecological approach, not only to see what is in the field and how it evolves, but also how concepts and values come to the field of financial control, and from whence. It is difficult to foretell the future, not least by just looking in the rear-view mirror and drawing out the visible trends, but something should still be possible to learn from seeing how the field has evolved up till now.

Looking back, we see a growth in the field of management control by the incorporation of different forms of governance under the label management control. This can have many causes. One is the imperialism of controllers – to see themselves as steering experts and to include ever greater variety of governance under their definition of the field, and moving out of what Olve calls the controller's "Secure Corner" with accounting data and reports (Olve, 1988; Nilsson, Petri & Westelius, 2016). Another is that management has evolved and that traditions and tools have been created, partly in response to the need for new or modified forms of control, partly as a result of a growing cadre of people interested in management control, trying to launch models, concepts and tools in order to be seen – and to sell. The need – and demand – has grown because successively, larger organisations need to be coordinated, possibly over increasing geographical and cultural distances. Here, digitisation has been both an enabling factor for the development of the organisations and the organisational networks, and an enabler of ever more data-based management control (Cöster & Westelius, 2016). But the development has also been driven by consultancy companies that earn big money in proposing and conducting mergers (M&A, mergers and acquisitions). Furthermore, the growing toolbox itself has given rise to its own growth and development, in order to deal with increasingly obvious clashes between different control instruments. The noted problems have given rise to thoughts about the need for coordination – to see management control as "a package" that should be coordinated, rather than as the sum of all organisational functions' and staff units' individual governance attempts.

Consulting companies and management writers will continue to be sources of changes in the management control portfolio. And noted problems (really tangible or just cleverly marketed) will also in future be signals that initiatives and novelties could be developing – or leave room for our own contributions.

One type of dynamics we can see in the rear-view mirror, and which is likely to keep occurring, is pendulum movements. Already two hundred years ago, Hegel noted that knowledge development tends to occur by the prevailing perception eventually beginning to be filled with contradictions, giving rise to a counter-movement to deal with them; thesis is followed by antithesis, and a possible synthesis is by no means an end point, but is followed by a similar development. This pendulum movement – or spiral, if one imagines that it after all leads onwards – is quite universal and is also visible in the development of the control field. The wave of decentralisation in business in the 1980s, with customer focus and customer attentiveness, was followed by stricter governance, standardisation and centralisation during the 1990s. In the public sector, the strong expansion and good supply of financing in the 1970s and early 1980s was followed by NPM, stricter governance and more metrics, starting in the 1980s – a development that is not completely replaced yet. That public and private activity do not necessarily go in step is visible in the example and in its continuation, where the spread of NPM in the public sector coincided with the emergence of storytelling, mission and vision and an emphasis on passion in business, to handle the erosion of sense of meaning and dedication caused by hard management-by-numbers. But the business world does not move in step either; Amazon's extremely measurement-focused and individualism-promoting control coexists with Google's and Microsoft's efforts to provide or maintain a sense freedom, group spirit and creative engagement.

Different human needs that governance must meet

There is talk of hard and soft control, key indicators and core values, and various external factors, such as competition and industry maturity, are considered to set different requirements for management control. And so do organisation-specific factors, such as size and risk appetite. Other traditions focus on how those controlled may need different types of steering (Hersey & Blanchard, 1969). Situational leadership does not ignore the organisation, task and environment, but stresses that the inexperienced and insecure, the inexperienced but confident, the competent but unwilling and the highly capable and confident all need to be met with different control actions – differences in how much and what type of control. In such a human-centred tradition, we have moved on and identified four types of human needs that need to be met also in organised cooperation, summed up in the model MARC (Brytting, Westelius & Westelius, 2004; Westelius, Brytting & Westelius, 2013), see **Error! Reference source not found.** Meaning (the wordless: to be able to see a higher meaning and to be allowed to use intuition); Authority (coordination and power to act (when the other three do not well satisfy this): to acknowledge and follow the decisions of a (competent) superior, and to set up and comply with rules); Rationality (reason: to be able to see the logic and to be allowed to question); and Care (human relations: to be seen as a human being and to experience and express joy).

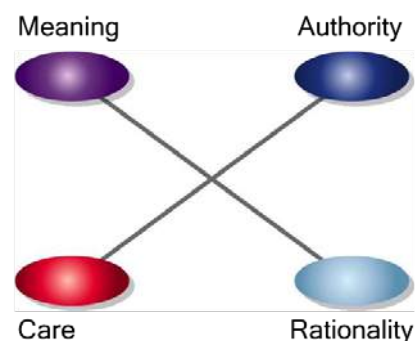


Figure 6 The MARC model

If we look back at the management control families in **Error! Reference source not found.**, we can note that traditional management control tends to handle the right-hand side of the MARC model: Activity-Based Costing, Cost allocation (rather than allotment), breakdown into leading, coincident and lagging indicators, etc, speak to our logic, while budgetary discipline, focus on the selected key indicators (above others) and so on, should ensure that we act in a coordinated way, even when our personal, rational analysis would have led us in a different direction. (But if the prescribed key indicators systematically point in what we perceive as the wrong direction, we should at least be able to initiate a discussion about their appropriateness.) Process orientation is based on a strong position for prescribed routines (authority), but they are presumed to be appropriately designed, and for example, quality circles are meant for conducting discussions on possible improvements to the decided and mandated processes (Rationality). The stakeholder perspective can also be said to focus the right-hand side of MARC to a certain extent, with a clear presentation of what the various stakeholders find important, and with negotiated agreements on trade-offs between interests. But the perspective also includes some of the left-hand side of the MARC model – Care, to note that there may be other stakeholders than the owners or the principals, and to take them seriously. CSR, taken seriously, emphasizes that it is too myopic to claim that "the business of business is business"; even a profit-making organisation should be conducted in a socially responsible manner. (This does not preclude that CSR perspectives are sometimes handled mostly for show, or are motivated by concerns that too antisocial conduct can lead to retaliation by clients, legislators or other potentially influential parties.)

Quality focus or Lean (and some other tracks) can sometimes take on a character of almost religious conviction, mysticism rather than rationality (and possibly akin to a strong sense of Meaning). The absolute conviction that zero-failure (or waste elimination) is the way to success provides the strength to persevere in the management control efforts. The other factors in the MARC model become secondary. In **Error! Reference source not found.**'s left-hand family, values control, the emphasis is strongly on the MARC model's left, and above all on Meaning. If we agree on the higher values we strive to achieve and maintain, our inner compasses will be the main instruments for achieving direction and consonant action, relying to a large extent on our intuition and common sense, without so much tools from the MARC model's right. At the same time, it may be important to build close relations in the narrow circle – the calibration discussions with direct colleagues, the scrum meetings

where we stand in a circle together with our project group – so even Care is subject to tool development.

Based on the above reasoning about swings of the pendulum, thesis and antithesis, the problems of the current control model will, if they feel sufficiently troublesome, lead us to seek solutions far away, in the antithesis to the present, or the other end point of the pendulum. We can then see the MARC model's concepts as clues to where development is likely to occur. If today's models are right-side heavy (Rationality and Authority), it is likely that old or new ideas and tools from the left side (Care and Meaning) will make their entrance, and vice versa. To hold together large organisations, the upper half is often emphasized (Meaning and Authority), which, if it goes too far, can be expected to produce a backlash within the lower half's relationship focus and strive for rationality (Care and Rationality). And as the smaller company grows, group cohesion and ad-hoc solutions can increasingly need to be complemented by designed construction of Meaning (vision, mission, ...), decision-making systems and regulations (Authority).

We propose that long-term sustainable governance needs to meet all four types of needs, as in Figure 7 (where the box is a radar chart, indicating that all four types are well catered for), but the question is whether this is an attainable ideal. (It should be noted, that the balance in MARC terms is not about there being much of everything, but that what is applied is appropriate in the organisation in question.) A quick glance at the management control families in **Error! Reference source not found.** indicates that such balanced governance packages are uncommon. Possibly, they can be constructed by picking from different families, but the risk is that there will be clashes on the overall conceptual level – the overarching Meanings underlying the various control package parts become irreconcilable. Whether that really is the case, we will leave aside for now. It should be the subject of a separate study. Instead, we turn to current examples. Is there one dominant way to sustainable success?

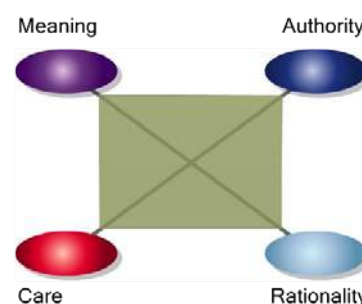


Figure 7 Balanced management control

Different examples of successful management control

What are the management control practices of currently successful companies? A rapidly growing and highly valued company that has featured in the public debate is Amazon. According to descriptions, the regime is extreme in its management by numbers, where everyone's performance is monitored with detailed metrics (Selby, 2017), and where the numbers are complemented with an informer system where you can report colleagues who do not seem to contribute sufficiently (Kantor & Streitfeld, 2015). Among the stories circulating is how, instead of ensuring that there is air conditioning in the warehouse in the high summer heat, management ensures that there are ambulances standby that can quickly take care of those who suffer heat stroke. At the same time, there is no shortage of candidates who want to expose themselves to this employer's control system. Those who stomach it and succeed, seem to regard themselves as a superior race, Amazonians. They are driven by a desire to work with other highly ambitious people in developing even more efficient systems to market, sell and deliver all possible products and services. It is possible to find adult people lyrically testifying to how they were able to deliver Disney dolls to expectant little girls faster than anyone else. Strength, durability, endurance and dedication, these are esteemed traits, and having worked for some time at Amazon can be seen as a sign that one is both ambitious and stress-resistant. But there is no talk of fellowship, concern for colleagues or other joy than that which is to be found in successful deliveries and in achieving the targets. At the same time, there seems to be a disdain for weakness. The informer system, unwillingness to pay consideration to those who become ill or

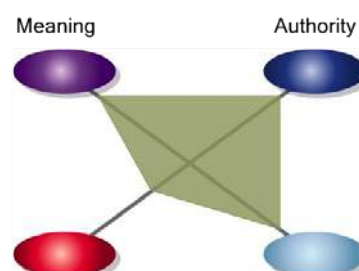


Figure 8 Amazon's management control?

suffer personal losses, testimony of an extremely instrumental view of co-workers, all make the image of Amazon painted in the public debate (Cadwalladr (2013); Kantor & Streitfeld (2015); Selby (2017)) the epitome of the "combustion organisation" that a good MARC balance should protect against (Brytting et al., 2004, Westelius et al., 2013). The combustion organisation produces results – by combusting the people who work in it. If we are to believe the testimony in articles such as Kantor & Streitfeld (2015), the management control is even more skewed than in Figure 8, but obviously it is sustainable, as long as it continues to deliver results (and as long as the company can recruit fresh candidates, and does not have to take care of those used up in or damaged by the process). Expectations continue to be high; Amazon is today the world's second highest-valued company (market value 826 bn USD on 2018-06-25), with a P/E ratio of 270!).

Google has, reportedly (e.g., Manimala & Wasdani, 2013), a completely different control model. With seemingly minimal numerical control, encouraging own initiatives and little process control, the emphasis is rather on the MARC model's left. Management by values, with the objective "to organize the world's information and make it universally accessible and useful", which emphasises the benefit to the surrounding community rather than the company's profit (although the model so far seems very profitable), "Don't be evil", to mark that it is not about "don't leave money on the table" or to chase short-term success, makes it attractive and socially acceptable to work for the company. The freedom to develop your own ideas to a large extent, and to get support for them if you can demonstrate their potential; empowerment rather than micro management; fairness in evaluation (to be evaluated by people whose judgement you esteem); emphasis on joy, comfort and companionship; caring for employees' professional development, life balance and health: all contribute to the image of a company where societal benefits, humanity, joy and work satisfaction are at the forefront (Meaning and Care of the MARC model).

Provided that recruitment works, that the cherished values really match the tasks, that the focus on individuals, the community, job satisfaction and comfort works, there is little need for guiding rules or decision-making arrangements to maintain momentum, or advanced analysis to make sure people are doing their job. So, according to this reasoning, the emphasis of the left side of MARC here does not mean that Authority and Rationality are undersized in the management control. But then it should also be mentioned that Google (or more formally, the Alphabet Group) is a very profitable organisation – and valuable. Their market valuation of 807 bn USD today (2018-06-25) is based on a high, but not completely fanciful, P/E of 31. In such an organisation, which is also perceived as a good employer and a merit to have worked for, it may be possible to get motivated people to perform good – and profitable – work without hard control or unnecessary stress. We are not claiming that any company that tries to govern like Google would be successful. Nor is it certain that stories about the company provide a complete and credible picture. The Alphabet group with Google now has 85.000 employees and it is hard to believe that everyone can have inspiring work and have a great outlet for their creativity. Most likely, there is a substantial amount of goal management and traditional control tools also within this company.

Yet a high-profile company, Tesla, with a market valuation of USD 54 billion (currently not making profit, and with a total revenue for the current year of around 15 bn USD), also stands out as a value-driven company. Musk's vision to change the world by gathering highly skilled people who want to develop and manufacture ground-breaking products preserving the environment – so far mainly electric cars – are also based on motivated and collaborating employees, rather than on rules, routines, standards and hard key-indicator control. Of course, you need to keep deadlines and be cost-effective, because the vision can only be reached if the products are gaining wide dispersion, but target-cost management in design and motivated employees who are result-oriented and cost-conscious will be more important than hard cost-tracking. In the current race to increase car production while keeping costs reasonable, there has been an increased cost and productivity focus, but to a large extent communicated as a desirable work ethos rather than classical agent-theory-based management control. Here, too, it is unclear whether the control model can survive when other manufacturers see

how Musk's product visions are adopted by the market, and seriously enter the segment. Then, right-side control tools may become more important within Tesla than they are at present.

The impressionist picture these examples paint, shows how different control models can be seemingly sustainable in different – but new and successful – activities at the same time. The examples also suggest that there are no persistent ideal configurations. Each set of control concepts and tools has its strengths – and its weaknesses, which will sooner or later require other efforts to be handled.

A final glance in the crystal ball

Above, we have noted that the environmental issue will continue to demand attention and probably also give rise to continued control-tool development. Digitisation is another ongoing process, which changes the prerequisites for both operating and controlling; more and more data can be collected, analysed, visualised and disseminated, and increasingly realistic communication can be carried out without geographical relocation. Furthermore, we have noted that gender, ethnicity and various political considerations could be expected to figure more prominently in the management control flora of tomorrow. Equality, or at least constructive coexistence over possible dividing lines, is a growing challenge, not least in an increasingly international – and migrant – world. It is possible that today's control tools can be adapted to deal with such challenges, but it may also require redevelopment (or at least rebranding). Political considerations can be prompted by similarities and differences, but they can also be about drifts in prevalent ideals. Governance in the public sector is clearly influenced by the prevailing political winds, but the business sector is not unaffected either. It is no coincidence that decentralised governance began to gain ever greater focus after 1968, or that economic growth, growing financial assets and the spread of shareholding have been accompanied by more conservative or market-liberal sentiments and rhetoric and a stronger establishment of shareholder-value-focused governance.

On the world stage, we also see how country after country is affected by polarised contradictions between two groups, where one (often the minority) has been deemed too favoured and the other (the majority) takes over repressively and violently – in Nigeria, Rwanda, Somalia, Iraq, Sri Lanka... Even harder it becomes when there are not only two sides, as in Syria. Our management control flora is developed to handle collaboration in reasonably peaceful forms and with moderate conflicts. How are we poised if the stakeholder divisions really become serious and go beyond what we have traditionally managed to deal with in terms of reasoning?

When pronounced poverty combined with widespread corruption encounters destabilising changes – drought, military interventions, plagues – chaos erupts that eventually causes people to even prefer tyranny, if only it provides some form of stability. Can such developments also affect the financial control portfolio and the use of control tools?

And more close to home: at the beginning of the 1980s, Sven-Erik Sjöstrand, professor of organisational theory, used to say that you should build organisations so that they can sustain having Donald Duck at the top – for one day you stand there with Donald Duck at the top. Now, we have a political and social development in the direction of the post-truth society, where demagoguery can give political power on the basis of sentiment rather than reasoning and factual basis. (It is not the first time in world history, but it seems to happen now again – at least viewed from a value-base that saw our Western society ten years ago as a good and successful one, with increasing globalisation, detente, free trade and free labour mobility.) What will our management control tools need to be to work in a post-truth climate, where experience and factual basis are no longer watchwords?

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Stream 01. Conference Theme: Managing the Many Faces of Sustainable Work
Competitive Session

**EXPLORING THE 'EMPLOYMENT' DIMENSION OF DECENT WORK AMONG
CLEANERS IN MAURITIUS**

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ABSTRACT

Decent work is at the heart of global, national and local strategies for economic and social progress and encompasses four major dimensions, namely: Work and Employment, Rights at Work, Social Dialogue and Social Protection. Today, decent work is central to the efforts for achieving equitable, inclusive and sustainable development. Nevertheless, people throughout the world face deficits, gaps and exclusions in various forms. This paper therefore explores the perception which cleaners in Mauritius have as far as the 'Work and Employment' dimension of decent work is concerned. It used the qualitative stance, to investigate the extent to which cleaners perceived their jobs to be decent through the Employment Fit Framework and the Job Quality parameters.

Keywords: Decent Work, Healthy Work, Sustainability, Precarious Work

LITERATURE REVIEW

Work is defined as a context for human experience and development which have positively impacted the lives of people, organizations, and communities for more than a century (See for example, Landy and Conte, 2010; Schleicher *et al.*, 2011; Di Fabio and Maree, 2012; Di Fabio, 2014). On the other hand, decent work sums up the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income; security in the workplace and social protection for families; better prospects for personal development and social integration; freedom for people to express their concerns, organize and participate in the decisions that affect their lives; and equality of opportunity and treatment for all women and men (Ali, 2013). The components of decent work, as stated by the ILO (2001, 2002) constitute of the following dimensions: work and employment, rights at work, social dialogue and social protection. Although, the promotion of decent work for all is the overarching objective of the ILO, people throughout the world still face deficits, gaps and exclusions as far as their work is concerned. (See Carr, MacLachlan & Furnham, 2012; Duffy, Blustein, Diemer & Autin 2016).

Such decent work deficits are more pronounced for the workers in the informal economy in comparison to workers with secure and permanent jobs in the formal economy (Blustein, Olle, Connors-Kellgren & Diamonti, 2016). In recent years trade liberalization and globalization have re-shaped and re-defined the composition, dynamics and geographical distribution of the informal economy (Malenfant, Larue & Vézina, 2007), making room for more enlarged decent work deficits.

The ‘Work and Employment’ Dimension of Decent Work

The ILO (2012) identifies “job generation” and “quality of employment” as the parameters of the ‘work and employment’ dimension of decent work. In fact, for a person to have a decent job, he or she must ‘have’ a job. The need for more jobs is central to the decent work paradigm, and full employment rightfully occupies the prime position at the forefront of the decent work effort (Guichard, 2009). This stresses that employment generation is the primary consideration for decent work, followed by job quality in terms of working conditions. In turn, employment is generated or created when there is a fit as shown in Figure 1.

INSERT FIG 1 HERE

According to Kristof (1996), supplementary fit represented by arrow “a” denotes the relationship exists between the underlying characteristics of the individual and the organization. From the organizations’ point of view these characteristics consist of culture, climate, values, goals and norms. On the other side, the individual’ characteristics include values, goals, personality and attitudes. Therefore, supplementary fit occurs when there is similarity between the individual’ and organization’ characteristics (Berger, 2009).

These characteristics influence the supply and demand of both entities as shown by the dotted arrows. Organizations supply financial, physical and psychological resources, as well as task-related and interpersonal opportunities requested by individuals. When the organizational supplies are similar with the demands of individuals, the needs-supplies fit is accomplished. Correspondingly, organizations demand side such as time, effort, commitment and experience resources from individuals. When individuals are able to supply the organization with the mentioned resources, then demands-abilities fit is achieved. (See for example Bogler & Nir 2015)

In the existing literature on fit between organizations and individuals, four operationalizations of person-organization fit were observed. The first type of operationalization in relation to supplementary fit is the ***congruence between organizational and individual values***. In this type of operationalization, person-organization fit is equivalent to person-culture fit. According to O’Reilly, Chatman, and Caldwell (1991) congruency between an individual’s values and those of an organization may be at the crux of person-culture fit. Person-culture fit essence lies from the fact that the organizations have cultures that are more or less attractive to individuals. This operationalization assumes that values are imperative, as they guide the individuals’ behaviour (Edwards 1994; Nisbett & Lee, 1980).

The third operationalization mirrors the ***needs-supplies fit perspective***. This match is between individual preferences and needs and organizational systems and structures (Tomoki, 2004). This type of operationalization originated from the need-press theory which presumes that an individual will be contented with work if the environment fulfills his or her needs (Kristof, 1996).

The fourth and last operationalization matches the characteristic of *individual personality and organizational culture or climate* (Tomoki, 2004). This operationalization can be viewed from both perspectives: supplementary and needs-supplies. Supplementary fit, because it describes congruence between organizations' and individuals' personality. From the needs-supplies perspective, it can be said that the environment is determined by organizational supplies and the individuals' personality is determined by the needs of the individuals (Kristof, 1996).

In connection with the relationships described and presented above, person-organization fit can be defined as “the compatibility between people and organizations that occurs when: (a) at least one entity provides what the other need, or (b) they share similar fundamental characteristics, or (c) both” (Kristof, 1996). Therefore, the definition suggests that the desired person-organization fit is achieved when each entity's needs are met by the other and they share similar fundamental characteristics (Kristof, 1996; Olsen 2010; Karasek & Theorell, 1990).

The Employment Quality

Ghai (2003) relays that job generation should also consider the quality of the job. He suggests that the greater challenge for job generation lies not only in having available jobs for workers but in the creation of quality employment. Several authors (for example Bonnet, Figueiredo & Standing 2003; Ghai, 2003; Kuruvilla, 2006) suggest that social upgrading within the quality of employment can be seen through the following indicators: adequate wages, balanced (not excessive) working hours, allowance for paid leave, provisions for training, existence of health and safety programmes, job security by determining whether work is temporary or permanent.

In addition, Rodgers, Lee, Swepston & Van Daele (2009) noted that when the ILO refers to quality of work, it has mainly focused on hours of work, occupational health and safety, and minimum wages. In other words, the qualitative aspect of work has overlooked the substantive way the activity of work and its effects on workers.

There is no agreements upon definition of a quality work and no consensus on what constitutes a good job (Kalleberg, Reskin& Hudson 2000); these being both subjective and objective. Thus, measures of

job quality are better elaborated upon below, taking into consideration the measures of job quality put forward by Green, Burchell & Felstead (2000):

Job security

Job security was seen as an essential aspect of quality of work (Martel and Dupuis, 2006). Jobs of short and uncertain duration are considered of low quality and the same are jobs where the work itself is pervaded with uncertainty (Green, 2007). Job insecurity is a major source of ill-health and job dissatisfaction, has long lasting impact on individuals and their households and creates tension at home (Burchell, 1994; Wichert, 2002). Job security depends on aspects of the current job as well as the possibility of alternative job (employability) (Green *et al.*, 2000). Green (2007) defines job insecurity as the loss of welfare that comes from the uncertainty at work and this insecurity may derive from either economic aspects of a job or from the content of the work itself. Uncertainty about the economic aspects of the job can involve more than just losing the job, losses can also occur in the current job through wage cut, missed promotions opportunities and so on but it also involves uncertainty about the income stream in the current or future jobs.

Pay and Fringe Benefits

Pay is the core dimension in the economic perspective on quality of jobs. A low wage has consequences long after a person has left employment. It makes it difficult to build up savings to draw upon when there is no longer an income from employment, and with earning related pension schemes the disadvantage continues as people enter retirement (Gallie, 2002). In defining the hallmark of bad jobs, low earnings and lack of access to health insurance and pension benefits are included (Kalleberg *et al.*, 2000).

Although a raise in wages does not proportionately increase people's happiness, a minimum level of pay is necessary to uphold a basic level of living (Green, 2007). Pay also raises questions on inequality and fairness (See for example Maurin and Postel-Vinay, 2005).

Intrinsic Job Rewards

With the changing nature of work, intrinsic work orientation is likely to become an increasingly important factor for economic performance and future competitiveness in the knowledge-based economy (Gallie, 2007). Intrinsic job rewards differ from extrinsic job rewards such as pay, promotion in that the reward is derived from the job experience in itself. Typically, an intrinsic rewarding job is interesting and challenging, one is able to use skills and abilities, one is able to learn new things, work independently and being recognised for doing a good job (Kalleberg and Vaisey, 2005; Huang and Vliert, 2002). Several intrinsic job characteristics have been found to be correlated with higher level of job satisfaction and subjective well-being. Examples are meaningfulness of work, clear and identifiable piece of work, task complexity, whether the task is recognizable, task variety, pace, opportunity for use of initiative (Warr, 1987; Judge and Watanabe, 1993; Clark, 2005).

Work intensity

Conceptually, work intensity is ambiguous, and has included elements, such as, rising pressure of pace, time pressure, work overload, tight deadlines, harder work and long and unsocial hours. The European Union defines working more than 48 hours per week as undesirable (Gallie, 2007b). Green (2007) compares work intensity synonymously with work effort: the intensity of labour effort during time at work, and argues that work efforts should be separated from terms such as performance and productivity. Conceptually, work effort is the rate of physical and mental input of work tasks during the working day. Work intensity, on its part, is closely linked to job demands. Job demands entails using psychological stressors (Karasek, 1979), using perceptual measures and objective measures such as hours worked, overtime and so on (Michie and Williams, 2003)

Skills

The concept of skill is approached differently in academic fields. In psychology, skill refers to the competence to perform specific tasks while for sociologists, the most important indication of skill is the degree of complexity of work, and economists looks upon skills as a characteristic that individuals can acquire and that enable them to produce valued services at work (Green, 2007). According to the author, skill is an aspect of quality of work because the utilisation of skill is an end in itself. In Green's (2007)

review, the measurements for skills are listed as follows: qualifications, length of education, occupation, scores from literacy and numeracy tests, self-assessments and job requirements. Empirically, it was found that a quarter to a third of a nation’s employees tend to work in jobs for which they are overqualified, while the proportion having jobs for which they are under-qualified is somewhat lower (Green and McIntosh, 2007).

Autonomy and Control

According to Green (2007), autonomy refers to the extent to which an employee is able to exercise discretion and initiative over what happens on the job. The degree of autonomy is an outcome of the manner in which the work is organised, especially the extent of standardization of work processes and whether the execution of work tasks is controlled through rules and procedures or surveillance systems (ibid). Economists have been worried that giving workers too much autonomy will lead to inefficiency and underemployment of workers (Shapiro and Stiglitz, 1984). According to Braverman (1974), when workers get less autonomy management will eventually increase control over labour process. However, psychologists look upon workers’ autonomy and the content of the job as being fundamental importance for job satisfaction and job quality.

AIM AND OBJECTIVES OF THE STUDY

In the recent years, the demand for cleaners is on the rise and the cleaning sector has become a vital and a growing part of the modern world economy (Duminy 2011). Typically, cleaning workers are scattered, often illiterate, un-represented and invisible both in national data or programme.

This study takes place in Mauritius, where there are around 170 registered cleaning companies throughout the island, employing more than 4,000 individuals. The cleaning sector in Mauritius is characterized by a small number of large firms and a large number of small and medium-sized firms operating in a competitive environment. Since 1995, the Cleaning sector has diversified into a wide range of cleaning activities ranging from office cleaning to refuse collection. The evolution of the industry is illustrated in Figure 2 and Table 1.

INSERT FIGURE 2 HERE

INSERT TABLE 1 HERE

The salary of cleaners is governed by the National Remuneration Board under the Cleaning Enterprises (RO) Regulations, Mauritius and defines a Cleaning Enterprise as an enterprise engaged in “general cleaning and keeping in an orderly condition premises, streets and other open place”. Although recommendations concerning the remuneration and working conditions of workers employed in this sector were first made public in 1994, the ensuing regulations became effective only in 1995 and amendments brought to same in 2017 following representation from Trade Unions. Mauritius has already charted out its Decent Work Country Programme (DWCP) with a list of priorities as well in 2012 (See Decent Work Country Programme Mauritius 2012). However, till date, there has not been any structured research done to investigate into the status of decent work after DWCP has been established, contrary to other countries and prestigious institutions like the World Health Organization and World Bank. Till date, cleaners in Mauritius have made a lot of representations regarding their job conditions in the last few years, including a hunger strike last year.

This study therefore explores the perception of cleaners in Mauritius with respect to the ‘work and employment dimension’ of decent work. It investigates into the job quality of cleaners and probes into whether the cleaning sector is in line with the “employment fit” framework for generating employment, the two major parameters falling within the ‘employment dimension’ of decent work. Recommendations are then proposed, based on the findings.

METHODOLOGY

The qualitative stance was adopted for this study since it enables researchers to “get an inner experience of participants, to determine how meanings are formed through and in culture, and to discover rather than test variables”. (See Corbin and Strauss 2008). Thus, the meanings derived from participants’ experiences helped develop their needs and find out how these needs can be met (Cohen, Manion & Morrison 2000). Acknowledging that the target population for the study consisted of individuals with very low level of education, the researchers used unstructured interviews to collect data (See Corbin & Strauss 2008). A typical interview protocol was developed in that sense (See Christensen, Johnson &

Turner, 2011). The researchers have accessed informants through contact information which was provided by other informants, that is, employees working for cleaning services. This process is, by necessity, repetitive: informants refer the researcher to other informants, who are contacted by the researcher and then refer her or him to yet other informants, and so on. Since there are no power calculations or quantitative sample size estimations algorithms in qualitative research, to determine sample size, interviews continued until “saturation” had been reached. (See Corbin & Strauss 2008: 148). 71 cleaners were thus interviewed throughout Mauritius. The “naturally occurring talks” were then subsequently transcribed before being coded (See Silverman 2006).

Coding data involves reducing raw data gathered into manageable pieces of information which can also be easily retrieved by the researcher at a later stage and basically involves two simultaneous activities (See Neuman 2003: 442), that is “mechanical data reduction” and “analytic categorization of data into themes”. Coding depends on the research question, the “richness” of the data and also on the researcher’s purpose. As per Strauss (1987 in Neuman 2003) the researchers found open coding to be most appropriate for this study as it brought “themes to the surface from deep inside the data” (See Neuman 2003: 443). Transcripts were thus read line by line, different key phrases, expressions and terms were highlighted using different colours and chunks or extracts of paragraphs of conversations were highlighted to preserve the richness of data. Through this process, some key themes and sub themes emerged.

FINDINGS

Demographics

97 % of the cleaners interviewed studied till the 6th standard (that is, had achieved the Certificate of Primary Education (CPE)) and the rest had studied till Form III (that is, till lower secondary). The majority of cleaners were more than 40 years of age, with 14 % being above 61 years; the retirement age in Mauritius being 65 years of age. 19 % of respondents indicated that they were working without any formal contracts while 30% of respondents had a working contract, with a minimum duration of 3 months to a maximum duration of 11 months. A quite equal proportion of cleaners had a contract with

a minimum of 2 years and a maximum of 3 years. Only a small percentage (16%) had contracts of one year. Very few respondents (3%) claimed that they were employed on a permanent basis. 81 % of respondents interviewed were females who started work at 07 00 hours and finished at 17 00 hours with a lunch break of one hour. Only 10 % claimed having a tea break from 08 30 till 08 45. 48 % of cleaners interviewed claimed to work overtime, that is beyond 17 00 hours. Nearly all of them worked till Saturday with half day on Sunday.

Employment Quality

Ghai (2003) suggests that the greater challenge for job generation lies not only in having available jobs for workers but in the creation of quality employment and job security (See also Anker, Chernyshev, Egger, Merhran& Ritter, 2003; Bonnet et al., 2003; Kuruvilla, 2006).

Findings revealed that all cleaners in Mauritius were employed on definite contracts, not exceeding three years. More so, apart from the first three months being without any formal contracts, some cleaners indicated that they were fired from their jobs once the definite contract was over. This demonstrates the high level of job insecurity with which cleaners are working.

The study also revealed that although working for long, continuous hours, very low and inconsistent remuneration practices existed among cleaners. The interviews revealed that the salaries of cleaners were not meeting their basic needs and were not even covering their basic staple food requirements in some cases. Some cleaners compared their salary to be equivalent to ‘a day out’ for the average Mauritian. Only those who were single and knew that they would not get other jobs because of their very low level of education seemed to be satisfied with what they got as salary. The conversations also revealed that bonus, irrespective of how it was allocated to cleaners, was the only benefit that they received from their employers. However, the cleaners were not sure about the amount they received as bonus. This might be explained by their low level of education and in some cases, the absence of a contract.

An intrinsic rewarding job is interesting and challenging as one is able to use skills and abilities, learn new things, work independently and being recognised for doing a good job (Kalleberg and Vaisey,

2005; Huang and Vliert, 2002). Cleaners interviewed characterised their work as being ‘routine’ and ‘under constant supervision’ with a lot of running around even during weekends and public holidays. This, added to long working hours (on average 54 hours), depict the very high level of “work intensity” which cleaners are confronted to. Some respondents even characterised their jobs as being one “next to slavery”.

As far as skills are concerned, there were no evidence shown that cleaners exercised any type of special competencies while doing their jobs. They mentioned their jobs as being routine and involved no complexities as such. However, they did mention that they were closely supervised by their supervisors with some also indicating that they were ‘harassed’. More so, the majority of interviewers revealed that they had no formal training as such, rather, they were “shown” the work by colleagues or explained by their supervisors.

Emerging themes

Poor quality of employment as advocated by the cleaners led to two emerging themes in the study. These are elaborated upon below:

Socio Economic Issues

Cleaners voiced out how, with the low wages they were receiving, apart from not being able to buy their basic needs, unpaid bills keep piling up. Many cleaners thus had no recourse, but to borrow money. Such low wages and borrowing practices has had a spill over effect on the social life of cleaners, forcing them to enter the vicious debt cycle where they owe money to their colleagues, friends and family members. Some cleaners shared how ‘awkward’ and ‘embarrassed’ they felt in front of their family members because they could not pay back what they owed them and the debt burden kept rising. Yet another issue which emerged with the aspect of debt, more pronounced among those involved in single parenting was about the fact that children and households were being neglected. With these existing conditions of work, many cleaners (majority of whom were females) found it difficult to grapple with their children and their own household chores, which in turn questioned their Work Life Balance, thus emerging as the next theme of the study.

Work Life Balance of cleaners

Work Life Balance is defined as the satisfaction and good functioning at work and at home, with a minimum of role conflict. The focus on the domains of work and family is vital as family and work are regarded as the most important elements of everyone's life, and any competing demands from work and family life cause conflict and negatively affect the wellbeing of workers (Clark, 2005). In a large majority of cleaners interviewed, most took up other freelance job(s) on which they embarked on after their cleaners' job, after 17 00 hrs. Though they were tired and did not have time for kids and family, they still forced themselves to have this other job in order to sustain living for their families. Cleaners claimed that the revenue of the second job added up to their primary job which enabled them to settle bills and debts. Although this additional pay came as a relief, it was also at the expense of spending time with family or for one self. Interviews even revealed that few were also doing a maximum of three jobs per day to keep up with a decent standard of living, but which however, took a toll on their family life and general wellbeing. Cleaners, often expressed being 'tired' and 'fed up' with 'neglected children and households', giving clear indications of poor work life balance .

DISCUSSIONS & RECOMMENDATIONS

As portrayed by the literature search, the ILO (2012) identifies "job generation" and the "quality of employment" as the first aspect of decent work. As discussed, quality of employment encompassed parameters such as security, pay and fringe benefits, intrinsic job rewards, work intensity, skills and autonomy and control. This qualitative research took place among cleaners in Mauritius and depicted that this very first precondition of decent work was not really being met.

All cleaners acknowledged being very poorly paid, and in some cases, basic needs were not being satisfied with the current basic pay. It is acknowledged that the government of Mauritius, since December last year has looked into an increase in the basic salary of cleaners , making it at par with the minimum wage policy in force in Mauritius. However, as shown in this study "employment quality" is measured in terms of other parameters other than a minimum pay. The conversations with the cleaners indicated that they did not experience any job security, being employed on contract, there was no

evidence of any intrinsic job rewards since the majority found their jobs to be routine and that they were always being closely supervised, with even few mentioning that they were forced to work and they regarded their work to be close to “slavery”. These coupled together with the hours of work of cleaners also indicate high work intensity with no autonomy and control. More so, the low level of education and short term employment contracts of the cleaners left very less scope for any type of skills enhancement, in turn enabling the production of valued services at work. (See Green 2007)

Consequently, the issues discussed as above, do not seem to foster the “employment fit”, which in turn does not promote “job generation” as a prerequisite for decent work, as earlier explained. Referring back to Figure 1, the findings of the study indicate the lack of similarity between the ‘organisation’ and ‘person’ thus showing the absence of the supplementary fit. The existing deficits shown in this study in terms of supplies and demands as per Figure 1 also indicate the lack of the complementary fit. This study can thus safely conclude the lack of “employment generation” as such in the cleaning sector in Mauritius.

CONCLUSION

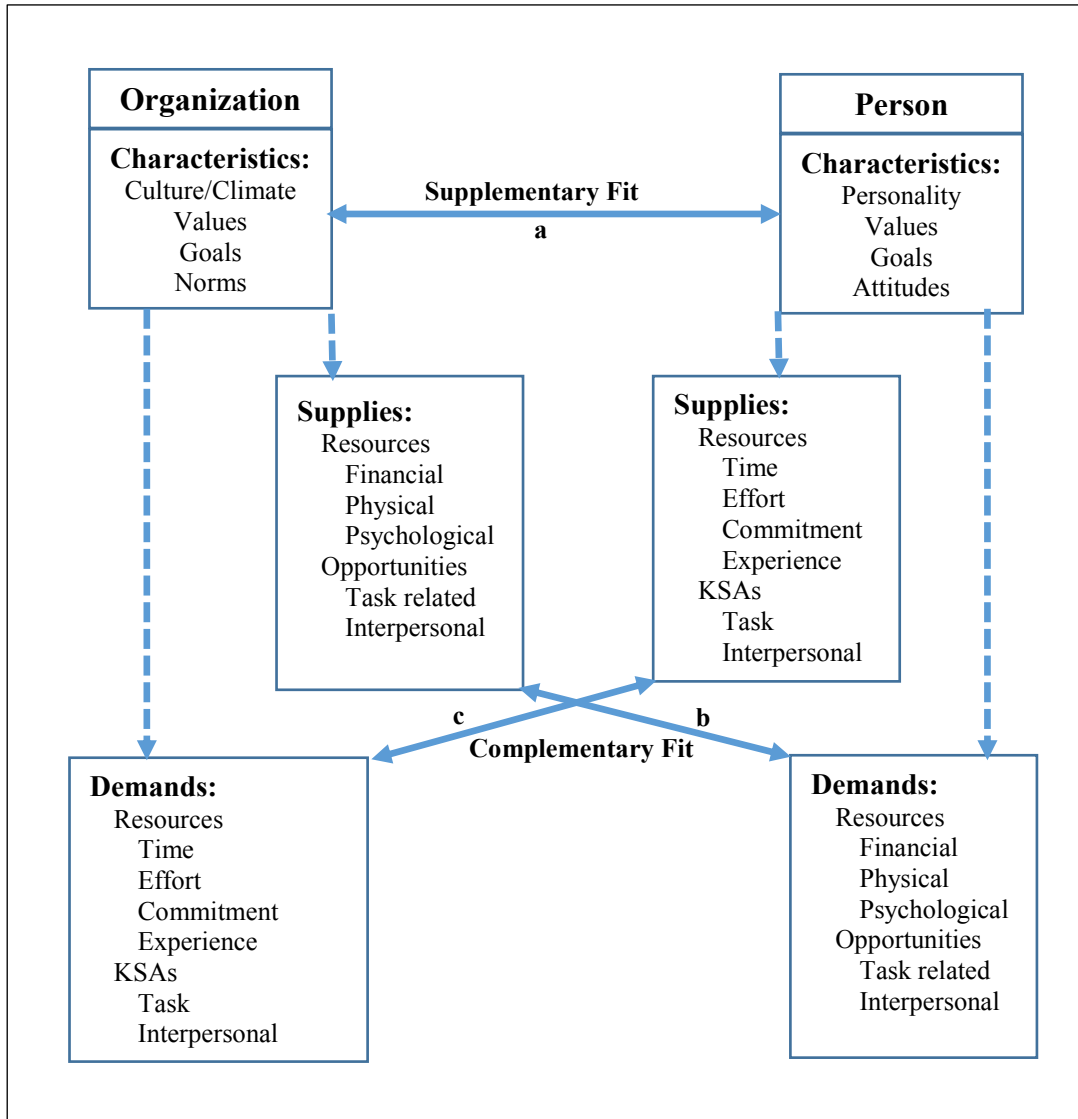
This study showed that there is a considerable deficit in the ‘work and employment dimension’ of Decent Work among cleaners in Mauritius. Although there have been recent measures taken to deliver fair incomes, opportunities for work that is productive, security in the workplace, better prospects for personal development still need to be addressed by policy makers in Mauritius in order to achieve decent work among cleaners.

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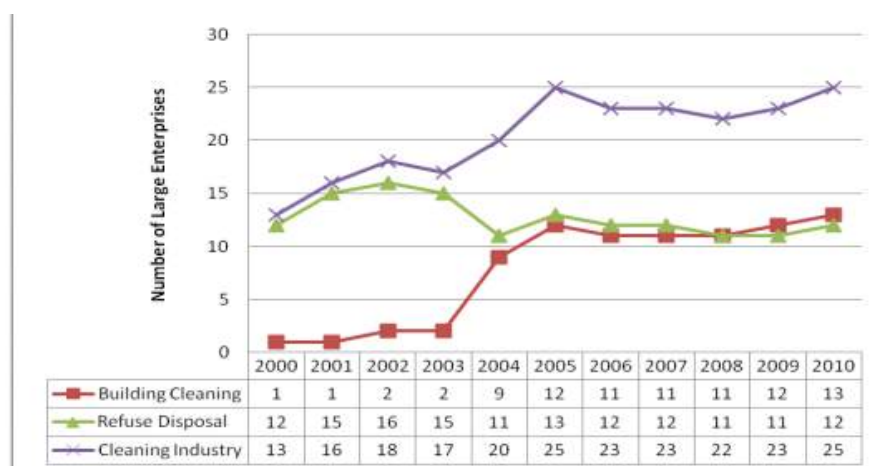
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Figure 1 Employment Fit



Kristof, 1996. Person-organization fit: an integrative review of its conceptualizations, measurement and implications. Personnel Psychology, pp1-49

Figure 2 Overview of Cleaning Companies



Source: Statistics Mauritius

Statistics Mauritius 2011

Table 1 Evolution in the number of cleaning companies in Mauritius

Year	Building Cleaning		Refuse Disposal & Other Services		Cleaning Sector	
	Enterprise	Employment	Enterprise	Employment	Total No. of Firms	Total Employment
2000	1	16	12	2,355	13	2,371
2001	1	16	15	2,206	16	2,222
2002	2	118	16	2,843	18	2,961
2003	2	117	15	2,816	17	2,933
2004	9	1,636	11	1,562	20	3,198
2005	12	1,697	13	1,697	25	3,394
2006	11	1,532	12	1,648	23	3,180
2007	11	1,587	12	1,553	23	3,140
2008	11	1,687	11	1,560	22	3,247
2009	12	1,970	11	1,656	23	3,626
2010	13	2,083	12	1,720	25	3,803

Statistics Mauritius 2011

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Competitive Session

How SME Owners and Managers Leverage their Personal Social Resources for Wellbeing and Performance

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How SME Owners and Managers Leverage their Personal Social Resources for Wellbeing and Performance

ABSTRACT: Utilizing a conservation of resources (COR) theoretical framework, we examine a model for how SME owners and managers leverage their personal social resources such as impression management (defined as self-promotion and ingratiation) to balance their wellbeing and firm performance. Structural equation modelling (SEM) of 267 SME owners and managers at time 1 and time 2 confirm our hypotheses for how SME owners and managers utilize impression management and social support to balance their wellbeing and performance. However, social support moderates self-promotion only, and not ingratiation. Our analyses also found that the relationship between wellbeing and performance was negative. The results are discussed in relation to the importance of understanding how personal and social resources are utilized in SMEs, and the wellbeing-performance link.

Key Words: Conservation of resources theory, impression management, social support, wellbeing, and multi-goal performance

INTRODUCTION

A central concern for founders and managers in small-medium sized enterprises (SMEs) is how to manage their personal wellbeing, in addition to the multiple performance goals they set, for themselves and their firms. The processes involved in managing this situation requires self-organizing in entrepreneurial situations (Shir, 2015; Wiklund et al., 2016), characterized by long hours, hard work, risk, and job stress (Bradley & Roberts, 2004). Additionally, SME owners and managers often lack resources, where they work alone to fulfil a diverse range of responsibilities in the firm that bear the costs of their mistakes from their own decisions, creating a context where stress is ubiquitous (Buttner, 1992; Cardon & Patel, 2015; Uy, Foo, & Song, 2013). Studies examining wellbeing in SMEs have found these individuals do indeed experience greater stress than employees (Cardon & Patel, 2015); that their wellbeing mediates venture context and entrepreneur characteristics, on entrepreneur outcomes such as role-related rewards and role-related exhaustion (Wincent & Örtqvist, 2009); and, that psychological capital were positively related with their level of subjective wellbeing (Baron, Franklin, & Hmieleski, 2016).

Despite these findings, wellbeing research in SME's and entrepreneurship is still nascent with very few studies examining the link between the wellbeing of these entrepreneurial individuals and firm outcomes (Baron et al., 2016; Wiklund et al., 2016). There is little understanding on how SME owners and managers regulate their personal social resources in managing stress while balancing their

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own wellbeing and firm performance goals (Baron, Hmieleski, & Henry, 2012; Cardon & Patel, 2015). How these personal social resources are utilized in managing the tradeoffs between one's wellbeing and firm performance have not been examined to date (Bolino, Long, & Turnley, 2016; Gorgievski & Stephan, 2016). In addition, while wellbeing has been touted as a critical aspect of SME owner and entrepreneurial behavior (Baron, 2008; Cocker, Scott, & Sanderson, 2013; Shepherd & Patzelt, 2015), scholars still lament the lack of insight into how individual wellbeing affects organizational outcomes and performance (Gorgievski & Stephan, 2016; Stephan & Roesler, 2010). Lastly, as with all emerging areas of research, the links between wellbeing and firm performance, particularly in SMEs is not well understood. This, despite the fact there exists a close connection between SME owner and managers and the performance of SMEs and entrepreneurial outcomes (Rauch & Frese, 2007; Zhao, Seibert, & Lumpkin, 2010).

This study investigates a model that addresses the above limitations by examining an important social process that incorporates personal social resources for firm performance and reduced stress (i.e. wellbeing): impression management and social support. We focus on impression management and social support, since there is evidence that understanding how SME owners and managers build social influence and utilize social support is critical to wellbeing (Abdel-Halim, 1982; Johnstone & Feeney, 2015; Turner, 1981) and entrepreneurial outcomes (Baron & Markman, 2003; Davidsson & Honig, 2003; De Carolis, Litzky, & Eddleston, 2009). Utilizing conservation of resources (COR) theory as an overarching theoretical framework, we build and test a model of impression management, social support, wellbeing, and multi-goal performance. In the following section we build hypotheses towards our model.

HYPOTHESES DEVELOPMENT AND MODEL

Conservation of resources (COR) theory assumes individuals and groups are motivated to protect their existing resources as they acquire new resources (Hobfoll et al., 2018; Halbesleben et al., 2014). A central principle of COR is that people must invest resources to protect against, and to recover from, resource loss (Westman, Hobfoll, Chen, Davidson & Lasky, 2004). As a result, there has been much work done on the effects of stress, including its effects on worker performance, with factors such as emotional exhaustion (Demerouti et al., 2014; Halbesleben & Bowler, 2007). We

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address the more recent call (i.e., Hobfoll et al., 2018) to extend the focus of stress on meeting the performance goals in this study on SME owners and managers. We are interested in the combined effects of social influence with impression management and social support on reduced stress and performance. Since resources are often tough to build, and often involve risk and associated stress, but relatively easy to lose (Hobfoll, 1989), it is critical for SMEs owner and managers to attempt to balance investing in, as well as guarding against loss, in utilizing their personal social resources (Hobfoll, Halbesleben, Neveu & Westman, 2018; Halbesleben, Neveu, & Paustian-Underdahl & Westman, 2014).

Impression management is a skill-based behavioral process that SME owners and managers can use to influence the perception others have of them, either by maintaining or changing their own image, in the eyes of another (Bolino et al., 2008, Bozeman & Kacmar, 1997, Tedeschi & Melburg, 1984). This social influence process attempts to achieve a highly valued goal of creating biases in others, where external events that have taken place are positively attributed to them (Villanova & Bernardin, 1989). During this process the individual attempts to control the information exchange during social interaction (Piwinger & Ebert, 2001; Gibb & Osman, 2014). Similarly, the resources required to meet these performance targets will typically draw on the resources of the SME owner and manager, particularly on their personal and social resources. Such resources include their perceived ability to build and retain social support and their ability to exercise social influence, through mechanisms such as self-promotion and ingratiation in order perform (Bolino, Long & Turnley, 2016; Higgins, 2003; Jones, 1964).

Two prominent impression management tactics are self-promotion and ingratiation (Gordon 1996; Higgins et al., 2003; Jones & Pittman, 1982). Self-promoters often draw attention to their own accomplishments, where they take credit for positive outcomes, and will downplay the seriousness of negative incidents they might be connected to (Bolino & Turnley 1999; Jones & Pittman, 1982). While those who ingratiate will point out the positive points of targeted individuals, self-promoters draw attention to important features of themselves or their work (Wayne & Ferris, 1990; Bolino et al., 2016). These tactics have been used in the entrepreneurship context, for example to access information and to persuade investors (Baron & Tang, 2009; Nagy, Pollack, Rutherford, 2012; Tang,

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Khan & Zhu, 2012) and to acquire resources more generally (Zott & Huy, 2007). Studies, particularly on employee behavior have found these tactics each led to increased performance outcomes (Higgins, Judge, & Ferris). However, the broader organizational implications for the combined use of these tactics is less clear (Bolino et al., 2016).

Hypothesis 1a: There is a positive relationship between self-promotion and performance.

Hypothesis 1b: There is a positive relationship between ingratiation and performance.

SMEs typically depend on those within the firm to develop and market their product; as well as those external to the firm such as customers, to become sufficiently interested to buy their product. This can require owners and managers to often use scarce resources, including their belief in own ability to influence and convince those important others, of the value of their product offering. Engaging in these processes can detract from their individual wellbeing as they have often taken much risk and made significant sacrifice to develop business to this point (Ireland & Webb, 2007; Souitaris, Zerbinati & Al-Laham, 2007).

Several studies have investigated the impact of stress and reduced wellbeing using COR theory (e.g. see review Westman, Hobfoll, Chen, Davidson & Lasky, 2004; Hobfoll, Halbesleben, Neven & Westman, 2018). However, we were unable to find work within this theory work that had examined the use of these two influence tactics. Within the entrepreneurship literature self-promotion has been found to reduce stress by increasing factors such as self-esteem (Bryant, 2007). Studies using ingratiation, such as Hallen and Eisenhardt, (2012) have focused on how entrepreneurs have effectively used this tactic to secure investment ties. Therefore, we argue for the following:

Hypothesis 2a: There is a positive relationship between self-promotion and wellbeing

Hypothesis 2b: There is a positive relationship between ingratiation and wellbeing

COR theory also posits that reduced stress (i.e., wellbeing) should have an impact on performance (Karasek & Theorell, 1990). Often utilizing a Job Demands-Resources (sometimes Job Demands-Control-Support) models, SME owners and managers face working conditions that influence their motivational and energy depleting processes that impacts on their performance (Gorgievski & Stephan, 2016; Stephan & Roesler, 2010). For example, during times of high demands, SME owners and managers experience greater strain compared to periods of lower demands and high control

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although this was moderated by optimism (Totterdell, Wood, & Wall, 2006). This suggests that increased wellbeing may lead to increased performance.

As described above, studies on reduced stress or wellbeing are still scarce. However, there are several studies which support the wellbeing-performance link. For example, one study demonstrated that impaired mental health in Dutch agricultural entrepreneurs predicted poorer objective economic business prospects, which, was partly due to lower investment decisions (Gorgievski-Duijvesteijn, Bakker, Schaufeli, & van der Heijden, 2005). Cardon and Patel (2015) in a longitudinal study reported evidence for higher stress levels predicting both higher income and more physical health complaints over a four-year period. Their study demonstrated the occurrence of concurrent motivational and energy depleting processes as predicted by COR theory. Additionally, utilizing the affect infusion model, a daily diary study of 46 entrepreneurs found that negative affect predicted effort on tasks immediately required, whereas positive affect predicted effort for long-term goals (Uy et al., 2013). Based on the preceding arguments, we hypothesize,

Hypothesis 3: There is a positive relationship between reduced stress and performance

In SMEs, social support is increasingly deemed a critical resource for conveying a positive impression. Social support is an “interpersonal process” between the provider and the receiver that helps to reduce uncertainty and to manage difficult situations that the receiver is in (McGlynn III & Richardson, 2014). SME owner and managers cannot independently achieve legitimacy for themselves and their ventures as these must be granted by external stakeholders, financiers, and customers (Nagy et al., 2012). To convince potential external stakeholders and customers that a new venture is credible, has potential, and is worthy of funding, owner/managers, like actors skillfully stage an appropriate performance based on a carefully woven narrative to convey a positive impression about themselves and their venture (Benson et al., 2015). For example, entrepreneur’s impression management that included professional and family affiliations were found to have a positive influence on stakeholder’s perceptions of new venture legitimacy (Nagy et al., 2012). The influence of social support with impression management is also evident in Gleasure’s (2015) examination of entrepreneurial decision making regarding the use of crowdfunding. Additionally, in a study of 595 young firms in New York, Parhankangas and Ehrlich (2014) found that business angels

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preferred investment proposals that demonstrated high levels of opinion conformity, that is, conveying of values and opinions that were assumed to be like that of the target audiences. Opinion conformity enhanced likeability and helped convey the impression that the venture team would rely not only on their own competence but also value social support through working and maintaining collaborative relationships (Parhankangas & Ehrlich, 2014), a quality deemed crucial for venture success (Baron & Markman, 2000). We suggest SME owners and managers will draw on their social pool as a critical resource, where they seek support from some individuals, while they use impression management tactics to exercise social influence over others. Further, we argue that the perceived social support these decision makers can secure (Shumaker & Brownell, 1984) will positively influence their belief in own ability to influence the judgement others develop of them via the use of these impression management tactics. Based on these arguments, we hypothesize:

Hypothesis 4a: There is a positive relationship between social support and self-promotion

Hypothesis 4b: There is a positive relationship between social support and ingratiation

SME owners and managers commonly use social support to enhance well-being (Abdel-Halim, 1982; Turner, 1982; Johnstone & Feeney, 2015). Where impression management has a positive relationship with wellbeing, social support also moderates impression management efforts. Hobfoll (2011) suggests individuals employ social aspects of their organization that become social resources to help protect or gain additional resources at work. Thus, social support can be seen as enhancing impression management efforts towards the demands of the workplace (Cohen & Wills, 1985; Kurtessis et al., 2017). Findings suggest social support works to moderate variables such as teamwork (Strutton & Pelton, 1998; Wayne, Liden & Sparrowe, 1994), leader-follower communications (Deluga & Perry, 1994), and customer satisfaction (Yagil, 2001); which, enhance the working environment and reduce stress levels through better social interactions at the workplace (Harvey et al, 2007). Specific SME-focused research has also found that social support moderates outcomes of wellbeing (Chay, 1993; Rahim, 1996). Further, COR theory asserts it is important SME owners and managers can estimate the extent to which the combined use of their personal and social resources can facilitate progress toward meeting their goals (Hobfoll et al., 2018). The perceived ability to influence individuals through self-promotion and ingratiation has been found to protect

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one’s image and to boost confidence of their ventures in others (e.g. Benson et al., 2015; Gleasure, 2015) and performance outcomes. Yet, Hobfoll (2001) cautions the process of striving for advancement can be stressful, especially when the subevents to achieve them are considered negative. Social support is an interpersonal process and resource (identified by McGlynn III & Richardson, 2014) that reduces uncertainty in managing challenging situations. As such, we hypothesize that:

Hypothesis 5a: Social support will reduce the positive relationship between self-promotion and reduced stress

Hypothesis 5b: Social support will reduce the positive relationship between ingratiation and reduced stress

Our proposed hypothesized model is depicted in Figure 1.

 Insert Figure 1 about here

METHODS

Data and Sample Measures

Data and Sample

Data collection was undertaken in 2016. We engaged Pureprofile, a marketing company to select from its panel members those who met the inclusion criteria for this study (that is, small business owners and professional managers between 18 and 65 years of age in Australia. Pureprofile obtained a total of 267 SME owners and managers at two points in time, separated by 3 months (response rate of 38.1%).

To minimize the limitations of self-report data, we chose a two-wave data collection research design in order to separate the independent variables from the dependent variable in attempt to minimize common method bias (see Podsakoff et al., 2003). In addition, we also adopted procedural remedies, such as randomizing the questions, promising the participants confidentiality and anonymity, and assuring participants that there was no correct answer. These procedures were outlined in Chang et al., (2010) and Podsakoff et al., (2003). In addition, we conducted two statistical remedies to check for common method variance (see Podsakoff et al., 2003). These two procedures were Harman’s one factor test and common method latent factor. Both checks showed that common method bias was of no major concern. Furthermore, as we also conducted a moderation analysis, the

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inclusion of an interaction term in the regression analyses provided another assurance that common method bias was not a concern (see Podsokoff et al., 2003).

In total, over half of the participants were males ($n=164$, 61.4%). Most of them were from the following age groups: 30-34 ($n=31$, 11.6%), 35-39 ($n=42$, 15.7%), 40-44 ($n=31$, 11.6%), and 45-49 ($n=32$, 12%). The largest group of participants reported that their organization had been in operation for greater than 25 years of experience ($n=73$, 27.3%). Most of the participants had worked in the organization for less than six years ($n=97$, 36.3%). They were from a diverse range of industries such as personal and other services ($n=66$, 24.7%), accommodation and café ($n=35$, 13.1%), retail ($n=29$, 7.9%), and manufacturing ($n=21$, 10.9%). Nearly half of the participants were business owners ($n=133$, 49.8%). Most of the organizations employed less than 20 employees ($n=181$, 67.8%).

Measures

We adopted previously validated scales in the current study. Internal reliability was established using Cronbach's alpha. Discriminant validity were established using Fornell and Larcker's (1981) AVE test. In additional, the individual items in the scales were greater than 0.50. Prior to conducting moderation analysis, we standardized the scales.

Multi-goal performance was operationalised using five items to measure multiple goal performance for the individual and the firm. Sample items included 'Please indicate whether your own personal performance targets have been met in the last 3 years: 2013, 2014, and 2015' ($\alpha=.78$). This scale was collected in wave 2.

Impression management was operationalised with two scales: self-promotion (four items, $\alpha=.95$) and ingratiation (four items, $\alpha=.92$) from Bolino and Turnley (1999). These scales were collected in wave 1. A sample item of self-promotion was 'I let others know that I have a reputation for being competent in a particular area'. A sample item of the ingratiation sub-scale was 'I praise others for their accomplishments, so they will consider me a nice person'.

Reduced Stress (Wellbeing) was operationalised using the 10-item Kessler's K-10 Stress scale to measure the wellbeing of the participants in wave 2. They were asked to indicate the level of their health and well-being on a five-point rating scale, ranging from '1' none of the time to '5' all of the

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time. Sample items included ‘Did you feel tired out for no good reason?’ and ‘Did you feel nervous?’ Higher value indicated lower wellbeing or psychological stress (alpha=.95).

Social support was a second order latent factor from Zimet, Dahlem, Zimet, and Farley (1988), which comprised of support from significant other (alpha=.95), friends (alpha=.94) and family (alpha=.96).

This scale was collected in wave 1.

RESULTS

The means, standard deviations, and intercorrelations for all study variables are presented in Table 1. Older respondents were from firms with smaller number of employees ($\rho = -.24, p < 0.001$). SME owner/managers tend to own smaller sized firms ($\rho = -.52, p < 0.001$). Male respondents were older ($\rho = -.14, p < 0.05$) and SME owner/managers were also older ($\rho = -.35, p < 0.001$).

Insert Table 1 about here

The hypotheses were tested using SmartPLS v2 (Ringle et al., 2003). As reported in Table 2, with the exception of Hypothesis 2b, the hypothesized relationships were supported. These were: H Tannenbaum et al.’s global goodness of fit index for the model was 0.28 and the R-sq = 0.113. Moderation analyses were conducted within SmartPLS which supports Hypothesis 5a. Interaction plot is shown in Figure 2. Moderation analysis shows that social support strengthens the negative relationship between self-promotion and psychological stress. Moderation plot shows that when participants adopt high self-impression, they experienced high wellbeing when social support is high. On the other hand, participants who did not receive high level of social support, they reported lower level of wellbeing, that is, higher psychological stress. Social support did not moderate the relationship between ingratiation and psychological stress. Therefore, Hypothesis 5b was not supported.

Insert Table 2 about here
Insert Figure 2 about here

Our final model can be seen in Figure 3.

Insert Figure 3 about here

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DISCUSSION AND CONCLUSION

This study contributes to the emerging important literature on wellbeing and performance by specifying how SME owners and managers balance their wellbeing and performance goals using their personal and social resources. First, aside from the negative relationship between reduced stress and performance, our results confirm the hypotheses regarding how SME owners and managers utilized the impression management tactic of self-promotion and social support to increase wellbeing and performance. The use of the ingratiation tactic was not found to relate to performance, nor was it found to negatively impact on these individual's reduced stress. Interestingly, social support, as a resource, was found to positively impact on both self-promotion and ingratiation.

Our central contribution is to the COR theory. We explain how the relationship between wellbeing and performance in SME firms can be improved when SME owners and managers manage their personal and social resources, via their ability to engage in socially influence by using the impression management tactic of self-promotion, and, to effectively leverage social support. In doing so, these findings support Hobfoll et al's., (2018) quest to acknowledge and better understand how resources, social resources in this instance, can be leveraged in caravans across individuals and organizations. SME owners and managers can use social support as a form of judgment in their ability to perceive control of others. They can then use social influence in the form of impression management (self-promotion) to perceive control via their interpretation of their ability to shape the judgement of others after events. We identify the dynamic nature by which social support can be used to offset the reduced well-being - stress associated with developing social influence where performance is measured in a multi-goal context.

Second, we contribute to the impression management literature. We address Bolino et al's., (2016) call to better understand the comparative value in using self-promotion and ingratiation, as well as their performance relevance. Our finding of no significant relationship between ingratiation and performance may stem back, to where, despite the wide spread merits of its use, its effectiveness can include a range of factors such as who the target is, and what the situation is, when the tactic is being used. For example, a SME manager using ingratiation with an employee for coming to work early may be effective but only when this is combined with employee on the job knowledge and

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motivation to pursue the tasks at hand. In contrast, the use of self-promotion is typically more goal oriented where the key motivation is to seek to change the judgement of others in the SME owner or managers' ability rather than that of a situation. Additionally, while in general, relationships and support from symbolic, influential groups can be used in attempts to strengthen the impression of credibility and worthiness (Gleasure, 2015), there may be particular ways in which this occurs (Bolino, Klotz, & Daniels, 2014). In this study, a far more effective tactic to increase wellbeing could be that SME owners and managers may engage in more self-promotion, rather than ingratiation, as portraying an image of having backing from and links with good social supports can be more prestigious and valuable for owner/managers (Parhankangas & Ehrlich, 2014). In addition, self-promotion may be more conducive to owners and managers wellbeing rather than ingratiation as it may be tied up to important individual characteristics such as identity and esteem (Arora, Haynie, & Laurence, 2013; Murnieks, Mosakowski, & Cardon, 2014). Certainly, a finding that speaks for closer attention to the facets of impression management and wellbeing.

A surprising finding was that the relationship between reduced stress and performance was negative. Interestingly, there is theory to suggest the reduced stress and performance link. Baron et al., (2016) utilizing the attraction-selection-attrition (ASA) theory, suggest that entrepreneurs are attracted, selected into, and persist in entrepreneurship have purportedly less stress because of relatively high levels of psychological capital and are good at entrepreneurship, thus mitigating the effects of stress. While they found no evidence for performance moderating or mediating the effects of stress and wellbeing, we suggest an alternative view. SME owners and managers experiencing high levels of reduced stress tend to perform less well because wellbeing tends to drive performance in a contradictory fashion, particularly for SMEs. In other words, higher stress drives performance in the way that eustress (or "good stress") pushes high performance in athletes (Selye, 1956). Clearly this is an area for investigation as stress in general is not well investigated although they have the potential to bring insights for occupational groups such as SME owners and managers (Fevre, Matheny, & Kolt, 2003; Pavlidis et al., 2012).

One limitation in this study is the use of SME owners and managers for our analysis. While the focus was on the SME, there is an argument that owners and manager do not constitute a more

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consistent sample. However, our analysis does not show any differences between the two.

Additionally, we believe that the sample fits into the criteria for entrepreneurship research (Stearns & Hills, 1996), where studies have used a diversity of definition including owner-manager of a firm (Warren, 2004), involved in starting up an innovative private venture (Politis, 2008) or involved in starting up new small or medium sized enterprise (Sullivan, 2000). Our sample is consistent with Politis and Gabrielsson's operative definition: "as an individual who establishes and manages a business, which is consistent with past entrepreneurship research" (2009, pp. 370)."

Our findings also open opportunity for future work to explore the resource caravan passageways that exist between the various social resources available to SME owners and managers and how this might impact on their wellbeing and performance. Our findings point to some interesting practical implications for SME owners and managers. First, the COR framework with the concept of resource caravans and passageways provides a fruitful way of understanding entrepreneurial processes and outcomes. Second, in terms of stress and multi-goal outcomes, we find that balancing both for SME owners and managers require a focus on the social support networks which they draw on and leverage for managing impressions. Lastly, our research highlights that the wellbeing and performance link may be important and critical for SME owners and managers. For example, it might be that critical entrepreneurial or managerial responsibilities in the SME require moderate amounts of stress in order to be effective.

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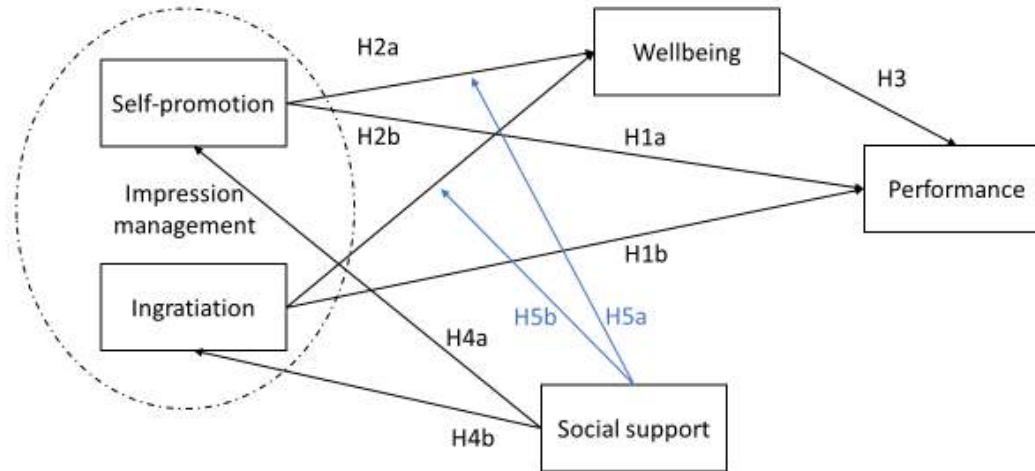


Figure 1. Proposed theoretical model of impression management, social support, wellbeing and performance.

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Table 1. Descriptive statistics and intercorrelations

	M	SD	1	2	3	4	5	6	7	8	9
1. Firm size	1.71	1.18	1.00								
2. Gender	1.39	0.49	-0.05	1.00							
3. Age	6.76	2.65	-.24***	-.14*	1.00						
4. SME owner vs managers	0.50	0.50	-.52***	-.01	.35***	1.00					
5. Ingratiation	3.92	1.46	.141*	.02	-.22***	-.24***	1.00				
6. Self-promotion	4.06	1.51	.02	-.06	-.12*	-.07	.57***	1.00			
7. T1 Social Support	5.05	1.29	-.09	.04	.07	.01	.14*	.17**	1.00		
8. T2 Wellbeing	1.89	0.83	.11	.02	-.05	.04	.10	.12	-.05	1.00	
9. T2 Perceived Performance	-0.02	0.73	.04	-.04	-.13*	-.12	.06	.07	-.06	-.24***	1.00

Note: n=267

*p<0.05, **p<0.01, ***p<0.001

Table 2. Model results

Hypothesis	Coefficient	t Statistics
H1a. There is a positive association between self-impression and performance	-0.09	2.2804
H2a: There is a positive relationship between self-promotion and wellbeing	0.08	1.9835
H3: There is a positive relationship between wellbeing and performance	0.34	10.4144
H4a: There is a positive relationship between social support and self-promotion	0.20	5.525
H4b: There is a positive relationship between social support and ingratiation	0.17	4.9344
H5a: Social support increases the positive relationship between self-promotion and wellbeing	-0.12	3.6952

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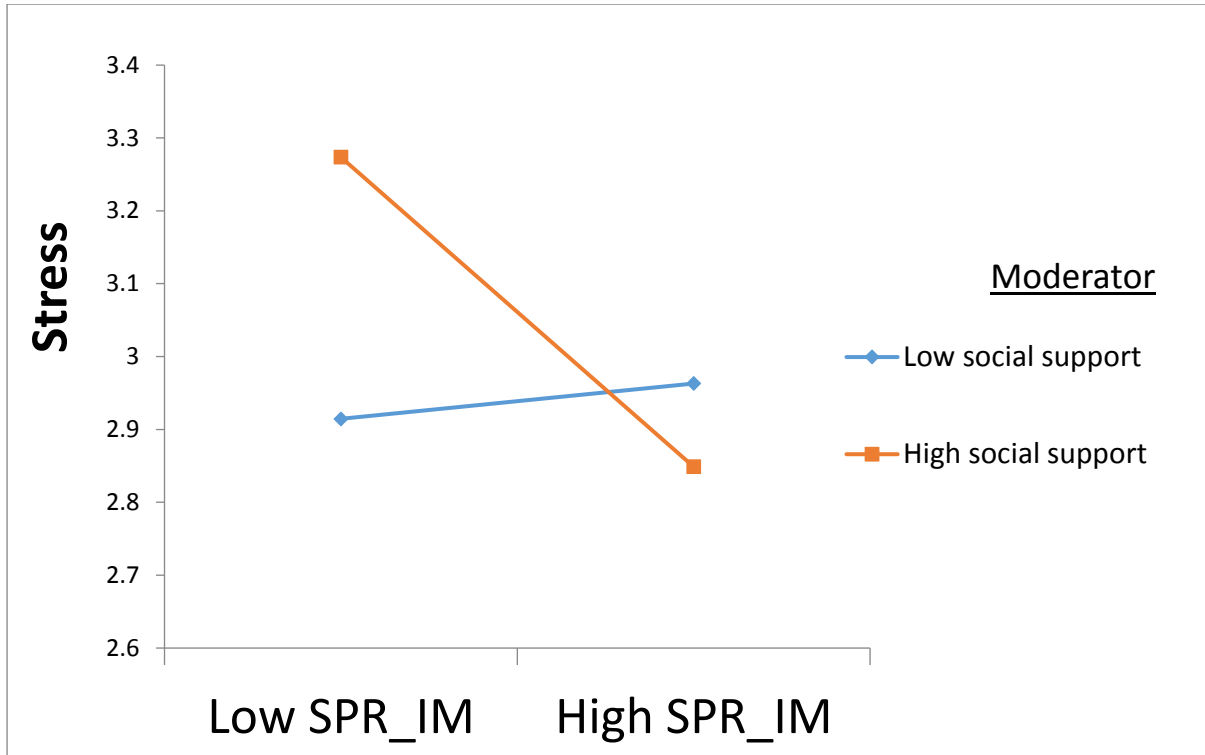


Figure 2. Moderation plot: Social support strengthens the negative relationship between impression management tactic - self-promotion and wellbeing.

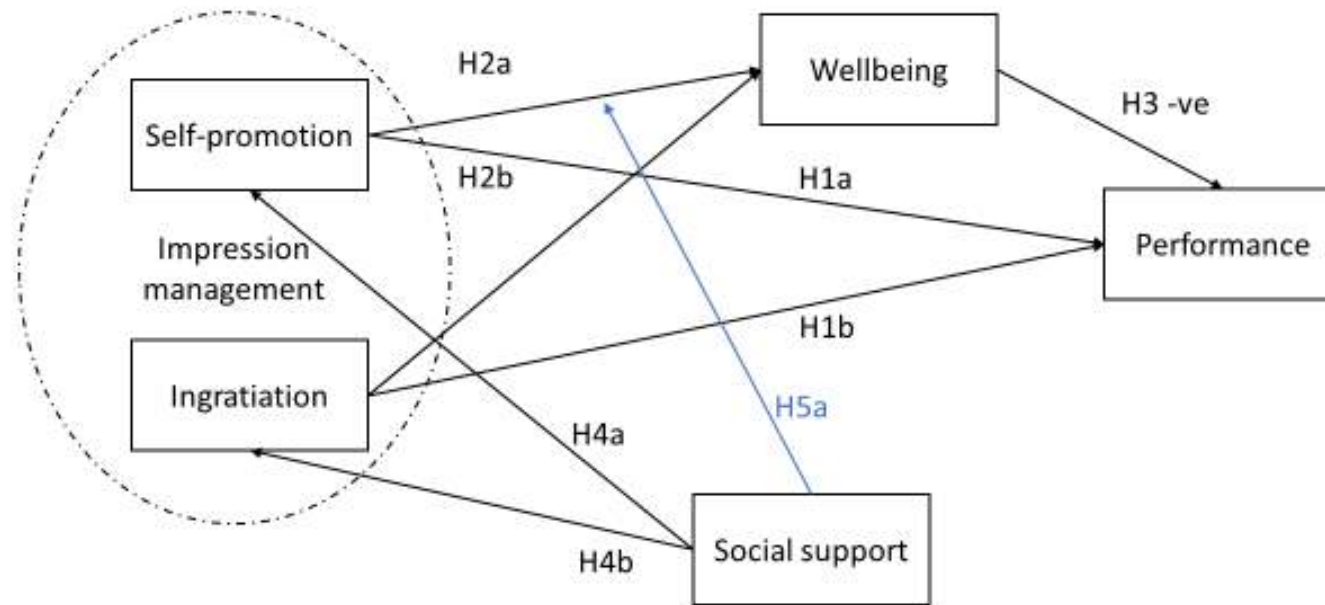


Figure 3. Final model

**Newcomer Person-Job Misfit, Turnover and Performance: Roles of Person-
Group and Person-Mentor fit**

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Newcomer Person-Job Misfit, Turnover and Performance: Roles of Person-Group and Person-Mentor fit

ABSTRACT

Based on the theory of work adjustment and the spillover model of person–environment fit, we explore whether newcomer person–group (P–G) and person–mentor (P–M) fit can buffer the detrimental outcomes of their person–job misfit. In the present study, we apply a longitudinal research design and collect data from 211 new engineers at three different time points. The results show that newcomers’ need–supply (N–S) misfit positively predicts actual turnover, whereas demand–ability (D–A) misfit negatively predicts task performance. Importantly, P–G fit buffers the positive relationship between N–S misfit and actual turnover. In addition, P–M fit mitigates the negative relationship between D–A misfit and task performance.

Keywords: Person–job misfit, Actual turnover, Task performance, Person–group fit, Person–mentor fit.

INTRODUCTION

Fit researchers have paid increasing attention to the issue of “misfit” (Devloo, Anseel, & de Beuckelaer, 2010; Kristof-Brown & Billsberry, 2013; Kristof-Brown & Guay, 2011), especially for newcomers (Wang, Zhan, McCune, & Truxillo, 2011). Due to the information asymmetry between job providers and applicants, newcomers may subsequently realize that their knowledge, skills, and abilities do not match the job demands (i.e., demand–ability misfit; D–A misfit) or that the job does not satisfy their personal needs (i.e., need–supply; N–S misfit) after they have entered the organization. Recent studies have suggested that D–A misfit reduces task performance for newcomers (Wang et al., 2011); whereas, N–S misfit increases newcomer turnover (Saks & Ashforth, 2002). In fact, few researchers have explored the negative consequences of employee misfit (e.g., Devloo et al., 2010; Wheeler et al., 2007), and none of them have examined ways to alleviate the negative impacts of newcomers’ misfit. Thus, it is important to clarify both the consequences of a newcomer’s person–job (P–J) misfit and how to mitigate its detrimental effects (Kristof-Brown et al., 2013).

In the fit literature, Kristof-Brown, Jansen, and Colbert (2002) and Jansen and Kristof-Brown (2006) have proposed a spillover perspective to explain how multiple fit perceptions for an employee would influence his/her reactions to their environment. Specifically, when an employee perceives a stronger fit on one aspect of the environment (e.g., fit with coworkers), this perception might

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compensate for a misfit on another aspect (e.g., fit with the job). Supporting this perspective, a recent qualitative study conducted by Follmer, Kristof-Brown, Astrove, and Billsberry (in press) found that employees often use “social buffering” (i.e., good fit with the coworkers or supervisors) to shift their attention and mitigate negative reactions caused by P-J misfit. Therefore, we apply Kristof-Brown et al.’s (2002) and Janssen and Kristof-Brown’s (2006) spillover model to answer following questions: (1) how newcomers adapt to misfit and, (2) whether their different facets of fit perceptions can buffer the detrimental effects of a P-J misfit.

This study is designed to answer the aforementioned questions and to contribute to the fit literature in two ways. First, we investigate the predictive effects of newcomer D-A and N-S misfit on actual turnover and task performance by collecting data from different sources at three time points. This study design helps to avoid issues pertaining to common method variance (Podsakoff & Organ, 1986) as well as reverse causality.

Second, based on the spillover model (Janssen & Kristof-Brown, 2006; Kristof-Brown et al., 2002) as well as the social buffering functions of fit perceptions (i.e., employees’ with the social context; Follmer et al., in press), we explore whether person–group fit (P-G fit: the compatibility between a newcomer and his or her work unit; Kristof-Brown et al., 2005) and person–mentor fit (P-M fit: the compatibility between the newcomer and their mentor) can mitigate the harmful effects of newcomer D-A and N-S misfit. Specifically, when newcomers have entered an organization, they are more likely to interact with their colleagues within the same work unit, as well as their mentors (Brashear, Bellenger, Boles, & Barksdale, 2006; Follmer et al., in press). As such, when newcomers’ values and personalities are similar to other members of the work unit (i.e., high P-G fit), they are more likely to build good interpersonal relationships with their coworkers and experience a sense of belonging within the work unit (Masterson & Stamper, 2003), thereby compensating for the negative effects of N-S misfit. On the other hand, even when newcomers’ knowledge, skills, and abilities do not match their job demands (i.e., D-A misfit), they can seek work-related advice or assistance from their mentors if they share similar values and personalities (i.e., high P-M fit), which might

compensate for the negative effects of D–A misfit on task performance. The research framework is presented in Figure 1.

Insert Figure 1 about here

THEORY AND HYPOTHESES

The Relationships between Person-Job Misfit and Actual Turnover/Task Performance.

In this study, we applied the Minnesota Theory of Work Adjustment (MTWA) (Dawis & Lofquist, 1984) as the overarching theory to explain the effects of newcomer misfit on turnover and performance. The MTWA is consists of two important models: the structural model and the process model. The structural model suggests that employee attitudes and behaviors are determined by the compatibility between their needs and the environmental supply as well as the compatibility between their knowledge, skills, and abilities and the environmental demands. Dawis and Lofquist (1984) suggest that satisfactory performance results from the correspondence between the employees’ abilities and job demands (i.e., D-A job fit), and positive job attitudes result from the correspondence between the employees’ needs and job supplies (i.e., N-S job fit). On the other hand, the process model suggests that employee engaged in maintenance and adjustment behaviors to achieve an ongoing fit and increase their fit by either acting upon the environment or acting upon themselves. (Dawis & Lofquist, 1984; Dawis, 2005)

Based on the perspective of structural model, when the items supplied by the job—such as the salary, benefits, and work conditions—do not meet an employee’s expectations with respect to interest, interpersonal relationships, and self-esteem, such that a sense of achievement cannot be satisfied at work, the N–S misfit will result in the employee decreasing his or her commitment to the job (Cable & DeRue, 2002), which can result in the employee either considering or actually leaving the organization (Tak, 2011; Van Iddekinge, Roth, Putka, & Lanivich, 2011).

In addition, when an employee’s knowledge, skills, and competence match those required for the job, he or she will have significantly positive task performance (Edwards, 1991; Cable et al., 2002; Chi & Pan, 2012). On the contrary, when their knowledge, skills, and competence do not meet the

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requirements, work progress is often delayed, resulting in low work efficiency; moreover, this can lead to feelings of inferiority and decreased motivation, further hindering task performance (Wang et al., 2011; Westman & Eden, 1996).

Previous researchers have found that N–S fit can effectively predict employee job satisfaction, organizational commitment, turnover intention, and turnover behavior, while D–A fit can predict employee task performance (Cable et al., 2002; Chi et al., 2012; Kristof-Brown et al., 2005). In other words, newcomer N-S misfit might predict eventual turnover, whereas D-A misfit might indicate poor performance. Thus, we propose:

Hypothesis 1: Newcomer N–S misfit is positively related to actual turnover.

Hypothesis 2: Newcomer D–A misfit is negatively related to task performance.

The Buffering Effect of Person-Group fit on the Relationship between Newcomers' N-S Misfit and Actual Turnover

The process model describes how employees adjust and adapt to an environment to weaken the detrimental effects of misfit (Dawis, 2004), and provides a conceptualized method to probe the fit between a person and his or her environment.

In other words, work adjustment concerns both dynamic adjustment and adaptation. When employees perceive that their psychological needs cannot be satisfied and fulfilled by their job, they will seek out other work environments to supplement the negative effects caused by job misfit (Cable & Edwards, 2004; Wilk & Sackett, 1996). Janssen and Kristof-Brown's (2006) spillover model also outlines the compensation process: when individuals experience a higher fit of one aspect and a lower fit of another, they can counteract the effects to reduce the contradictory views of incompatibility and avoid internal unbalance (Jansen et al., 2006; Kristof-Brown et al., 2005). Follmer et al.'s (in press) social buffering perspective also suggests that employees would use their good fit with the coworkers or supervisors to mitigate negative reactions caused by P-J misfit.

In the present study, we expect that P–G and P–M fit will be more important for newcomers than P–O (person-organization) and P–S (person-supervisor) fit, because they are more relevant to our theoretical arguments (i.e., newcomer work adjustment). P–G fit refers to the compatibility between

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individuals and their work groups (e.g., team members or colleagues) in terms of their personality or values (Kristof-Brown et al., 2005). When employees and group members in an organization share similar values, goals, and characteristics, they will have better interactions, more positive interpersonal relationships, and stronger group cohesion, which strengthens their unification, and increases the likelihood they will remain with the organization (Kristof-Brown et al., 2005).

N–S misfit indicates that an employee’s multidimensional needs (e.g., social needs, self-esteem, and self-actualization) are not satisfied by the extrinsic and intrinsic resources or rewards supplied by a job (e.g., money, social involvement, achievement; Cable et al., 2004). Based on the aforementioned information on work adjustment and the spillover model, employees with high N–S misfit are more likely to seek out other resources, such as their colleagues, to satisfy their needs.

Therefore, when employees and other group members have a higher P–G fit, they will more easily construct positive interpersonal relationships with colleagues and develop a common consensus, which will satisfy their senses of belonging and identity (Masterson & Stamper, 2003) and thus mitigate the positive relationship between N–S misfit and turnover behavior. Thus, the following hypothesis is proposed:

Hypothesis 3: When a newcomer has a high P–G fit, the positive relationship between N–S misfit and turnover behavior will be reduced.

The Buffering Effect of Person-Mentor fit on the Relationship between Newcomers’ D–A Misfit and Task Performance

According to the MTWA, when an employee’s competence does not meet that required by the job, he or she might seek help from the environment to adjust to the problems caused by the incompetence (Dawis & Lofquist, 1984). The social buffering perspective (Follmer et al., in press) also indicates that employees might seek interpersonal assistance to deal with their P–J misfit. For new employees in particular, mentors listen to them, offer psychological support and concern, and provide suggestions and guidance for the development of the skills required for work tasks (Kram & Isabella, 1985). Therefore, the fit between newcomers and their mentors plays a significant role in solving the problems caused by D–A misfit.

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P–M fit refers to the compatibility between individuals and their mentors in terms of personality or values. In comparison to inexperienced employees, mentors often have rich work experience and professional knowledge that can help new employees to become familiar with the organizational culture and gain required knowledge (Kram, 1983). When the values and personality of new employees match those of their mentors, the employees are more likely to create favorable interactions with the mentors. In turn, when they encounter problems at work, they can easily obtain competent assistance and seek psychological support and career counseling from their mentors (Scandura, 1992). Mentors usually are willing to share their experience to support and instruct employees (House, 1981), which can improve the low task performance caused by the D–A misfit.

Thus, this study proposes H4:

Hypothesis 4: When a newcomer has a high P–M fit, a negative relationship between D–A misfit and task performance will be reduced.

METHOD

Sample and Procedures

In this study, we selected 211 newcomers in engineering jobs who had entered a Taiwanese high-technology company within the previous three months. This firm has employed a mentor system for many years to help its newcomers adjust. The unit managers assign a senior employee as a mentor for each newcomer. The mentor proposes an individual development plan to help the newcomer develop professional knowledge and skills. Hence, this company provides a relevant context to examine the role of P–M fit.

To enhance the internal validity and to avoid issues associated with common method variance, the data was collected in three phases: (a) Within the first month that newcomers entered the company (Time 1), they were asked to complete an initial questionnaire that assessed their D–A misfit, N–S misfit, proactive personality trait (control variable), and background information; (b) when newcomers had received performance feedback after their three-month probation period (Time 2), they were invited to complete the second questionnaire that measured their perceived P–G fit, P–M fit, task performance, organizational socialization, and person–organization/person–supervisor fit

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(included as control variables); and finally, (c) after the newcomers had been with the company for four months (Time 3), personnel data was obtained from the HR department to measure the actual turnover rate of newcomers (i.e., whether the sampled newcomers had left the company or not).

In total, 211 newcomers completed the questionnaires across the three time-points, resulting in a response rate of 96%. Regarding the sample characteristics, most of the participants were male (86.76%), and their ages ranged from 24 to 30 (Mean = 27.09, SD = 3.85); most participants held master's degrees (76.71%). The majority were scheduling and facility engineers (56.62%), followed by R&D engineers (26.48%), and other types of engineers (factory maintenance, product development, production and manufacturing, operations, and management, etc.; 16.89%).

Measures

Person–Job misfit.

The P–J misfit scale is composed of Cable and DeRue's (2002) N–S fit and D–A fit scales (three items for each dimension). A sample N–S fit item is: "The job that I currently hold gives me just about everything that I want from a job." A sample D–A fit item is: "The match between the demands of my job and my personal skills is very good." These were measured using Likert 5-point scales (*strongly disagree* = 1, *strongly agree* = 5). To measure new employees' N–S and D–A misfit, we reverse coded the scores of these two dimensions. Cronbach's α for the two dimensions was .86 and .78, respectively.

Person–Group fit.

Regarding the P–G fit measurement, we followed the approach used in previous studies and modified Cable and DeRue's (2002) three-item person–organization fit scale. A sample item is "My personal values match my group's (e.g., colleagues') values and culture." We again used a Likert 5-point scale (*strongly disagree* = 1, *strongly agree* = 5). Cronbach's α was .91.

Person–Mentor fit.

Similarly, we slightly modified the referents of Cable and DeRue's (2002) three-item scale to assess the fit between newcomers and their mentors. A sample item reads, "The things that I value in life are very similar to the things that my mentor values." Scoring was based on a Likert 5-point scale

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(*strongly disagree* = 1, *strongly agree* = 5). Cronbach’s α was .93.

Actual turnover.

We obtained the turnover data directly from the human resources department to assess whether the newcomers were still in their positions (*0= hold a post, 1=turnover*).

Task performance.

In the present study, we asked newcomers to provide their task performance ratings. In the sample company, newcomers received information about their performance at the end of the three-month probation period (i.e., Time 2), and thus it is easier for newcomers to receive the information regarding their performance levels from the organizational viewpoint. Therefore, this study employed the self-rating approach, where newcomers evaluated their task performance using the four items from Williams and Anderson’s (1991) scale: for example, “Fulfills responsibilities specified in job description” (*strongly disagree* = 1 to *strongly agree* = 5). Cronbach’s α for this scale was .88.

Control Variables

This study included each newcomer’s gender, organizational tenure, organizational socialization (using the 20 items from Taormina’s [2004] scale), proactive personality (10 items from Bateman and Crant [1993]), and perceived person–organization fit and person–supervisor (from Cable and DeRue’s [2002] scale) as control variables because these variables might influence newcomers’ adaptation or turnover (Bateman & Crant, 1993; Griffeth, Hom, & Gaertner, 2000; Ng & Feldman, 2010).

Data Analysis

We used a hierarchical regression analysis to test our hypotheses. Hellevik (2009) has suggested that linear regression can be used when analyzing the dependent variable of a *dichotomous* dependent variable because the results of linear and logistic regressions for this type of variable are nearly identical and the results of linear regression are substantively meaningful and easy to comprehend.

RESULTS

Table 1 presents the means, standard deviations, reliabilities and correlations among all variables.

 Insert Table 1 about here

Confirmatory Factor Analysis

We performed confirmatory-factor analyses (CFA) with LISREL 8.54 to investigate the validity of the study variables for the hypothesized nine-factor model (i.e., N-S misfit, D-A misfit, person-organization fit, person-group fit, person-supervisor fit, person-mentor fit, task performance, proactive personality and organizational socialization). The hypothesized nine-factor model provided an adequate fit to the data. ($\chi^2 /df=3.52(4358.66/1238$, CFI=.91, NFI=.88, IFI=.91, RMSEA=.11, SRMR=.08). As such, we proceeded to test the hypotheses.

Hypothesis Testing

The results for testing Hypotheses 1 and 3 are presented in Table 2. As shown in model 2 of Table 2, after controlling for the effects of the control variables, N-S misfit was still positively related to newcomer actual turnover ($\beta= .18$, $p<.05$), supporting Hypothesis 1. Moreover, as presented in model 3 of Table 2, after controlling for the main effects of the study variables, P-G fit negatively moderated the relationship between N-S misfit and actual turnover ($\beta= -.22$, $p<.05$), and the incremental variance explained by the two-way interaction term was significant ($\Delta R^2=.09$, $p<.01$).

Insert Table 2 about here

In order to clarify the forms of the two-way interactions, we followed the procedure suggested by Aiken and West (1991) to specify and interplay between P-G fit and N-S misfit on actual turnover (Figure 2). As presented in Figure 2, when P-G fit was high, N-S misfit was not related with actual turnover (simple slope = $-.00$, $p > .10$). However, when newcomers are low in P-G fit, N-S misfit was positively related to actual turnover (simple slope = $.05$, $p < .01$). These patterns are consistent with the prediction made in Hypothesis 3, thereby supporting it.

Insert Figure 2 about here

In terms of Hypotheses 2 and 4, we present the results of hypotheses testing in Table 3. When including task performance as the dependent variable (see model 5 of Table 3), the results show that D-A misfit was negatively related to task performance ($\beta= -.14$, $p<.05$) after controlling for the main

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effects of the study variables. As such, Hypothesis 2 was supported. Furthermore, P-M fit positively moderated the relationship between D-A misfit and task performance ($\beta = .10, p < .05$), and the incremental variance explained by the two-way interaction term was significant ($\Delta R^2 = .04, p < .01$).

Insert Table 3 about here

We again followed the procedure suggested by Aiken and West (1991) to clarify the patterns of moderation (Figure 3). Figure 3 shows that D-A misfit was positively related to task performance (simple slope = .05, $p < .05$) when P-M fit was high. However, D-A misfit was strongly and negatively related with task performance (simple slope = -.19, $p < .01$) when P-M fit was low. These patterns are consistent with the prediction of Hypothesis 4. Therefore, Hypothesis 4 was also supported.

Insert Figure 3 about here

DISCUSSION

Fit researchers have consistently found that newcomer person–job misfit leads to detrimental work outcomes, such as increased turnover and decreased task performance (Wang et al., 2011). In the present study, we found that newcomers’ P–G fit can buffer the positive relationship between newcomer N–S misfit and actual turnover, whereas their P–M fit can mitigate the negative relationship between newcomer D–A misfit and task performance. It should be noted that we controlled for the effects of newcomers’ proactive personality, socialization, and perceived P–O fit and P–S fit, supporting the unique influences of P–G and P–M fit in the newcomer adaptation process. We discuss the theoretical and practical implications in the following sections.

Theoretical Implications for the Fit Literature

As Kristof-Brown and Guay (2011) noted, fit researchers have overlooked the consequences of employee misfit, with limited studies on this subject. By employing a multiphase research design, we found that newcomers’ N–S misfit positively predicted their actual turnover after four months, whereas D–A misfit negatively predicted their task performance during the three-month probation

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period. Compared with studies employing a cross-sectional design to measure the misfit–outcome relationship, our findings not only demonstrate the predictive effects of newcomers’ initial misfit perceptions on subsequent outcomes, but also establish the nomological network of person–job misfit.

In addition, we found that the positive relationship between newcomers’ N–S misfit on actual turnover was attenuated when they were high in P–G fit. However, when newcomers with high N–S misfit believe that their values and personality are incongruent with their colleagues (i.e., low P–G fit), they are more likely to leave the organization at some point. Although fit researchers have suggested that employees’ N–S misfit enhances their turnover intentions due to the lack of need fulfillment in the job domain (e.g., compensation, benefits, job conditions; Cable & DeRue, 2002; Kristof-Brown et al., 2005), it is plausible that newcomers’ fit with their coworkers (i.e., P–G fit) can satisfy their need for affiliation, and compensate for the detrimental effect of N–S misfit.

Furthermore, we found that the negative relationship between newcomers’ D–A misfit and task performance was mitigated when their P–M fit was high. However, newcomers’ D–A misfit can further reduce their task performance when their personality and values are less compatible with those of their mentors. It is possible that newcomers are able to seek valuable assistance from their mentors based on their experience when both parties share similar values. As such, high levels of P–M fit play an important role in newcomers’ work adjustment, especially in improving on poor performance.

Finally, it should be noted that P–G fit only buffers the relationship between N–S misfit and actual turnover, whereas P–M fit only mitigates the association between D–A misfit and task performance. These findings suggest that newcomers with different types of misfit perceptions need different sources of fit perceptions to “compensate” for the detrimental impacts of misfit and thereby adjust themselves. Our findings also support the propositions of the spillover model of fit (Jansen et al., 2006). Overall, the present findings enrich our understanding of person–job misfit by clarifying its negative consequences, as well as providing ways to mitigate the harmful effects (Kristof-Brown et al., 2013).

Practical Implications

Our findings offer several implications for organizations and managers. In order to avoid the

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negative consequences caused by newcomers' D–A misfit, an organization should consistently measure and monitor whether newcomers' knowledge, skills, and abilities match the job requirements. In addition, organizations need to identify employees whose skills and abilities fail to meet their job requirements and provide them with adequate training in order to improve/update their skills (Chang, Chi, & Chuang, 2010), or assign senior employees whose values and traits are similar to those of the newcomers as mentors to facilitate improvements (Neuwirth & Wahl, 2017).

On the other hand, because newcomers with high levels of N–S misfit may eventually leave their organization, managers should assess newcomers' perceived N–S fit and clarify the facets/sources of their misfit. For example, if most newcomers believe the extrinsic rewards supplied by the job (e.g., money, benefits) are inconsistent with their needs, managers can clarify and assess employees' needs and desires by conducting employee opinion surveys in order to provide more effective and flexible compensation/benefit system (Pawson, 2004).

Limitations and Future Research

There are several limitations of this study that should be noted. First, newcomers' misfit perceptions and task performance were collected from a same source, which introduces the potential problems of common method variance (CMV). To address this, we separated the data collection procedure with predictors collected at three separate time periods based on the recommendations of Podsakoff et al. (2012). In addition, given that the strength of the correlations among the self-reported variables in Table 1 are low to moderate, CMV should not have resulted in serious issues in this study.

Second, we chose R&D engineers from a single organization as our sample, which puts a constraint on the generalizability of our findings to other groups. However, this approach helped us to test the proposed theoretical framework under a more “controlled” setting (i.e., the newcomers shared the same organizational culture as well as the same human resource practices), increasing the internal validity of our findings. Future researchers could compare our findings with samples from other occupations and industries to test their generalizability.

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Table 1: Descriptive and bivariate correlations among study variables

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender	1.13	.34	—												
2. Tenure	2.61	6.54	-.04	—											
3. Total working experience	21.80	35.79	.07	.45**	—										
4. Proactive personality	3.85	.41	-.14*	.23**	.17*	(.78)									
5. Organizational socialization	3.84	.49	.07	-.05	-.01	.36**	(.87)								
6. N-S misfit	2.43	.78	-.05	-.06	-.14*	-.34**	-.49**	(.86)							
7. D-A misfit	2.24	.68	.10	-.06	-.15*	-.27**	-.30**	.38**	(.78)						
8. P-O fit	3.55	.74	.11	.03	.06	.26**	.67**	-.52**	-.25**	(.89)					
9. P-G fit	3.53	.73	.03	.06	.08	.29**	.59**	-.41**	-.34**	.68**	(.91)				
10. P-S fit	3.75	.64	.03	.03	-.01	.24**	.61**	-.38**	-.16*	.69**	.50**	(.93)			
11. P-M fit	3.70	.71	.04	.00	-.01	.23**	.59**	-.26**	-.17*	.59**	.57**	.61**	(.93)		
12. Actual turnover	.02	.15	-.06	.38**	.13	.04	-.11	.18**	-.03	-.16*	-.10	-.18**	-.02	—	
13. Task performance	3.75	.60	-.03	.07	.16*	.37**	.51**	-.22**	-.32**	.30**	.36**	.26**	.31**	.05	(.88)

Notes: 1. ** $p < .01$; *** $p < .005$; $N = 211$; Cronbach's alpha coefficients are presented in boldface on the main diagonal.

2. Actual turnover: 0= hold a post, 1=turnover.

3. Tenure and total working experience (in months)

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Table 2: The two-way interaction among N-S misfit and P-G fit on actual turnover

	Actual turnover		
	Model 1	Model 2	Model 3
Control Variables			
Gender	-.02	-.02	.00
Tenure	.40**	.41**	.40**
Total working experience	-.03	-.03	-.01
Proactive personality	-.02	-.00	.02
Organizational socialization	-.06	.09	.04
P-O fit	-.19	-.05	.00
P-S fit	-.01	-.07	-.10
Main Effect			
N-S misfit		.18*	.14
D-A misfit		-.08	-.04
P-G fit		-.22*	-.08
P-M fit		.17*	.02
Two-way Interaction			
N-S misfit * P-G fit			-.33*
D-A misfit * P-M fit			.12
R ²	.16**	.19**	.28**
ΔR ²	—	.03**	.09**

Notes: ** $p < .01$; * $p < .05$; $N = 211$.

The coefficients are standardized regression coefficients (Beta).

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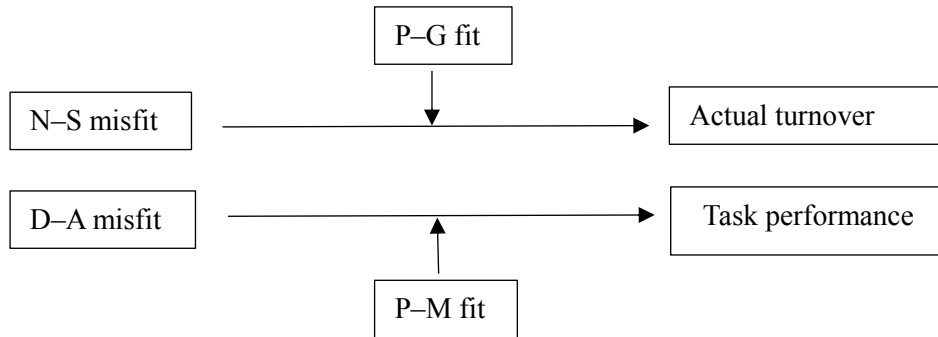
Table3: The two-way interaction among D-A misfit and P-M fit on task performance

	Task performance		
	Model 4	Model 5	Model 6
Control Variables			
Gender	-.03	-.01	-.00
Tenure	-.00	-.00	-.01
Total working experience	.14*	.13*	.14*
Proactive personality	.17**	.18**	.19**
Organizational socialization	.49**	.50**	.48**
P-O fit	-.17	-.11	-.09
P-S fit	.12	.09	.07
Main Effect			
N-S misfit		.13	.11
D-A misfit		-.14*	-.12*
P-G fit		-.04	.04
P-M fit		.02	-.06
Two-way Interaction			
N-S misfit * P-G fit			-.16
D-A misfit * P-M fit			.10*
R ²	.32**	.33**	.37**
ΔR ²	—	.01	.04**

Notes: ** $p < .01$; * $p < .05$; $N = 211$.

The coefficients are standardized regression coefficients (Beta).

Figure 1. The conceptual model of the present study.



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Figure 2. The two-way interaction between Person-Group (P-G) and Need-Supply (N-S) Misfit on Actual turnover.

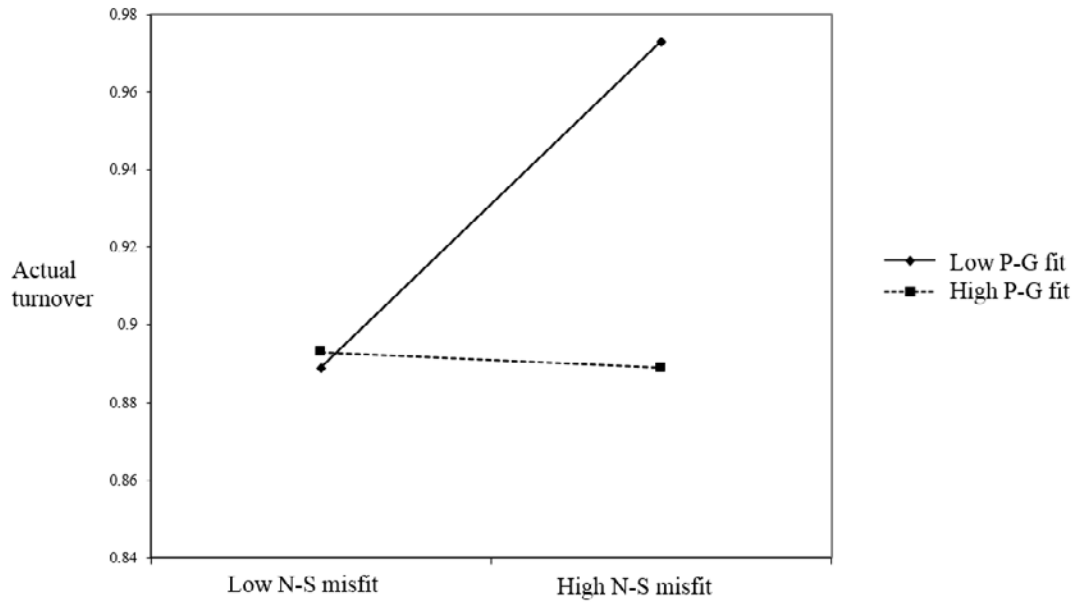
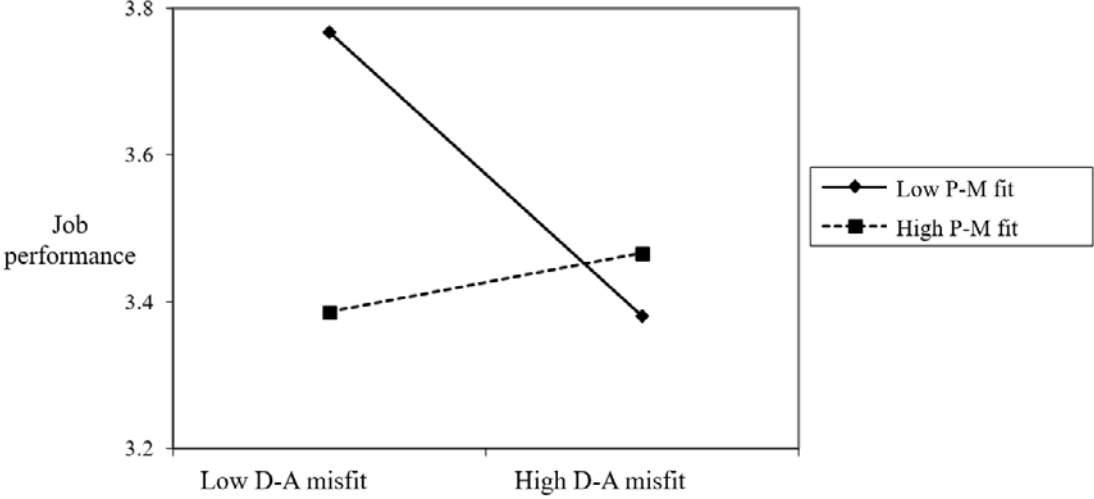


Figure 3. The two-way interaction between Person-Mentor (P-M) and Demand-Ability (D-A) Misfit on Actual turnover.
A) Misfit on Actual turnover.



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**Toward a theory of reference group determination: Longitudinal influences of
organizations' historical performance comparisons**

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Toward a theory of reference group determination: Longitudinal influences of organizations' historical performance comparisons

ABSTRACT: *Historical and social comparisons are two heterogeneous but related processes for decision makers to evaluate an organization's performance and adjust future aspiration levels. We develop theory to explain why and how decision makers refer to less ambiguous historical comparisons to determine reference groups to benchmark, in the perspective of performance thresholds. We argue that an organization's self-comparative performance influences decision makers' motives to conduct social comparisons, and further influences performance thresholds for reference groups. We also argue that the deviation of an organization's performance from the industrial average is an important moderating factor. Overall, this research challenges the implicit assumptions of identical reference groups and extends the discussion on motives of social comparisons from an individual level to organizational level.*

Keywords: Strategic decision-making, strategy process, strategy, managerial thinking and cognition

Organizational aspirations, also called goals and reference points, are the targeted performance levels set by the decision makers to communicate strategic direction, enhance performance, and provide success criteria (Shinkle, 2012). With bounded rationality, decision makers evaluate an organization's performance by comparing an organization's performance with its prior performance and the performance of a group of comparable organizations ("reference group"), and further adapt aspirations based on the performance feedback in the form of attainment discrepancies (Cyert & March, 1963; Greve, 1998; Kim, Finkelstein, & Halebian, 2015; Moliterno, Beck, Beckman, & Meyer, 2014). These two comparisons are termed as "historical comparison" and "social comparison" respectively. Recent work has argued that historical comparisons are more relevant than social comparisons to facilitate evaluations of an organization's capabilities and resources (Kim et al., 2015); yet social comparisons also provide relevant information on the competitive environment in which an organization is embedded. Meanwhile, social comparisons are more ambiguous than historical comparisons considering the availability of different reference groups (Hu, He, Blettner, & Bettis, 2017), and the attribution difficulty due to the unobservable factors within other organizations (Kim et al., 2015). This difference in information ambiguity, prompts the question: will performance feedback based on more straightforward historical comparisons shed light on the selection of reference groups for social comparisons when decision makers determine organizational aspiration levels?

In the organizational aspiration literature, reference groups are commonly specified as the other organizations in the same industries, and the means or median performance of the reference groups are

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the referent points with which the focal organization compare its own performance (Hu et al., 2017). Emerging studies have questioned this oversimplified determination of reference groups by arguing the existence of alternative reference groups (e.g., Audia, Brion, & Greve, 2015; Hu *et al.*, 2017; Moliterno *et al.*, 2014). Previous literature has also investigated an organization's shifting attention among multiple reference points within a certain reference group (e.g., Hu, Blettner, & Bettis, 2011; Moliterno *et al.*, 2014). However, these studies mostly assume that historical and social comparisons are independent processes (Hu et al., 2011; Joseph & Gaba, 2015).

Our investigation builds theoretical arguments that both the recent and longitudinal historical comparisons influence decisions makers' motives to conduct social comparisons. We distinguish decision makers' motives as threefold: self-improvement, self-assessment, or self-enhancement based on social comparison theory. While social comparison theory is at the individual level, scholars have increasingly used this theory to understand organization-level decision making and behavior (Hu et al., 2011; e.g., Greve, 1998; Hu et al., 2017; Moliterno et al., 2014). Our propositions argue that decision makers adopt different performance thresholds to adjust social reference groups based on their motives of conducting social comparisons and that these motives exhibit systematic relationships with historical comparisons. Moreover, the deviation of an organization's performance from the industrial average performance sets an important boundary condition for the influence from historical comparisons on reference groups.

Through exploring the influence of historical performance comparisons on reference groups, this research answers calls to explain the selection of reference groups (Hu et al., 2017; Shinkle, 2012), and examine the relationship between historical and social comparisons (Joseph & Gaba, 2015). Specifically, this research makes two contributions. First, we build theory to explain the heterogeneity in the specialization of reference groups based on historical performance comparisons. Although there are multiple available reference groups for an organization, in aspiration research an organization's reference group has predominantly been taken as all of the other organizations in the same industry (Moliterno et al., 2014). We join scholars arguing that this industry-based determination of reference groups lacks theoretical justification when considering the precision and realism of aspiration determining processes (Hu et al., 2017). Proposing the influences from historical performance

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comparisons, our research argues that reference groups are heterogeneous across organizations and we urge scholars to re-examine the reliability of implicit assumptions about reference groups in aspiration research.

Secondly, we extend the separate and switching models of aspiration levels by further examining how decision makers deliberately select reference groups. In the separate model, historical and social comparisons are studied as two parallel processes (Kim et al., 2015), and the interactions between these two types of comparisons are understudied. Assuming that reaching industry averages is an organization's primary goal due to the competitive pressure (Bromiley, 1991), the switching model argues that decision makers first conduct social comparisons due to the priority of social comparisons (Bromiley & Harris, 2014). Based on the well-accepted idea of limited cognitive capabilities and bounded rationality, we argue that decision makers first conduct less ambiguous historical comparisons, then select specific reference groups based on the performance feedback from these historical comparisons. This novel perspective inspires our investigation on the interactions between historical and social comparisons. In making these two contributions regarding the factors influencing decision makers to determine reference groups, our work also informs the cognitive approach to understanding competition which considers subjective perceptions instead of objective market indicators of competitors (Panagiotou, 2007; Tsai, Su, & Chen, 2011).

THEORETICAL BACKGROUND

Aspiration models and assumptions of reference groups determination

Washburn and Bromiley (2012) and Bromiley and Harris (2014) categorized aspiration models into three major types based on how decision makers integrate historical and social comparisons to determine aspiration levels. The first type is the weighted average model which hypothesizes that historical and social comparisons are combined in one additive function with different weights to form the aspiration levels (Bromiley & Harris, 2014; Shinkle, 2012; Washburn & Bromiley, 2012). The second type is the separate model which argues that historical and social comparisons operate as independent influencing factors (Bromiley & Harris, 2014). The third type is the switching model which assumes that social comparisons are conducted prior to historical comparisons. When setting future aspiration levels, an organization first engages to meet the industry average performance, then stretches

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its historical performance (Bromiley & Harris, 2014; Washburn & Bromiley, 2012). Based on Bromiley and Harris (2014)'s analysis, the separate and switching models get stronger support than the weighted average model; and the separate model gets moderately stronger support over the switching model.

The three types of aspiration models hold two assumptions, of reference groups, that we believe are oversimplified. Firstly, those models assume that the criteria of selecting reference groups (to benchmark) are identical for different organizations. Comparability is an important and common criterion when an organization selects reference groups, which highlights factors including industrial similarity, physical proximity, and specific organizational characteristics (Greve, 1998). The main theoretical reason to set the whole industry as the reference group is the comparability of organizations in the same industry (Cyert & March, 1963). There are increasing studies arguing whether organizations in the same industries make up appropriate reference groups, and whether industry averages validly measure reference points (Hu et al., 2017). For example, Tsai *et al.* (2011) argued that an organizations perceive the importance of competitors within the same industries differently. We argue that a focal organization gains its perception of competitors based on decision makers' cognition and available information. Thus, we contend that decision makers with bounded rationality first refer to less ambiguous information to facilitate the subsequent processing of more ambiguous information.

Secondly, these models assume that reference groups are exogenous and predetermined. Industry averages are set as the taken-for-granted reference points. Based on this assumption, the difference in the degree of ambiguity between historical and social comparisons is largely neglected. As a result, studies about interactions between historical and social comparisons are restricted to the impacts from social comparisons on historical comparisons in the shifting models. As discussed above, the shifting model hypothesizes that decision makers first pay attention to social comparisons with peer organizations in the same industry. This argument assumes that the level of industry average performance is the normative performance level that an organization should meet to keep up with the development of the whole industry (Shinkle, 2012). Moliterno *et al.* (2014) argued that comparisons between prior performance and the two reference points determine which reference point would be adopted. Their argument extends the shifting model by proposing two reference points. But these studies

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conform to the underlying assumption of the shifting model – that decision makers first conduct social comparisons to assess an organization's legitimacy within reference groups.

Current literature has demonstrated that the performance assessments based on historical and social comparisons are not fully independent. However, conforming to the underlying assumptions related to reference groups, there are only a few studies that focus on how the interactions between historical and social comparisons impact the determination of reference groups (e.g., Hu et al., 2011, 2017; Kim et al., 2015; Moliterno et al., 2014).

Intentions of social comparisons and reference group determination

Defining reference groups as organizations in the same industries or direct competitors (Kim et al., 2015) has roots in the emphasis of industrial competitive structure in the literature of industrial organization economics (Chen, Su, & Tsai, 2007), which overlooks the significant role of decision makers' cognition when determining aspiration levels. To better understand the role of decision makers' cognition when determining aspiration levels, we draw upon the work of Wood (1989) who summarized three motives for social comparisons at individual level: self-evaluation, self-improvement, and self-enhancement. Powered by self-evaluation motive, individuals will compare with similar ones to obtain accurate assessments. When intended to achieve self-improvement, individuals will compare with superior others to learn and get inspired. While powered by self-enhancement motive, individuals will compare with inferior others to reduce distress or enhance self-esteem.

We have identified two distinct groups of studies which have extended the social comparison theory from the individual level to the organizational level to explain how decision makers' cognition impacts reference group determination. The first group of literature conceptualizes the intention to conduct social comparisons as self-assessment or self-enhancement (Greve, 1998). When decision makers intend to conduct self-assessment, similarity is the core criterion to specify reference groups; while when self-enhancement is the intention of social comparisons, high-performing firms will be excluded from the reference group (Greve, 1998; Wood, 1989). The second group of literature classifies the intention of conducting social comparisons into normative one or comparative one (Kelley, 1952; Moliterno et al., 2014; Panagiotou, 2007). Decision makers attend to both the normative reference points, which ensure the legitimate identity in the preferred reference group; and the comparative reference

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points, which set the highest-ranking organizations as benchmarks (Moliterno et al., 2014). Where an organization's performance located between the two reference points influences the likelihood and scale of organizational changes.

The two classifications have some overlap with Wood (1989)'s summary of the three motives of social comparisons, however, not all the three types of motives are fully discussed. The categorization of self-assessment and self-enhancement goals does not investigate the self-improvement motive, while the categorization of normative and comparative intentions does not cover the self-assessment motive. However, self-improvement motive is important since organizations are inspired by better-performing firms; and self-assessment motive is strong when decision makers need to collect more information to facilitate the determination of aspiration levels. This research provides a more comprehensive picture by investigating the impacts from all the three motives of social comparisons on reference group determination.

THEORETICAL MODEL OF REFERENCE GROUP DETERMINATION

As summarized above, recent literature has investigated the complexity of reference group determination by demonstrating that the reference points and organizations included in reference groups are heterogenous across different organizations. To further extend the discussion of influencing factors on the determination of reference groups within the activity of aspiration level determination, we propose that there is a systematic relationship between historical and social comparisons. We use self-comparative performance and thresholds of reference groups as the major constructs to discuss how historical comparisons influence reference group determination. Self-comparative performance is based on historical comparisons and defined as the difference between an organization's performance and prior performance. Self-comparative performance is higher when the value of an organization's performance minus previous performance is larger – the literature also calls this a positive attainment discrepancy. Conversely, self-comparative performance is lower when the value of an organization's performance minus previous performance is more negative – this is analogously called a negative attainment discrepancy. Importantly, self-comparative performance can be in relation to recent past performance or in relation to past performance over time.

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In the determination of reference groups, we examine social reference groups as defined by performance thresholds. Performance is one dimension of reference group determination among other organizational features, including size and industry similarity (Greve, 1998). Previous research has demonstrated that performance is a significant dimension for decision makers to consider when determining reference groups to benchmark (e.g., Hu et al., 2011; Moliterno et al., 2014). We define performance thresholds as the boundary performance levels that decision makers set to specify reference groups. Performance thresholds can be envisioned as categories in a distribution relative to the focal organization. As such, the performance thresholds are higher when reference group organizations perform better than the focal organization. While the performance thresholds are lower when reference group organizations perform inferior to the focal organization. The performance thresholds are at medium levels when reference group organizations perform similar with the focal organization. In this definition, performance thresholds can be two-sided; they can define either the upper or lower side of the performance interval, or both sides of the performance interval of the reference groups to benchmark.

Due to bounded rationality, we argue that decision makers consult the information provided by performance feedback from historical comparisons when setting performance thresholds of reference groups. The comparisons between recent performance and prior performance influence performance thresholds of reference groups as summarized in Proposition 1. Besides, historical comparisons also have longitudinal impacts on the determination of reference groups in performance thresholds as stated in Propositions 2 and 3. Moreover, an organization’s position in the performance distribution of organizations in the same industry also significantly moderates the impact from historical comparisons on the reference groups used as benchmarks as argued in Proposition 4. The overall conceptual framework proposed in this paper is illustrated in Figure 1 and Figure 2.

Insert Figure 1 and Figure 2 about here

Self-comparative performance and the performance thresholds of reference groups

Availability of multiple reference groups is one important factor leading to the ambiguity of social comparisons (Hu et al., 2017). Decision makers are generally averse to ambiguity and adopt more clear information to interpret ambiguous information (Joseph & Gaba, 2015). Historical comparisons are more concrete compared with social comparisons. To further decrease the ambiguity of social

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comparisons, we argue that decision makers first interpret an organization's performance based on historical comparisons. Our arguments are that self-comparative performance influences decision makers' motives to make social comparisons and further performance thresholds of the reference groups to benchmark.

When the performance in the historical comparisons is high, decision makers would like to demonstrate that an organization's performance has been improved and the differences compared with better-performing firms are decreased. Furthermore, organizational aspirations, as important benchmarks to evaluate previous organizational performance, also impact employees' motivation for achieving high levels of appropriate value creation (Foss & Lindenberg, 2013). Enhancing levels of performance thresholds for reference groups also motivates employees to further improve organization's performance based on the already achieved improving performance. Thus, when the self-comparative performance is high, decision makers are inclined to conduct social comparisons as self-improvement processes (Wood, 1989). As such, organizations with better performance than the focal organization will be included in the focal organization's social reference group.

When an organization's self-comparative performance is low, this organization experiences a decline in performance. A higher social comparison performance alleviates the challenges from both internal and external stakeholders due to the declining performance. As a result, there is a tendency that decision makers conduct social comparisons with a self-enhancement motive, and select lower level of performance thresholds for reference group (Greve, 1998), with low level of performance in the historical comparisons. These arguments are summarized as Proposition 1.

Proposition 1 (P1): There is a positive association between the level of an organization's recent self-comparative performance and the level of the performance threshold of its reference group.

Longitudinal impacts from self-comparative performance

Despite the instant impacts, an organization's self-comparative performance also influences the decision makers' determination for reference groups across multiple periods. A higher variance of self-comparative performance means an organization's performance experiences a greater fluctuation in terms of performance improvement. High variability in past performance leads to difficulty of interpreting prior performance and predicting future performance (Kim et al., 2015). When the variance

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is high, decision makers fail to accurately evaluate an organization’s capabilities and resources via an organization’s previous performance. Besides, there are better opportunities for decision makers to manipulate social comparisons (Wood, 1989). Facing the fluctuating performance of an organization, decision makers prefer to lower an organization’s aspiration levels to decrease the possibilities of future performance falling short of aspiration levels. As such, self-enhancement becomes decision makers’ main motive to conduct social comparisons; thus decision makers adopt lower level of performance thresholds for reference groups to benchmark. The result is that organizations with inferior performance are included in the reference groups to determine aspiration levels.

When the variance of performance in the historical comparison is relative low, decision makers can evaluate an organization’s capabilities and resources more accurately. A constant falling short of historical performance brings the decision makers the pressure to provide both legitimate explanations and effective interventions towards an organization’s declining tendency. Decision makers are more eager to take the risk of further falling short of aspiration levels and demonstrate their strong intention to improve an organization’s future performance. While a constant outperformance based on historical comparisons largely enhances the decision makers’ positive evaluation towards an organization’s capabilities and resources. Simultaneously, stakeholders expect further improvement in an organization’s performance. Decision makers are also confident to achieve further improvement in performance. As a result, decision makers conduct social comparisons with self-improvement motive when an organization’s performance is constantly below or above prior performance across time. Thus, decision makers increase the level of performance thresholds for their reference groups. To sum up, the variance of self-comparative performance negatively impacts the performance thresholds for the reference group to benchmark: a larger variance leads to lower level of performance thresholds, while a smaller variance leads to higher level of performance thresholds. Thus, Proposition 2 is stated as follows.

Proposition 2 (P2): There is a negative association between the variance of an organization’s longitudinal self-comparative performance and the level of the performance threshold for its reference group.

We also contend that the variance of self-comparative performance also moderates the association between the recent self-comparative performance and the performance threshold for the reference group. A smaller variance provides decision makers with a more accurate evaluation towards

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an organization's capabilities and resources. If organizations have been experiencing a constant outperformance based on historical comparisons, decision makers' positive evaluation towards an organization's capability and competitiveness will be further strengthened. The self-improvement motive under the circumstance of a recent underperformance, and the self-enhancement motive under the circumstance of a recent outperformance will be further increased. While if an organization has been experiencing a constant underperformance based on historical comparisons, decision makers will try to direct the stakeholders' attention to the possible further improvement with a recent improvement in performance, and accept an organization's declining tendency with a recent decline in performance. Thus, the self-improvement and self-assessment motives are further increased.

On the other hand, when the variance is larger, decision makers obtain ambiguous information from historical comparisons. The comparison between recent performance and prior performance will have less impact on social comparisons due to the expected fluctuation of performance based on historical comparisons. To sum up, a smaller variance in historical comparisons will enhance the impacts from recent historical comparisons on the performance thresholds, while a larger variance in historical comparisons will reduce the impacts from recent historical comparisons on reference group determination. The negative moderating effects from the variance of an organization's performance in the historical comparisons are summarized in Proposition 3.

Proposition 3 (P3): The positive association between an organization's recent self-comparative performance and the performance threshold for its reference group is negatively moderated by the variance of longitudinal self-comparative performance.

Deviation from industrial average performance and reference groups determination

We further contend that the determination of reference groups is contingent on the position of an organization's position in the performance distribution of all organizations in its industry. Firstly, as the deviations from the industrial average performance enlarge, an organization's social comparisons become more independent from historical comparisons. Decision makers encounter lower ambiguity in determining reference groups with fewer comparable organizations with similar performance. Significant deviations of an organization's performance from the industrial average performance influences how decision makers integrate historical and social comparison processes to determine

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aspirations (Washburn and Bromiley, 2012). Decision makers rely less on extra information provided by historical comparisons to specify reference groups.

Secondly, we contend that decision makers’ motives to conduct social comparisons are more stable when an organization’s performance deviates more from the industry’s average performance. At the individual level, people avoid social comparisons to maintain their self-esteem when they believe their ability is low or when they feel threatened by the others with a much higher ability (Wood, 1989). While at the organizational level, decision makers also avoid social comparisons with higher-performing organizations when the focal organization ranks near the bottom of the distribution. Simultaneously, there are fewer inferior organizations for the focal low-ranking organization to make appropriate self-enhancement comparisons. Thus, decision makers from lower-ranking organizations will be more motivated by self-assessment when conducting social comparisons. While for an organization performing higher than the industry average, decision makers focus more on self-improvement to motivate employees for further improvement, and self-assessment the organization rank near the top of the distribution. Thus, decision makers’ motives to conduct social comparisons are more stable when an organization’s performance is highly deviated from the industry average performance. As a result, the positive relationship between performance in recent self-comparative performance and the performance threshold for the reference group is attenuated by the deviation from the industry average performance as summarized in Proposition 4.

Proposition 4 (P4): The positive association between an organization’s recent self-comparative performance and the performance threshold for its reference group is negatively moderated by the deviation between the organization’s performance and its industry’s average performance.

DISCUSSION AND CONCLUSION

This research explores the role of historical performance comparisons in determining social reference groups in the process of organizational aspiration determination. We establish four propositions. First, we explain why decision makers in an organization that performs better based on self-comparative performance, adopts higher performance thresholds for the reference group to benchmark. Second, when an organization’s longitudinal self-comparative performance has a smaller variance, decision makers will adopt higher performance thresholds. Third, we explain why recent performance and variation of longitudinal performance interact negatively. Finally, we explain why for

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organizations with performance far deviated from the industrial average, the influence from recent self-comparative performance on reference group determination decreases.

This research has mainly two theoretical contributions. Firstly, the implicit assumptions of homogeneous and static reference groups have been further questioned. Moving beyond the simplified notion that reference groups are organizations in the same industry, our research argues that the recent and longitudinal self-comparative performance influences decisions makers' motives to conduct social comparisons, and further influences the determination of reference groups. Secondly, extending from the separate model in aspiration research which studies social and historical comparisons as two heterogeneous and independent processes (Kim et al., 2015), this research emphasizes the interactions between historical and social comparisons by addressing the impacts from historical comparisons on reference group determination.

Further research is needed to consider the boundary conditions of our propositions. First, this research assumes meaningful systematic variance based on performance rather than decision makers' traits that might affect their motives to conduct social comparisons under similar historical comparison results. But this assumption needs scrutiny. Different risk preferences of decision makers might significantly moderate the impact from historical comparisons on social comparisons. Second, this research mainly studies the level of an organization's performance as the standard to specify reference groups. Exploring other important features of reference groups would further shed light on the mechanism of reference group determination (Hu et al., 2017; e.g., Massini, Lewin, & Greve, 2005). Third, this research has not yet discussed how many periods should be included when measuring the variation of an organization's self-comparative performance. Decision makers' cognitive differences as well as industrial features and life cycles of an organization might be important influencing factors. More theoretical and empirical studies are needed to provide deeper understanding. Nonetheless, our research indicates that there is reason to believe that there are meaningful systematic variances that can aid understanding of reference group determination.

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Figure 1: Overall theoretical framework for our model of reference group determination

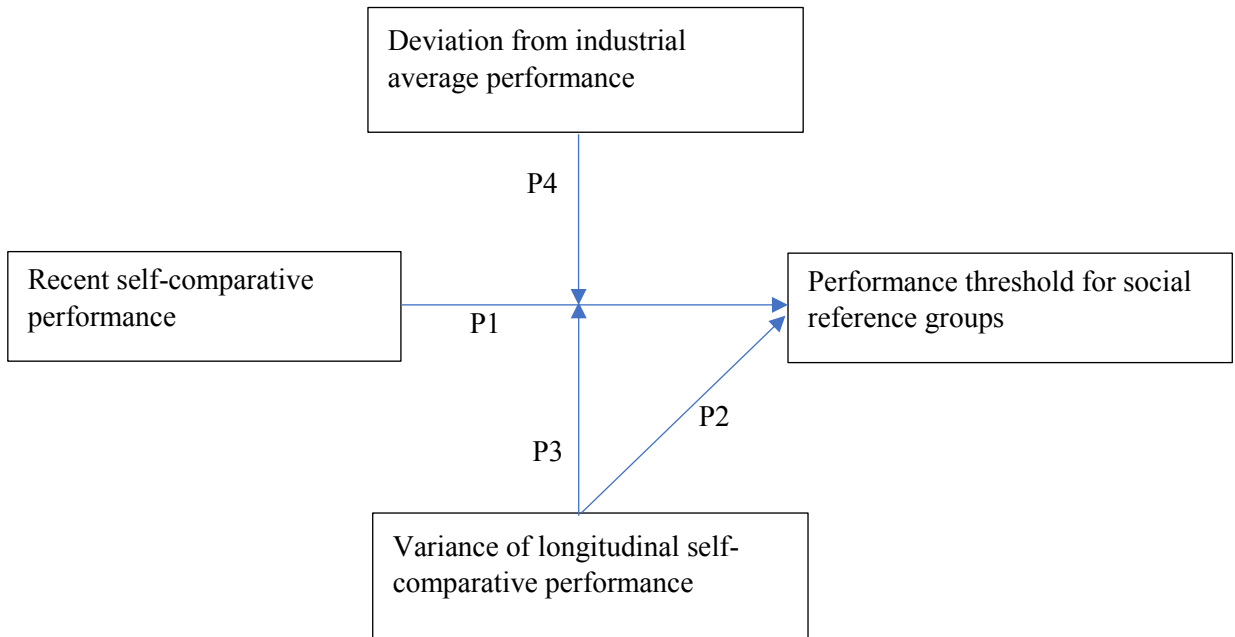
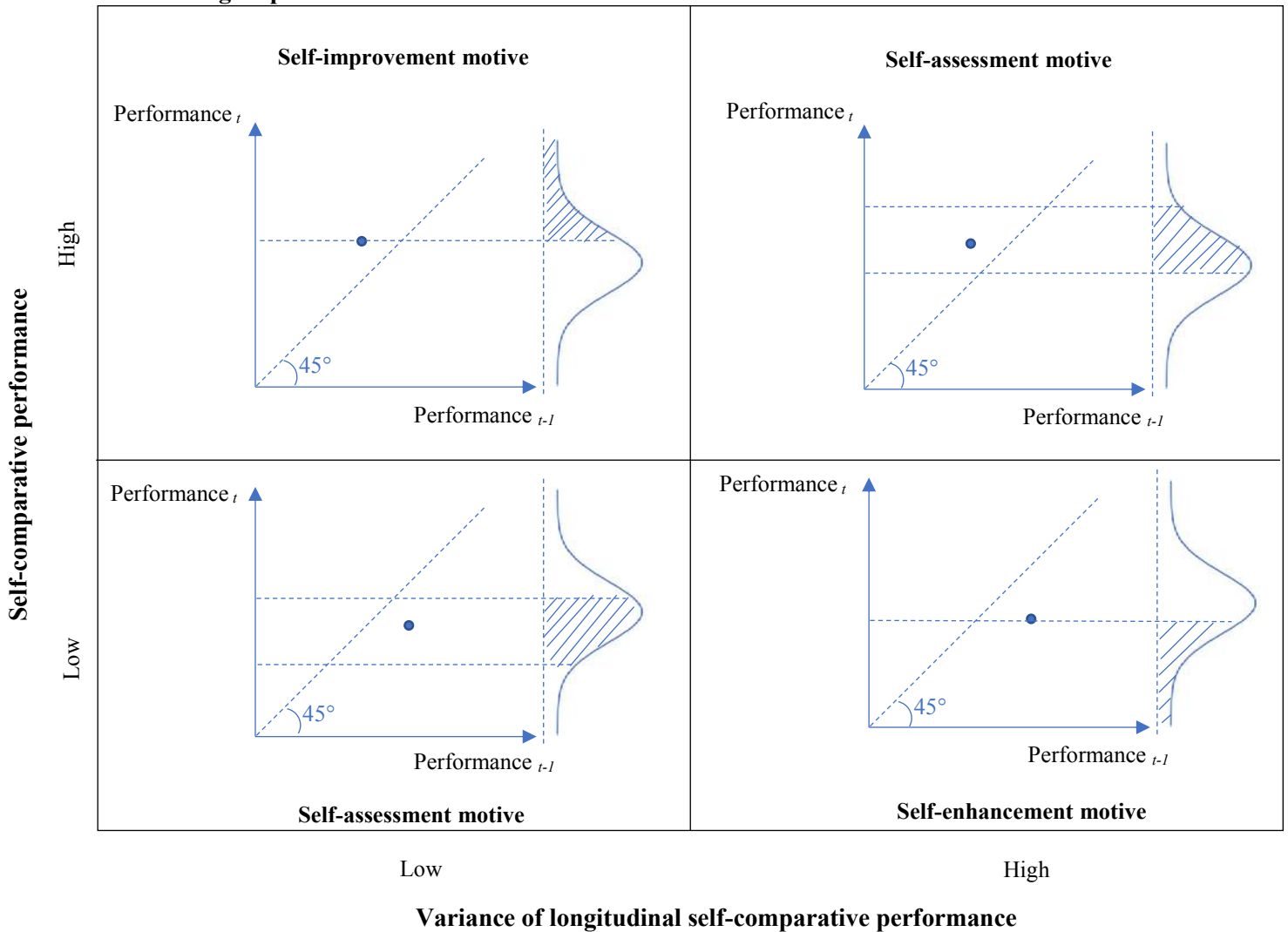


Figure 2: The influence of self-comparative performance on performance thresholds of reference groups



Note:

1. The dots represent the focal organizations.
2. The normative distribution curves represent the performance distribution of organizations in the whole industry.
3. The shaded areas represent the reference groups.

12. Public Sector Management and Not-for-Profit

Emergency Medical Services Response: Fire Department Involvement and Resource Utilisation

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Emergency Medical Services Response: Fire Department Involvement and Resource Utilisation

ABSTRACT

For many years, there have been concerns about ambulance service response times in Victoria, Australia. As a result, it was deemed appropriate to investigate other models of Emergency Medical Service (EMS) delivery to see if alternative solutions can produce better results. There are two major models; the Franco/German and the Anglo/American. They are broken down further by delivery models; the British model of a separate third party public sector service as used in UK, Australia and New Zealand or the fire service model where the fire service is the main delivery agency, such as in North America, (continental) Europe and parts of Asia. There has been limited research aimed at providing an understanding of which model produces better response times.

A number of case studies were undertaken and explored the issues of response times, patient outcomes and resource utilisation. In Victoria (Australia), response times for ambulance Basic Life Support (BLS) are over twice as long as the Fire Department (8.3 minutes for fire compared to 18.2 minutes for Victorian Ambulance at the 90 percentile). The US and Canadian Fire Services provide EMS response time considerably lower than Ambulance Victoria, some as low as 7.43 minutes. UK Ambulance (on which the Victorian model is based) also provides response time considerably less than Ambulance Victoria.

Keywords: emergency medical services (EMS), response times

BACKGROUND AND RESEARCH PROBLEM

The system of emergency medical services (EMS) delivery in Victoria follows an ambulance-based UK model, which is also used in other states of Australia and New Zealand (Ambulance New Zealand 2013; National Audit Office 2011). There are many other models of EMS delivery used around the world, although most EMS providers in the developed world have fire service involvement.

Ambulance Victoria is failing to meet its current response time targets. It has also come under considerable government scrutiny demanding an improved performance. The following quote, which is taken from the Victorian Auditor General's Report, states that "Performance data shows that ambulance response times have worsened in both metropolitan and regional areas over the last six years" (Auditor General Victoria 2010, p. viii). There has also been considerable public criticism of ambulance performance and their failure to meet response time targets (e.g. Herald Sun 2013), with

demands that the Auditor General and Ombudsman investigate the organisation (Herald Sun 2010, 2011, 2013; Payne 2015; The Daily Telegraph 2013; Tomazin 2013; Willingham 2013).

There are a number of researchers who have compared the North American system with other systems, including those of the UK, Europe and Canada. There have also been comparisons of the different systems in Asia and the Middle East (Hsien-Ho 2007; Ingolfson 2013; Lechleuthner 1994; Roudsari 2007; Fischer 2011; Dick 2003; Moore 1999; Blackwell 2002). While past research has been done on EMS performance measures both in Australia (O'Meara 2005) and the USA and Canada (Moore 1999; Lambert et al. 2009; Blackwell & Kaufman 2002); and there are a number of peer-reviewed articles comparing the USA system with other systems (Dick 2003; Hsien-Ho 2007; Ingolfson 2013; Lechleuthner et al. 1994; Roudsari et al. 2007; Fischer 2011); an extensive literature review was unable to identify any previous research comparing the Australian ambulance model for EMS delivery to the fire-based EMS system used in the USA.

Consequently, this research aims to compare different models of EMS: in particular, the ambulance-provided EMS services such as those operating in Victoria, Australia and the Fire Service EMS delivery in the USA, in order to seek alternative options to improve response times. The paper is organised as follows: in the following section, we firstly address the context of performance measures within emergency service, predominantly fire and ambulance services. The research methodology is then detailed, then key findings are presented and, finally, conclusions are detailed.

PERFORMANCE MEASURES IN EMS

The issue of Performance Management is very topical, with a number of recent articles addressing the issue (Arnaboldi, Lapsley & Steccolini 2015; Worrall 2010). Key factors in a successful Performance Management system include a need to set clear objectives or targets, which are set and agreed upon by all parties (individuals and management), regular monitoring and review of performance against these targets, and delivering meaningful reward for successful outcomes (financial, recognition, or a combination of both) (Ashdown 2014).

Arnaboldi, Lapsley and Steccolini (2015, p. 1) state that “The pressure to improve performance is **the** issue for the public sector in the current environment”. There are major challenges for performance management in the public sector, as techniques developed and honed in the private sector

may not produce the same results because of the complexity of influences in the public sector. In part this may be because of political influences, lack of managerial discretion and complicated levels of accountability (Arnaboldi, Lapsley & Steccolini 2015).

Whilst Performance Management was seen as a significant driver of improved productivity and job satisfaction, it has not always fulfilled the promise, particularly in the public sector. There has been significant dissatisfaction with the process that has led to decreases in job satisfaction, increases in absenteeism and rapid staff turnover (Guerra-López, 2013; Michie 2004; Arnaboldi, Lapsley & Steccolini 2015).

Key performance indicators (KPIs) and benchmarking have also been used extensively. The use of KPIs has resulted in a focus on what can be measured, rather than encapsulating all of the key dimensions of an organisation's performance (Bevan & Hood 2006), as cited in Arnaboldi, Lapsley & Steccolini 2015). Benchmarking with similar organisations in different jurisdictions has also become popular, but it also brings its own complexities (Bowerman 2001) as cited in Arnaboldi, Lapsley & Steccolini 2015). More recent research on performance measures has focused on the benefits of established routines for the collection of quality data (Josephs 2016).

As far as performance management for EMS is concerned, it is possible to describe the different delivery systems, but to be able to compare patient outcomes there is also a need to compare a wider range of performance measures. For decades, the only significant performance measure for ambulance services has been response times (Al-Shaqsi 2010; Ambulance Victoria 2013; National Audit Office 2011; Mayer 1979; Myers et al. 2008).

All EMS providers in Australia, UK and the USA produce annual reports containing details of response times (Ambulance Victoria 2013; Pons et al. 2005; Turner 2011; Wankhade 2011). Unfortunately, this seemingly easy measure is complicated, as many services measure different things and report them as response time. Response time can consist of the sum or parts of the following (International Association of Firefighters 2002): time of first call; call taking; dispatch/turnout; travel time; arrival on scene; and arrival at patient.

An international model which explains the component parts of response time has been published by the National Fire Protection Association (2010), a leading international codes and standards

developer based in Boston, USA. The model (Figure 1) provided includes target response times for each component.

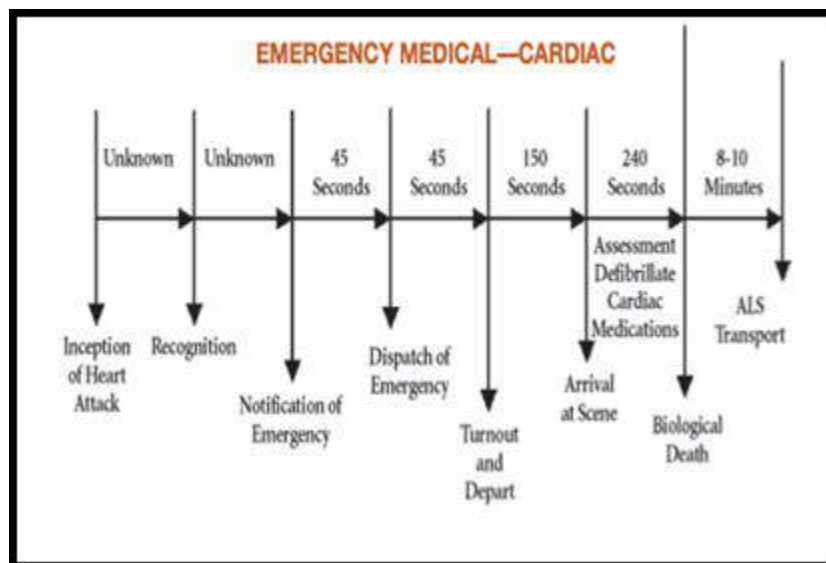


Figure 1: Response time for EMS as recommended by NFPA 1710 (2010) from *Emergency Medical Services: A Guidebook for Fire-Based Systems (International Association of Firefighters, 2002)*.

Within Australia, different ambulance services measure different things as part of their response time measures; some include call taking, whilst others start measuring time from dispatch of responders. There is also no common target used within Australia (Sassella 2005). Comparatively, in the USA, the National Fire Protection Association has produced NFPA 1710, which does outline a timeline for EMS calls.

Time targets in Australia do not conform to any one standard, making inter-state comparisons highly problematic. However, there seems to be general agreement that shorter response times to time critical incidents are desirable. This inconsistency in KPI measures is not unique to Australia. The same problems exist in other countries too. For example, in Seattle the Fire Department has a response time target to life threatening emergencies of four minutes on 90% of occasions (Seattle Fire Department 2012). This target time does not include call handling or dispatch, which is included in the Victorian figures. A major challenge for any comparison of EMS performance is to compare like to like and an aim of this research is to contribute to an improved understanding of this phenomenon.

RESEARCH APPROACH

The case study and mixed methods were chosen as the most appropriate for this study because the research is seeking to deal with “how” or “why” questions regarding a social issue, and the research fits the criteria outlined in the literature (Yin 2009, p. 4; Veal 2005, p. 169). Use of the case study method enables an opportunity to make the connection between practice and theory and allows improvement in business practice (Serio, Nanut & Borgonovi 2016). Helen Simmons (2009), as quoted in Thomas (2016), provides the following definition of a case study:

Case study is an in-depth exploration from multiple perspectives of complexity and uniqueness of a particular subject in a real-life context. It is research-based, inclusive of different methods and is evidence led. The primary purpose is to generate in-depth understanding of a specific topic (Simons, 2009 , as cited in Thomas 2016, p. 10).

Each case study was undertaken as an individual project. Within the case study method, it is possible to apply a mixed method of research to each individual case. The reason for choosing this method was that there was quantitative data to be collected and analysed, but also qualitative data; the challenge was to integrate the results (Bergman 2008; Plano Clark 2007; Silverman 1999).

The research questions addressed were:

RQ1: Which EMS delivery system provides the optimum response times; the ambulance-based system used in Victoria or the USA and Canadian fire-based systems?

RQ2: Does the Metropolitan Fire Brigade in Melbourne have the capacity to take on a supportive role in EMS to reduce response times?

The project was multi-phased. The first phase was to research multiple sources for primary and secondary data (Sapsford & Jupp 2006, p. 150). The second phase consisted of administering questionnaires to verify the previously collected data and open-ended questions to explore other areas pertinent to the research questions (May & Cantley 2001). The final phase was conducting interviews to both verify earlier data and to explore other key issues in depth (O’Leary 2009). The targets of the questionnaires and interviews were all Fire Chiefs or operational heads of relevant organizations.

The selection of organizations for the case studies was purposive (Veal 2005). The organizations chosen for this research were fire and ambulance services that provide a level of EMS delivery to the citizens that they serve. The organizations were chosen on the basis of similar size, budget, staffing and risk profile to the two key organizations under review in Australia. Advice

regarding exemplars in the field was sought from key members of the Metro Chiefs Association including an acknowledged EMS expert. These sources were also used to identify organizations that were willing to participate in such a study (Creswell 2009). Ultimately, in addition to the Metropolitan Fire Brigade, Melbourne (MFB) and Ambulance Victoria, the following organisations were chosen for inclusion in the study: Miami Dade Fire and Rescue, Florida; Fairfax Fire and Rescue, Virginia; LA County Fire Department, California; Mesa Fire and Medical Department, Arizona; Phoenix Fire Department, Arizona; New York City Fire Department (included on the basis of the lessons learnt from the merger of fire and EMS – i.e. what went wrong, what worked and how the problems of a merger might be addressed?); Winnipeg Canada Fire Department; and UK Fire and Ambulance Service.

FINDINGS

A comparison of ambulance agencies EMS response times across Australian capital cities is presented in Figure 2 and response times across all organisations included in the study are portrayed in Figure 3.



Figure 2: Ambulance response times by capital city – 90th Percentile (Australian Productivity Commission 2017b).

Figure 2 shows that Victorian response times have been relatively consistent over the years 2011 to 2016 and, compared to other states and territories, only marginally better than NSW in the period 2011 to 2015.

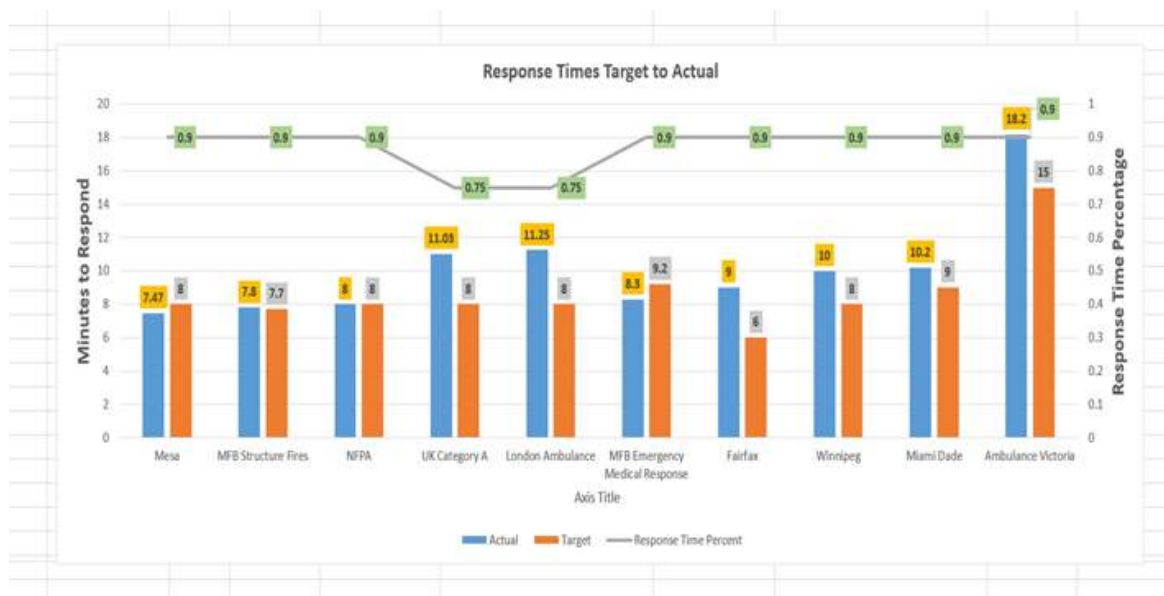
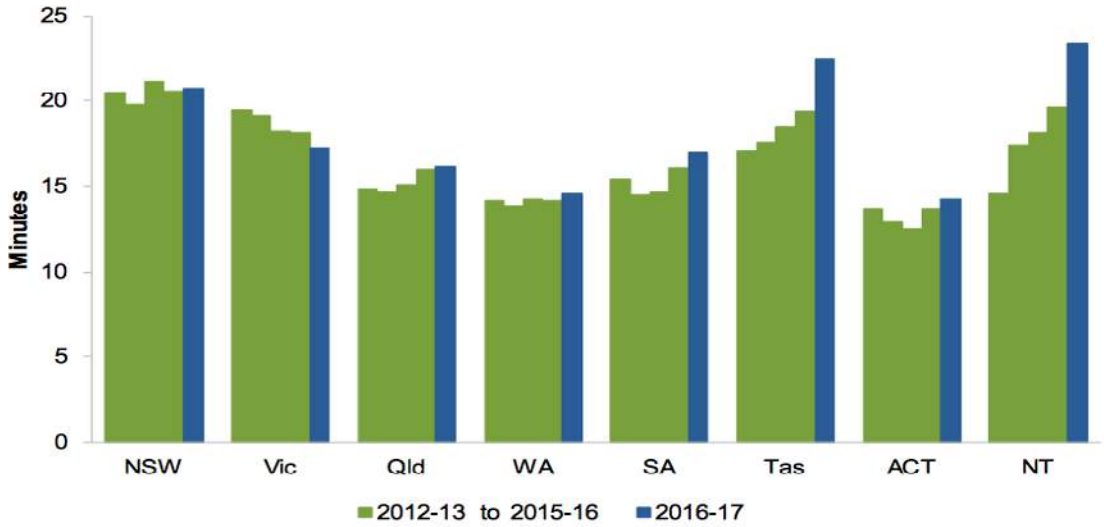


Figure 3: Response times across all case study entities.

However Figure 3 shows both target response times and actual response times for the EMS services included in the case studies. The results show that the targets for all with the exception of Ambulance Victoria are between 6 to 9 minutes for the 90 percentile. The actual response times range from 7.47 to 10.2 with the exception of Ambulance Victoria who have an actual figure of 18.2 minutes 90 percentile. There are potentially a number of reasons for different response times. These range from density of population (such as London which has a population density of 5518 people/km² compared to Melbourne, which has a population density of 1560 people/km² (Versus 2017), to resourcing, workloads, geographic spacing and multiple vehicles at fire stations. Population densities for other case study cites include Phoenix 2790 people/km², New York City 10,194 people/km² and Mesa with 1365 people/km² (Versus 2017).

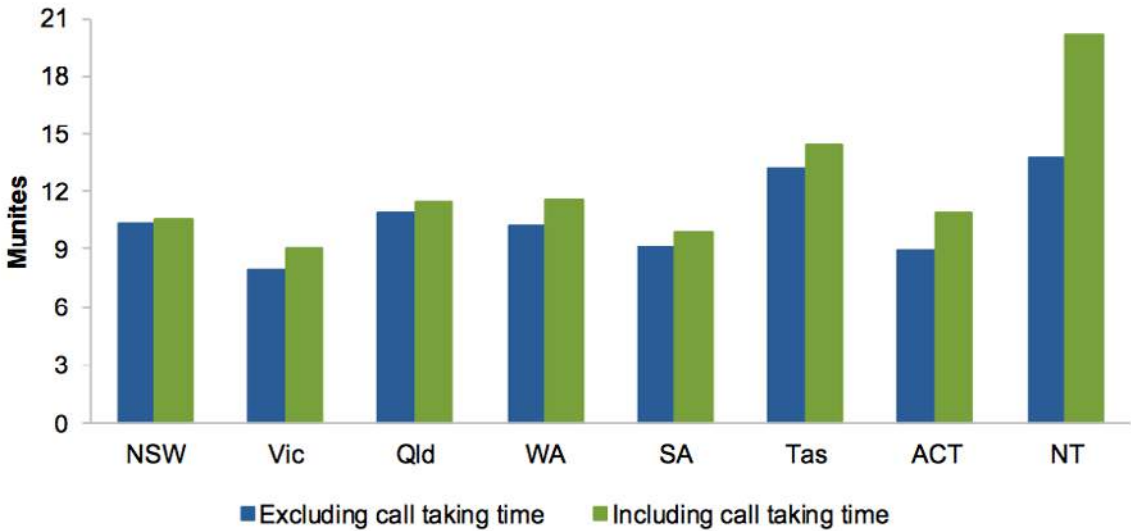
It is appropriate to compare the response times of fire services across Australia to the ambulance services across the country. These are capital city figures.

Figure 11.3 Ambulance response times, capital cities, 90th percentile^a



Source: Australian Productivity Commission, Report on Government Services 2018,Part E Chapter 11,Page 11.8

Figure 9.10 Response times to structure fires, capital cities, 2014-15, 90th percentile^a



Source: Australian Productivity Commission, Report on Government Services 2018,Part 9, Page 9.9

The graphs clearly show a pattern of the fire service arriving minutes before the ambulance. In a time critical emergency such as a heart attack those minutes can mean the difference between life and

death. It is worth noting that both Ambulance Victoria are the only ambulance services achieving a reduction in response times but these are still nowhere near the fire service response times for the same states.

The second research question related to the capacity for the North American EMS model to be implemented in Victoria, Australia. To address this question, an analysis of the number of staff, fire stations, fires, EMS and total calls was conducted. The results are presented in Table 2, below.

Table 2: Comparison of calls per firefighter across cases.

Place	# of FF	# Fire Stations	Total Fires	EMS Calls	Total Calls	# of calls/ # of FF
Mesa	389	19	N/A	45,000	56,000	143
Miami	2000	66	N/A	175,000	233,000	116
Pheonix	1667	58	17,000	164,000	187,000	112
Seattle	1071	33	13,500	72,000	85,000	80
Winnipeg	1084	34	15,000	64,000	79,000	73
Fairfax County	1400	38	19,000	69,000	95,000	68
Los Angeles	3892	171	7,500	216,000	297,000	76
New York	11051	218	41,000	216,000	1,734,000	42
Melbourne	1866	47	8,000	4,000	36,000	19

The evidence presented in Table 2 above, demonstrates that compared to other fire services case studies that were involved in this research, Melbourne Fire Brigade has sufficient capacity to take EMS calls in the first instance. This would allow for a dramatic reduction in response times to medical emergencies. This is further supported by the location of fire stations which are planned according a smaller response target of a 7 minute 90 percentile. Ambulance stations are located with significantly greater separation distances and are often based on hospital location compared to the point of origin of the incident. This has a significant impact on response time and the related survival rates of patients. With all responses of both fire and EMS shown in table 2 and the comparison of the

MFB with all the nominated US fire departments, the telling ratio of firefighter to number of calls is significantly lower for the MFB.

There is also a global reduction in fires attended and the severity of fires (Godfredson, 2018). The MFB now attends to more EMR calls than structure fires. It is interesting to compare some of the statistics from an earlier time. In 1996-1997 the total number of fires was 10,241. In 1996-1997 the number of 3rd Alarm or above fire was 50. In 2013- 2014 the comparable numbers are 7,382 fires and the number of third alarm fires or above was 37. The number of fire deaths in 1996-7 was 15; the number of preventable deaths in 2013-2014 was 5 (although these figures are not comparable as preventable deaths are not defined). Analysis of this data indicates the total number of fires has fallen, as well as the number of very large fires. The reasons for the reduction in very large fires include earlier calls (because of 24/7 lifestyle and the proliferation of mobile phones), installed fire protection such as sprinklers and smoke alarms, and better firefighting equipment such as more sophisticated and capable fire trucks, thermal imaging and better personal protection.

Given the capacity for the MFB to absorb a larger number of responses and the opportunity for the MFB to absorb the majority of EMS responses in the urban region of Melbourne, this is an immediate matter for Government policy. This is clearly the case, given the relatively poor response times of the Ambulance Victoria and the capacity of the MFB to absorb greater responsibilities with the current manning and resources (see above).

CONCLUSION

This study was motivated by the problem of ambulances in Victoria failing to meet their response time targets and growing community angst regarding the issue. The research aim was to make comparisons of different delivery models, response times and associated issues (as posed by the research questions).

To address the knowledge gap this study used a multi-method, multiple case studies approach with the objective of identifying the model that provided the best outcome for the patient. The response times for EMS delivered by the Fire Service in both the US and Canada are substantially less than those provided by Ambulance Victoria. In most cases this is by a significant margin. The shortest response time of the Departments studied was Mesa Fire and Medical Department, who were

achieving 90% of calls within 7.43 minutes (compared to Ambulance Victoria achieving 80.6% against a target of 90% by 15 minutes).

However, it was noted that many US Fire Departments do not report on their performance for total time response. New York City Government referred to the total time response as “end-to-end”. The term means the clock starts at the time of first call and finishes at time of arrival on scene. The main reason for not including the call handling in the measure by some departments is that an independent third party may provide the call handling service and the fire department has no control over the process. The Victorian Auditor General raised this very issue in his latest report on emergency service response times (Victorian Auditor General 2015).

Whilst it is understandable that the fire service does not want to be accountable for matters beyond its control, it is vitally important in terms of patient outcomes that this information is included in response time statistics. Without this information accurate benchmarking of systems is not possible.

Given the current research provides strong indications that fastest response time is provided by the fire service, and that the fire service in Melbourne has significant unused capacity, it is appropriate to explore further opportunities to use this underutilised resource for the timely delivery of EMS and address the potential for greater survival rates of patients.

At the same time, the issue of measuring the patient outcomes as a result of the intervention of EMS staff has not been broadly addressed by the industry. Some agencies are collecting data at time of arrival and additional data at time of handover of the patient at a hospital emergency room to try and measure the results of the inputs of EMS personnel. Unfortunately, such actions are not widespread and are not consistent across agencies. Also, there is a need to collect such information automatically to ensure it is timely and correct. The Compass project (EMS Compass 2016) currently underway, which aims to produce a consensus on key performance indicators, may be the best way forward.

The skill requirements for the three main levels identified in Australia and the US are similar but the training requirements are very different. The US system produces similar qualifications in a shorter timeframe. There is no pressure to change either system.

Globally, a revolution is occurring in the delivery of EMS services. Technology is advancing and there are also new drugs and procedures being used. An interesting aspect is the proactive

approach being taken by some progressive agencies to reduce the demand for high-level EMS services and for more efficient and effective use of Government resources for taxpayer dollars. (Arnaboldi, Lapsley & Steccolini 2015) It is an area that will continue to grow.

The dramatic reduction of demand for firefighting and the impressive results for community safety of proactive work done by firefighters (Thomas 2015) indicate that the status quo for most fire services is not an option. The current rigid models no longer satisfy community needs and will change further in the future. However, as acknowledged during this research by both the Phoenix Fire Department and the (Phoenix) firefighters union, change will be difficult - but necessary! (Antonellis 2012; Phoenix Fire Department 2016-2017).

The low productivity in the Melbourne Metropolitan Fire Brigade needs to be addressed to ensure the community gets a cost effective and efficient service. A way of improving the value to the community is to become proactive regarding fire prevention, utilizing on-shift resources and increasing the EMS role. In the current industrial/political environment this may not be easy.

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5. Human Resource Management
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5. Human Resource Management Competitive Session

Frontline Managers and Performance Management – The Impact of Support

ABSTRACT: *While the implementation of performance management is the responsibility of all levels of management, frontline managers play the greatest role as they deal with frontline employees directly on a day-to-day basis. This paper examines how the frontline manager's perception of support will affect how they handle their performance management responsibilities. I found that other organizational actors provided direct support in the implementation process but they also provided indirect support by acting as examples that frontline managers could emulate. This affects the ability, motivation, and opportunity of frontline managers when managing the performance of their employees.*

Keywords: frontline manager, performance management, support, AMO

While there is a long history of performance management in mixed results are reported. Indeed, many organisations are moving away from traditional performance management processes. Moreover, performance management tends to be seen in a linear way with HR and senior management designing and cascading the performance management system down the organisation for line managers to implement (Perry & Kulik, 2008; Truss, 2001; Weiss & Hartle, 1997). But line managers do not operate in a vacuum and depend are influenced by other supporting actors in the organisation. As such, one important element of understanding performance management in organisations lies in analysing the support that FLMs have.

The aim of this paper is to explore and understand how does the FLM's perception of support affect their implementation of performance management practices. This is achieved by first exploring the performance management and frontline management literature, with an emphasis on the role of FLMs and support of other organisational actors. The research methodology then follows, outlining the research approach, sampling method, and process of data collection and analysis. Our research findings will then be presented. Lastly, we reach our conclusion explaining how FLMs are affected by the support they are provided with.

PERFORMANCE MANAGEMENT AND ORGANISATIONAL ACTORS

Performance management

Performance management is seen as a critical and necessary system used to measure and improve the effectiveness of people in the workplace (Cardy & Leonard, 2015; Luecke & Hall, 2006). However, in practice many organisations find that their performance management systems are not meeting expectations (Morgan, 2006, Soltani and Wilkinson 2018). Goh, Elliott, and Richards (2015) report that organisations face significant challenges and barriers implementing performance management as it is difficult to align it across all units; “there was a tendency for different branches or departments to start functioning in silos”, with the view that performance management was not their responsibility and was just something that had to be done (p. 163).

FLMs in performance management

Whilst there is a plethora of literature on performance management, there is much less which focuses on line managers much less FLMs. No doubt much of the research on line managers, supervisors, or managers in PM applies to what FLMs experience in PM as they are part of that larger group in organisations (for e.g. Alfes, Truss, Soane, Rees, & Gatenby, 2013; Biron, Farndale, & Paauwe, 2011; Brown & Lim, 2010; Farndale, Hope-Hailey, & Kelliher, 2011; Fletcher, 2001; Goh et al., 2015). The tendency for literature to conflate line and frontline management negates the important and unique roles that FLMs play in organisations. Even though there are overlaps in certain responsibilities across various levels of line managers, there are still differences that remain due to the different employees and duties that are unique to certain levels. FLMs face the frontline and they would have some responsibilities that middle and senior managers do not have. Line managers are involved in an extensive range of formal and informal performance management activities as they are the ones who are “typically responsible for observing performance, rating performance, and conducting the performance appraisal interview” (Brown & Lim, 2010, pp. 192-193). Harris (2001) found that line managers did not enjoy performance management tasks, as they could not justify the additional time taken due to the bureaucracy in the performance

management process; they also felt restricted by the formal monitoring processes, feeling that the organisation was interfering with how they managed their staff. Managing poor performance is also a facet of performance management that managers widely struggle with especially in relation to ensuring fairness and consistency (Sheppard & Lewicki, 1987). Unlike HR personnel who are focused on being consistent to all employees FLMs are more focused on their work groups' functioning and the need to maintain flexibility may limit consistency (Klaas & Wheeler, 1990).

Support from other organisational actors

Support given to FLMs is important because of pressure and responsibility; support would help them further develop the ability in the implementation of HR policies (Townsend, Wilkinson, & Kellner, 2015). In short, FLMs need to have the necessary skills or ability to perform, the motivation to perform, and have to be given the opportunity to perform by their superiors (Truss, Mankin, & Kelliher, 2012). Ability is related to practices that attempt to influence and improve the knowledge and skills of individuals, improving competencies of the labour pool (Lai & Saridakis, 2013); motivation is affected by individuals' through positive work attitude and behavior, increasing their effort to perform well (Kooij & van de Voorde, 2015; Lai & Saridakis, 2013); opportunity is influenced by empowerment to make decisions (Brothers, 2007).

FLMs face both role ambiguity and overload in their jobs and support from other organisational actors can help to reduce that. By tapping into their support system, FLMs can use advice from their peers or superiors to help them (Hunter & Renwick, 2009). Senior management can also serve as role models for line managers in the PM system where good and bad habits can be imitated (Hutchinson & Purcell, 2007). Middle managers then act as mediators between senior managers and FLMs; their input can influence how senior managers shape and how FLMs' execute strategies (Floyd & Wooldridge, 1997). Currie and Procter (2001) found that FLMs hardly interacted with senior management, resulting in feelings of detachment – middle management can help to reduce this. And HR support can help FLMs to better manage the role overload they face in their HR responsibilities, performance management included (Gilbert, De Winne, & Sels, 2011). However, the

mere availability of support does not mean that FLMs will choose to utilise it. Bond and Wise (2003) explained in their study that even though FLMs were able to contact HR for support, they generally chose not to do so except in relation to exceptional cases. The goals of FLMs and the HR department tend to be different, affecting the delivery and acceptance of HR practices like performance management (Sheehan, De Cieri, Cooper, & Brooks, 2016, p. 176). Line managers generally tend to focus on the operational aspect of their job resulting in less attention paid to HR strategies. (Link & Müller, 2015, p. 297). The difference in work focuses of HR and FLMs may help to explain why FLMs choose not to ask for support as they do not want to feel restricted in how they handle their daily tasks. Superiors and peers also serve as important support sources for FLMs in the management of performance. As such, this study aims to address the following research questions: *To what extent are FLMs supported in their performance management responsibilities?* This questions acts as a means to better understand the role of organisational support when FLMs are managing the performance of their employees.

METHODS

Research design

Two large Singaporean organisations were the sites for this research. 57 in-depth, semi-structured interviews were completed across both organisations in total. CONS had 27 participants from three different departments and SVC had 30 participants from two different departments. The table below illustrates the breakdown of participants from both case organisations.

INSERT TABLE 1 ABOUT HERE

The five departments in both organisations serves as five different cases to better understand how support to FLMs affects the implementation of performance management. This allowed for data source triangulation, which also helped by allowing for multiple data courses providing various perceptions regarding a single reality, increasing the rigour in the study during the search for

convergences in the data (Evers & van Staa, 2010; Healy & Perry, 2000; McMurray, Pace, & Scott, 2004). The use of stratified purposive sampling helped select the departments and teams that are interviewed in order to provide a different perception based on how different FLMs approach performance management. This allowed for a comparison across departments, locations, and management styles.

Data collection

In-depth, semi-structured interviews were done with various levels of management and employees from operational departments and HR personnel. This use of interviews enables greater understanding of other people's experiences and also, the meaning that they make of it; it is through the use of interviews that we are able to inquire about these experiences (Seidman, 2013). The interviews began with demographic questions about the respondent. Respondents were also then encouraged to talk about their job, their organisation's performance management system, and their perception of their responsibilities in performance management. For those in the HR staff members, middle and senior managerial positions, they were also asked to talk about their perceptions and experiences of the FLM's role in performance management as well.

Data analysis

The analysis stage involved combining data units, generating meaning of data and inductive thematic analysis. Codes were assigned to relevant interview responses, allowing for the grouping of responses from interviews together under the same topic to combine data units. By allowing the same issue to fall under the same categorisation, meaning could be generated. The meaning generation of the data was completed by "selecting constitutive details of experience, reflecting on them, giving them order, and thereby making sense of them that makes telling stories a meaning-making experience" (Seidman, 2006, p. 7). Lastly, inductive thematic analysis was performed through the constant re-reading of the interviews in order to revise the codes and by comparing the information against the codes.

FINDINGS

Performance management of frontline employees requires the active involvement of FLMs to facilitate a successful process (Ryu & Kim, 2013). Organisational support is important to ensure that FLMs are able to implement intended policies (Evans, 2015). This support comes either directly or indirectly from HR, senior management, middle management, and other FLMs.

Direct Support

HR The HR department is plays an important role in the performance management process through formulation, adoption, and implementation (Huselid, Jackson, & Schuler, 1997; John & Björkman, 2015). However, the varying operational goals of FLMs and the HR department will impact the implementation of performance management (Sheehan et al., 2016). Whilst a small number of FLMs believe that HR provides support through the provision of training or serving as a helpline, most the interviewees did not believe that HR provided them much support in the performance management process; there was the tendency to regard HR as separate from the operational departments and see their role as largely sending out emails during the year to remind employees that specific components of performance management had to be completed. There was also the perception by non-HR interviewees from CONS that HR was more interested in giving instructions on performance management rather than working together with them. The divergence between HR and FLM perspectives is evident in the below view where HR point out the training and assistance provided:

I think one way would be training them, providing them with the tools and the guidelines. This is not so much on performance management specifically but we do meet up with them together when there are certain situations or cases that they struggle with. Let's say there are cases whereby they are not going to renew their contract due to performance issues and things like that, they will get HR to be involved in such situations. If it's really a case of a wrong job fit then we try to help them to source for alternative arrangements like seeing whether they could be deployed to do other things within the organisation. – HR FLM (#1.27)

The support given by HR does not mean that FLMs will utilise it and understand how to better implement performance management. There are FLMs who still perceive performance management

as separate from their operational activities and do not understand the importance of performance management:

I do prioritise operational tasks over people management but I wouldn't say I struggle between them. – FLM (#1.16)

I look at it [operational and performance management tasks] quite separately because the main time you have to look at appraisal is at the end of the year. I mean you do think about it on a day-to-day basis - whether each person has enough on their plate and which are the things that they are doing that can contribute to their appraisal at the year end, that kind of thing – but it is not the main thing. – FLM (#2.13)

Whilst HR supports FLMs in the performance management process through training and help given, it is not as influential as the superiors and peers of the FLM. Superior and peer support heavily impacts how FLMs choose to implement performance management and will be discussed next.

Superiors Support given to FLMs when managing the performance of frontline employees also comes from middle management as the FLMs' direct supervisor. Middle managers generally see themselves providing continuous support to FLMs through guidance or mentoring. This is best expressed by a middle manager from CONS (#1.26):

I give him the example of what I've been through, the process that I've been through; let him realize how this process is being materialised and then I go with him to see how he manages with the staff. At times when we chit-chat, I will just bring up a topic and let him see how he handles the situation with the staff. I will guide him, let him do the actual talking - let him be the talker rather than me. So I'm sort of in that way the backup, like a mentor to them and guide them.

Support is particularly important in difficult situations with many middle managers working closely with the FLM to handle such cases or employees. A middle manager from CONS (#1.13) said that in dealing with poor performing or problem employees, he will sit in with the FLM and the employee in question to manage the situation. Other middle managers also commented that even in less difficult situations, they try to take the time to support the FLMs by being there. When asked about who they turn to first when facing problems in their work, a few FLM interviewees noted that their first point of contact would be their direct superiors:

I go to my boss first... Sometimes I will try to solve myself but when I need help I will definitely go to him because for us, our team is quite small. – FLM (#1.07)

Usually we go to our boss first to ask them for guidance. A lot of times we will ask them because they have been here longer than us. First thing we need to know is are there past precedence, for such precedent cases how we handle it because our team is pretty young... so those old cases that happened six, seven, eight years ago they might not know what maybe applicable or relevant. So the only person that could have all these insights should be my boss. So I do have to run to them and seek their views. – Middle Manage/FLM (#2.18)

However, for employees who are new in the job their networks are relatively less developed and they are generally more restricted in how they are able to manage issues at work. This is not the case for more experienced employees in the organisation with more developed networks and relationships

Other FLMs For a large majority of FLMs, the main source of support would be from their peers. This is also the case for most of our respondents, whether or not they have managerial responsibilities. A large majority of FLMs said that they tend to go to their peers with issues they face in their job rather than their superior in the first instance; it is only when they face significant problems or their peers were not able to help that they go to their superior. There is the perception that when they go to their boss, they have to already have proposed solutions in mind or they are keeping their superiors in the loop regarding the situation:

Normally we will solve it by ourselves first. We cannot just go to him [referring to superior] for everything. I will check with my other colleagues whether they have faced the same issue before and what they would do; after that I would go to my boss and update him on the issue. Then he will advise me whether to go by the usual way or if there is a new way that we can approach it. - #1.09

I go to my boss first if it's major issues - if I know that those are really huge issues that maybe my colleagues won't be able to handle as well, then I will go to my boss directly... Otherwise I mean if it's normal things or problems on lower-level issues in that sense, then if I know that at the staff level if me and colleagues we can handle the problem, we will just get it done. I mean we can probably tell him after that but it's telling him that it's done, we've already resolved it rather than asking him for a solution. - #2.08

Even the frontline employees have indicated that they will always go to their peers first before their respective FLMs. For example, a frontline employee (#2.28) observed that “if I think my colleagues can help, I will go to them first. If not, then I will go to the boss.” As such, peer support is essential in such organisations where they provide the first case of support.

Indirect Support

Besides being a direct source of support, peers and superiors provide their own actions or examples to FLMs on how to manage performance. This can be seen in SVC where FLMs use their superiors as examples or precedents when they themselves are tackling performance management responsibilities:

For myself it's more of that - to really see how he is doing it to me, how is he guiding me, how is he giving me opportunities, how is he managing my duties and things like that - then that's what I learned. – FLM (#2.08)

I think that training will provide some background because when you move on from a staff to a management, you definitely need some background or some basic training to bring you up to speed and all that. Then after that, it's really on the job. Then I guess how your previous supervisor was will make a difference... So it depends on whether you want to adopt that one [previous superior's management style] or do you not want to. It really depends; it matters. - Middle Manager/FLM (#2.22)

Often, the superiors' influence is subtle that arises from the employee trying to align himself or herself with the management and working style of the former. This is explained by employees from SVC:

If you follow someone for long, you may adopt their practice, their style and all that. So, some people said, 'oh, actually some of them, during their processing officer days they were not like that, but they changed. They changed when they moved up to the mid-management role' and all that, which could be explained by the reason of they have been following the big boss for a long time. What the big boss is doing right, they will have to align - you have to do it this way to suit her style and all that (in terms of presentation and all that). Along the way, they may also get influenced by her culture, her attitude and then it just gets absorbed, learned, and passed down. It manifests downwards. - Frontline Employee (#2.15)

My RO she does the same for all the staff under her as well. So, we don't only meet staff at the pre-determined slot; we do give feedback throughout the whole of the year and so on... I think in a way largely that will be the trend where you follow or imitate your boss. – Middle Manager/FLM (#2.18)

In CONS, superiors and peers serve as examples or guides in the management of performance. FLMs have explained that their colleagues and superiors have helped them in adapting to their role and the way the organisation operates:

When I first came in, my colleague also told me that. So you have to put it in a nicer way to tell them their negative thing [sic]. You have to put it, rephrase the whole thing. -#1.03

When you are new to a company, how do you know what are the things you can do or cannot do? I closely follow what my manager will do and I'll quickly bring down the information and then follow. It may not be the best but it is a guide then after that when I've been in the organisation for a longer period of time then I start to think on what I can improve on; maybe I don't need this anymore. – #1.20

Peers and superiors are important sources of support in a FLM’s job. However, superiors are more impactful in that they serve as “role models” for FLMs in their implementation of performance management, whether they are aware of it or not. FLMs may consciously or subconsciously adopt the way they have been managed in the past. Other organisational actors act as forms of support for FLMs in their work and performance management. Middle and senior management can serve as examples and guides for the FLMs in how they should go about managing their employees.

DISCUSSION AND CONCLUSION

The amount of support that FLMs receive from other organisational actors influences their enactment of performance management and this can be explained through AMO theory. Direct or indirect support that FLMs get from other organisational actors will influence their ability, motivation and opportunity that they have in their performance management responsibilities. The figure below shows that this support comes from HR, superiors, and peers. FLMs get direct support from other organisational actors but they also get indirect support from their superiors and peers in the enactment of performance management.

INSERT FIGURE 1 ABOUT HERE

The support, whether directly or indirectly, given to a FLM by other organisational actors can help improve the ability of the FLM. This is because FLMs can learn from these sources of support and improve their skills and abilities in relation to performance management (Lai & Saridakis, 2013). Direct and indirect support can also influence the motivation that FLMs have through the amount of effort they use to manage the performance of their employees (Kooij & van de Voorde, 2015). Lastly, the support that FLMs have will affect the opportunity they have to fulfil their role in performance management. The support that is given by higher levels of management is important for FLMs to have the authority to carry out their performance management responsibilities (Brothers, 2007).

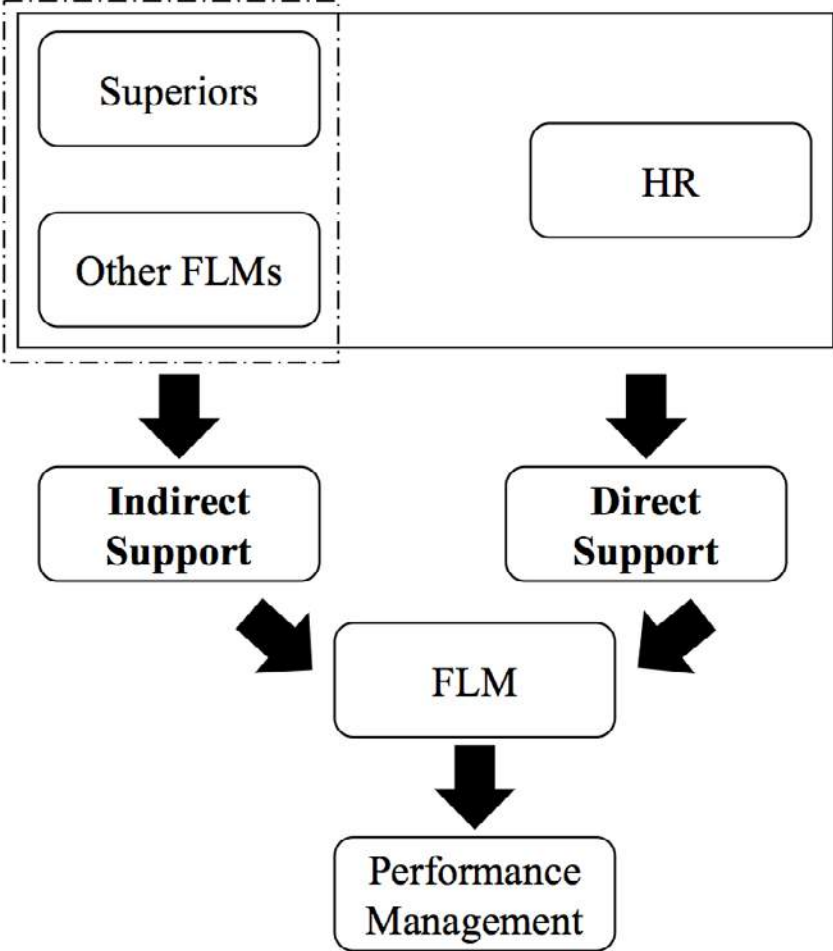
However, not all forms and sources of support are equal. The data showed support given by superiors and peers tend to be the most impactful in the performance management process. Literature has explained that support from superiors and peers through advice can help FLMs navigate through any work issues, including performance management (Hunter & Renwick, 2009). Higher levels of management can serve as role models for the FLMs, demonstrating behaviours for them to imitate (Purcell & Hutchinson, 2007). This study has shown the higher levels of management are very influential in how FLMs choose to manage performance. Their approach in how they choose to manage the performance of their employees are largely dependent on their own experiences with being managed in the past - FLMs either manage the way that they themselves have been managed previously or they choose to manage in a different way to what they have been managed. Other FLMs also serve as very importance sources of support because of their approachability; FLMs preferred to approach their peers for advice in their work, including performance management. Higher levels of management are not the first source of support the FLMs tend to seek, they tend to approach their peers first, especially if they believe their peers can help or have the experience. The HR department also provides support to FLMs in the performance management process but they are not as critical as peers and superiors. In conclusion, the study has shown that performance management is a very complex process; the implementation of performance management goes beyond just the FLM. Support is an intrinsic component that helps to explain the variation in performance management implementation.

Table 1

Interview Participants from Organisation 1 and Organisation 2

Organisation	Frontline employees	FLMs	Middle management	Senior management	HR	Interviewees	Total
CONS	3	15	6	1	2	27	57
SVC	20	5	3	2	0	30	

Figure 1: The FLM Support System



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Social Network and Innovation Ambidexterity: The Mediating Effect of Adaptive Capability

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Social Network and Innovation Ambidexterity: The Mediating Effect of Adaptive Capability

Abstract

The strategy of accumulating valuable assets led by the social network in organizational level is often not sufficient to facilitate ambidextrous innovation in the turbulent environment. Accordingly, innovation ambidexterity dependents will be depended upon the ability of a firm's employees to build its innovation capabilities and resources, the process of which is termed as adaptive capability in individual level. Hence, this paper examines the mediating effect of adaptive capability on the relationship between the extent of social networks and innovation ambidexterity. Using 428 survey data that collected from different manufacturing firms in Malaysia through PLS-SEM analysis, the results show that structural network, relational network, and cognitive network in individual-level are fully and positively mediated by adaptive capability, respectively.

Keywords: Social Networks, Adaptive Capability, innovation Ambidexterity

1. Introduction

In the last few years, innovation ambidexterity has been confirmed as a differentiated firm antecedent on firm performance in the literature (e.g., Fernhaber & Patel, 2012; Jansen, Van Den Bosch, & Volberda, 2005; Papachroni & Heracleous, & Paroutis, 2016). Innovation ambidexterity refers to the firm's ability to capture both exploring new knowledge and resources for radical innovation and exploiting the existing knowledge and resources for incremental innovation (e.g., Gibson & Birkinshaw, 2004; He & Wong, 2004). Despite the extensive literature in evaluating the linkage between organizational ambidexterity and firm performance, recent literature still call for further research on its antecedents (e.g., Asif, 2017; Koryak, Lockett, Hayton, Nicolaou, & Mole, 2018; Reilly & Tushman, 2013). Due to the unclear nature of organizational ambidexterity, further research is called to study the impact of social network on the organizational ambidexterity (Heavey, Simsek, & Fox, 2015; Simsek, 2009). From the extension of this argument, some authors call for further research to investigate how social networks influence innovation ambidexterity (e.g., Jossierand, Scmitt, & Borzillo, 2017; Junni, Sarala, Tarba, Liu, & Cooper, 2015), especially from individual level (Gibson & Birkinshaw, 2004; Rogan & Mors, 2014). Very few studies in the extent literature provide a very comprehensive in evaluating the impacts of various dimensions of social networks on ambidexterity. Furthermore, because of the existing literature provide inconclusive and controversy findings based on a particular dimension of social networks in which Heavey, Simsek, & Fox (2015) conclusion that there is a positive relationship between the finding from the Atuahene-Gima & Murray (2007) indicates that there is a

negative relationship between social networks and ambidexterity. In order to resolve this research issues, adaptive capability is introduced to a key factor to interpret the relationship between the social networks and ambidexterity. Innovation ambidexterity is difficult to be achieved in practice, it requires “different resources and skills, as well as it may be supported through different management control mechanisms” (e.g., Simons, 2010; Gschwantner & Hiebl, 2016, p. 375). This study would like to argue that ambidextrous innovation not only requires the resource residing in and available from social networks but also need the valuable knowledge, skills, and abilities of individual actors (i.e. adaptive capability).

The social network viewpoint has been increasingly adopted in the strategy management research, as it is a critical determinant in determining the outcomes of the firm (Nahapiet & Ghoshal, 1998). Social network refers to the actual and potential resources that generated from the network of relationships through an individual or social unit (Nahapiet & Ghoshal, 1998). Prior research illustrates that how social network can motivate the actors to seek for new opportunities and acquire complementary resources (Gulati, Nohria, & Zaheer, 2000), as well as encourage the attainment of resources and knowledge-based capabilities (Rowley, Behrens, & Krackhardt, 2000) through an individual or social unit (Nahapiet & Ghoshal, 2000). Hence, resource based view advocators argue that the effect of social network plays important role in creation of knowledge and innovation (e.g., Moran, 2005; Tsai & Ghoshal, 1998). Prior researches show that the networks of organizational managers within the organization does influence the capacities of managers in the balancing the efforts of exploring and exploiting innovation (Rogan & Mors, 2014). Although a large body of researches focused on interfirm networks (e.g., Im & Rai, 2008; Lavie & Rosenkopf, 2006; Tiwana, 2008), the implication of managerial networks for ambidexterity still remain underexplored, especially from individual level perceptible (e.g., Rogan & Mors, 2014). It is critical to focus the study at the managerial actors or “ambidextrous managers” because they have the ability to reallocate resources to enable the organization to exercise exploratory and exploitative activities simultaneously (O’Reilly & Tushman, 2004, p.81).

Moreover, Turner, Swart, & Maylor (2013) state that social network is an important organizational assets can provide valuable insight into micro-mechanisms process to enhance ambidextrous innovation, but it has not yet been explored. Most of the extent literature in related to the social networks primarily focusing on organizational level or business unit level (e.g., Tsai, 2001; Collins & Cleark, 2003) to explain organizational outcomes. In addition, the evidence shows that network theory captures individual networks behaviour that shaping individual actions (Burt, 1992), because of the individuals are deemed as the organizational actors who involve in network behaviors (Rogan & Mors, 2014). However, the other capabilities such as adaptive capacity are required to be present in the innovation ambidexterity (Lin, McDonough III, Lin, & Lin, 2013; Simsek, Heavey, Veiga, & Souder, 2009). The adaptive capacity as a micro mechanism in explaining the relationship between social network and innovation ambidexterity. Adaptive capacity refers to the ability of individual to reconfigure resources and coordinate processes to achieve market opportunities and innovation practices (Akgün, Keskin, & Byrne, 2012; Gibson & Birkinshaw, 2004 ; Oktemgil & Greenley, 1997). The concept of adaptive capability can be applied at micro level (Oktemgil & Greenley, 1997) even though it is normally applied at the organizational level such as market segmentation (e.g., Ansoff, 1965). The social networks that created by the firm's actors may enable the firm's actors to capture new information and resources that favouring for the development of adaptive capabilities. Hence, social networks generate certain degree of mechanism to process the new resources and knowledge for adaptive capabilities, in which the capabilities help to facilitate new innovation activities or new product practices (Zahra & George, 2002). Exploration and exploitation innovation are relied on the heart of firm's or individual's adaptive capabilities as it generates the internal variety and entails new information and knowledge (e.g., March, 1991; McGrath, 2001). Thus, this research argues that how does the adaptive capability pathway support the linkages between different dimensions of social network and innovation ambidexterity.

The remainder of this research is presented as follows. The following part shows the theoretical background and hypothesis development pertaining to this research. Subsequently, the research

methods will be articulated in methods section. Lastly, this study will end with the findings discussion, main conclusions, and future research suggestions.

2.0 Theory and hypothesis development

According to the ambidexterity literature, organizational ambidexterity consists of sequential, structural, contextual and leadership ambidexterity (e.g., Patel, Messersmith, & Lepak, 2013; Reilly & Tushman, 2013; Raisch & Birkinshaw, 2008). This study focuses on structural ambidexterity (Simsek, 2009) to investigate the impact of social networks and adaptive capability on innovation ambidexterity. Ambidexterity traditionally refers to the ability to do things with two hands simultaneously (e.g., He & Wong, 2004; Simsek, 2009). Interestingly, ambidexterity refers to the abilities of an organization enable to manage the exploratory practices that leading to radical innovation and at the same time engaging in exploitative practises leading to incremental innovation (Gibson & Birkinshaw, 2004; He & Wong, 2004). It is difficult for the firm to achieve innovation ambidexterity because the exploration innovation and exploitation innovation are competing for scarce inputs with various requirements of resources and capabilities (March, 1991). Thus, innovation ambidexterity can be considered as the high-order capabilities.

According to resource-based theory (Barney, 1991), social networks have been considered as the well-known resources providers. Social networks refers to “the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit” (Nahapiet & Ghoshal, 1998, p.243). Social networks consists of three different sub-dimensions that includes structural network, relational network, and cognitive network. Structural network refers to the actors enable to capture their network relationships engage in the social interaction and their social system as well as the whole network relationships (Nahapiet & Ghoshal, 1998; Rodrigo-Alarcón, Carcia-Villaverde, Ruiz-Ortega, & Parra-Requena, 2017). Relational network refers to the actor’s belief that the trust and trustworthiness can be adapted to each other within their relationship (Nahapiet & Ghoshal, 1998; Terry Kim, Lee, Paek, & Lee, 2013). Cognitive network refers to the resources can be created common understanding, shared representation, mission, vision of collective goal and meaning among their relationships system (Nahapiet & Ghoshal, 1998; Terry Kim

et al., 2013). Moreover, based on dynamic capability theory (Teece, Pisano, & Shuen, 1997), adaptive capability as one of important part of dynamic capability. It refers to the ability of individual to reconfigure resources and coordinate processes in order to provide high level of emerging market opportunities and innovation practices (Akgün et al., 2012; Gibson & Birkinshaw, 2004 ; Oktemgil & Greenley, 1997).

According to resource-based view and dynamic capabilities perceptive, the conceptual model has been created as shown in Figure 1. In this conceptual model, we intend to evaluate the relationships of structural network, relational network, and cognitive network with innovation ambidexterity are mediated by adaptive capability.

 Insert Figure 1 About here

2.1 Three dimensions of social network and innovation ambidexterity

Based on resource-based view, social network is one of bundle of resources creators that created for innovation ambidexterity. As part of the dimensions of social network, the structural network, relational network, and cognitive network contribute significantly to the innovation ambidexterity based on a few reasons.

First, density network and structure hole are important features of structural network. Density network (Walter, Lechner, & Kellermanns, 2007) enables the actors to pursuit the quick flows of information and knowledge, as well as identify new opportunities to balance exploitation and exploration activities (e.g., Lazer & Friedman, 2007). While structural hole enables the actors to control the speed and timeliness about the latest R & D development, know-how, and skills information (for local research) from other disconnected actors (e.g., Burt, 2009; Guan & Liu, 2016). The local research, speed, and timeliness are concerned important factors for exploitative innovation. Moreover, structural hole among actors create heterogeneous information, autonomy, and risk taking advantage in innovation processes, which also benefits exploratory innovation.

Second, in related to the relational network, several studies indicate that relational network is positively associated with innovation activities (e.g., Moran, 2005; Tsai & Ghoshal., 1998). Relational

trust is highly embedded in the relational network. Tsai & Ghoshal (1998) argue that relational trust is useful for acquiring and applying innovation resource from uncertain context and unknown relationships. Relational trust enhances the speed of transferring new resource transferring with little time, monitoring cost, and energy which enable the firm to promote incremental and radical innovative activities (e.g., Akçomak & Ter Weel, 2009; Kaasa, 2009). Furthermore, relational trust provide a gateway for the actors with new information and novel entrepreneurial opportunities (Kwon & Arenius, 2010) to promote exploratory innovation. It also favour in the experiential refinement and application of current resources (Baum, Li, & Usher, 2000) to facilitate exploitative innovation.

Third, Tsai & Ghoshal (1998) argue that the individual's shared vision and value are embedded in the cognitive network. Based on shared common value and goal, the actors would able to command their expertise based on the existing rule, routines, and knowledge in innovation practices (e.g., Li & Chang, 2016; Wasko & Faraj, 2005). The application of current rules, routines, and knowledge are belonging to local search in which show the actors to engage in exploitative innovation. In addition, without sharing same ambitions and vision among peer actors, the actors themselves cannot have great chances to capture latest trend, unexplored opportunities, and share new problem-solving methods (e.g., Carmeli, Gelbard, Reiter-Palmon, 2013). The features of shared common value and vision enable to help individuals to reduce risky and uncertain activities in exploratory innovation. Overall, based on resources-based view, we suggest:

Hypothesis 1: Structural network is positively related to innovation ambidexterity

Hypothesis 2: Relational network is positively related to innovation ambidexterity

Hypothesis 3: Cognitive network is positively related to innovation ambidexterity

2.2 Social networks, adaptive capability, and innovation ambidexterity

Research-based view suggests that the firm's competitive advantage is originally embedded in the valuable and rare resources (Barney, 1991). However, Eisenhardt & Martin (2000) argue that the RBV theory can be applied to explain how an organization can do better than others, but it may not suitable in explaining how a firm to achieve its competitive advantage under turbulent environment. Hence, the resource-based view has been extended and incorporated the perceptive of the dynamic capability. Dynamic capability refers to “integrate, build, and reconfigure internal and external

competencies to address rapidly changing environments” (Teece et al., 1997). In consistent with prior study, this research adopts the adaptive capability which is one of the components of dynamic capability, especially in a turbulent environment. Adaptive capability captures the essence of dynamic capability, as it refers to the firm’s or actor’s ability to reconfigure resources and coordinate processes to achieve competitive advantage under the changing environment (e.g., Akgün, Keskin, & Byrne, 2012; Gibson & Birkinshaw, 2004; Oktemgil & Greenley, 1997). This study argues that resource-based view (e.g., structure network, relational network, and cognitive network) affects the dynamic capability (e.g., adaptive capability) and subsequently leading to innovation outcome (innovation ambidexterity).

As one part of structure networks, density network enables the actors to refresh their new information and knowledge, as well as to identify new opportunities through their social interaction (e.g., Hanse, 1999). The social interaction provides the actor with great opportunities to enhance collective coordination practices in order to meet the environment changes with the identical expectation (Walter, Lechner, & Kellermanns, 2007). Additionally, density network arms with structural-hole facilitate the individual actors in sharing their diverse and timely knowledge among the actors (e.g., Lu & Ma, 2008), in order to promote work efficiency and reduce certain level of uncertainty (e.g., Uzzi, 1999). Moreover, the relational trust helps the actors in building a strong that relationship which capacitate them to share information about customer preferences (e.g., Slater & Narver, 1998), competitor-related information (e.g., Han, Kim, & Srivastava, 1998), and latest technologies knowledge to market change (e.g., Gatignon & Xuereb, 1997). With the information, the individual actors are able to configure or reconfigure their resources to meet competitive environment through adaptive capability (e.g., Zhou & Li, 2010). Furthermore, in aspects of shared value and vision in the cognitive network, the information shared among the individual actors also promote the relevant tacit knowledge and culture that can be shared among the actors, then facilitate the resources of observation and configurations speed (e.g., Tsai & Ghoshal, 1998).

In addition, Wei & Lau (2010) state that adaptive capability is highly embedded in the skills of problem-solving and quick responses to market environment. Adaptive capability possesses three main characteristics namely the technological, external market, and internal organizational aspects

(Tuominen, Rajala, & Moller, 2004). An individual actor who possess the technological adaptive capability is able to achieve new technological complementarities and discovers the potential risk of product development, as well as monitors the existing technological change and improves the current products and services quality (e.g., Wong, Shaw, & Sher, 1998). Furthermore, with the external market adaptive capability, an individual actor is able to learn and update about customer preference information, competitor's information, and marketing resources allocation within the limited time, in order to meet changing environment (e.g., Tuominen et al., 2004). Moreover, the management system of adaptive capability provides the individual actor with the abilities to evaluate current market state, response to the changing environment in a speedy manner, as well as to update the traditional model and practices (Gibson & Birkinshaw, 2004). Hence, the technological, external market, and management aspects of adaptive are more likely to promote the current routines, resources, and experiential refinement for exploratory innovation, at same time, it also encourages to take heterogeneous information, challenge, and risk for exploitative innovation. Therefore, the three dimensions of social network engage in a continuous resource configuration process to promote the flexibility and efficiency of the actor's new information. The flexibility and efficiency of the individual actor's information are the sources of adaptive capability and innovation ambidexterity, as discussed above. Hence, in the line with the existing literature, this research suggests that adaptive capability is driven by the three dimensions of social networks, namely, structural network, relationsho network, and cognitive network in order to enhance innovation ambidexterity. Thus, we propose that:

Hypothesis 4: Adaptive capability mediates the relationship between structural network and innovation ambidexterity

Hypothesis 5: Adaptive capability mediates the relationship between relational network and innovation ambidexterity

Hypothesis 6: Adaptive capability mediates the relationship between cognitive network and innovation ambidexterity

3.0 Methods

3.1 Sample and data collection

The purpose of this study is to investigate the mediating effects of adaptive capability between the extents of social network and innovation ambidexterity. To fulfil the purpose of this study, an empirical

analysis on manufacturing firms in Malaysia is conducted. A self-administrated questionnaire-based survey was utilised to collect data from the target respondents who are employees of manufacturing firms in Malaysia. Before finishing the questionnaire, pre-test and consultation of two experts in the aspect of new service development have been undertaken to eliminate potential problems with questionnaire design, and the comprehensiveness of the statements and instructions (Gerbing & Anderson, 1988). A total of 500 questionnaire were distributed to the different departments includes marketing, product development, and R&D management. The selected departments for this research possess the resources and capabilities for social networks and adaptive capability. All the respondents are on a voluntarily basis and they are aware that no reward were provided upon the completion of the survey. In the end, there are 428 usable copies and data were then keyed-into the Statistical Package for Social Science (SPSS) for subsequent analyses using Smart PLS technique.

3.2 Measures

To measure the key variables of this study, the measurements were adopted from the previous literature to ensure the reliability and validity of the measurement. As shown in Table 1, this study mainly applies the seven-point Likert-type scale (ranging from 1= strongly disagree to 7 = strongly agree) for all constructs.

 Insert Table 1 About here

Innovation ambidexterity. To assess new service development ($\alpha= 0.810$), this study adapts the six - items scale from the work of Gibson & Birkinshaw (2004) and He & Wong (2004).

Adaptive capability. This study adopts the unidimensional scale of three items from Akgün et al., (2012) and Oktemgil & Greenley (1997) to test adaptive capability ($\alpha= 0.940$).

Social network. The three dimensions of social network (e.g., structural network, relational network, and cognitive network) were measured by 9 items. The three items that measure structural network ($\alpha= 0.723$) are adopted from Rodrigó-Alarcon et al., (2017) and the three items measuring relational

network ($\alpha= 0.891$) are adopted from Terry Kim et al., (2013), as well as three items used to measure cognitive network ($\alpha= 0.909$) from Terry Kim et al., (2013).

3.3 Reliability and validity

To assess the measurement model of this research, this study examined the reliability, internal construct reliability, convergent validity, and discriminant validity. As shown in Table 1, the Cronbach’s alphas for the items used in this research possess internal consistency where the Cronbach’s alpha is ranging from 0.723 to 0.930 which achieve the minimum threshold value of 0.70 for Cronbach’s alpha (Nunnally, 1978). Moreover, the composite reliability (CR) values of the items used in this study are ranging from 0.844 to 0.962 where this indicates the items possess internal consistency by achieving the minimum threshold value of 0.70 for CR (Fornell and Larcker, 1981). In addition, the constructs of this research demonstrate adequate convergent validity with factor loadings value of more than 0.70, except for one construct (Innovation ambidexterity = 0.575). Lin, Su, and Higgins (2016) posit that convergent validity can be established when the factor loadings value of all constructs are higher than 0.40. The values of average variance extracted (AVE) of the constructs used in this research achieve the minimum threshold value of 0.50 for AVE (Fornell & Larcker, 1981; Hair et al., 2014) as the values of AVE are ranging between 0.513 and 0.893.

To assess the discriminant validity, the Fornell-Larcker criterion and the heterotrait-monotrait (HTMT) are applied. Specifically, as shown in Table 2, the cross loading results revealed that the loadings of each item are the highest for their designed construct greater to other constructs than to its constructs. Moreover, as can be seen from Table 2, in terms of Fornell-Larcker criterion, it is found that the square root of AVE of each variables (Diagonal bolded) are greater than its correlations with one another construct, this results were provided to support for the discriminant validity of the constructs (Fornell & Larcker, 1981). In addition, as shown in Table 2 (Highlight area), the results indicate that all the values of HTMT are below the threshold of 0.85 (Henseler et al., 2015). Thus, this concludes that internal consistency, convergent validity, and discriminant validity are established in this research.

3.4 Common method bias

The assessment of common method variance is required as this research adopted the self-administered questionnaire-based survey where the measurement model of this research consists of 18 items. In assessing the common method variance of this research, the statistical software, PLS-SEM is used that suggested by Liang et al.'s (2007). As illustrated in Table 3, the results generated by PLS-SEM show that 0.722 is the average of substantive variance, whereas 0.008 is the average method variance. Interestingly, the majority of the factor loadings on the common factor are negative. The common method bias is not likely to be an issue in this study based on the results generated by PLS-SEM as mentioned above.

 Insert Table 1 About here

 Insert Table 2 About here

 Insert Table 3 About here

3.5 Results

Prior to assessing the structural model, it is important to ensure that there is no collinearity issue in the inner model of this research. The Variance Inflation Factor (VIF) is used to assess collinearity in this research. The VIF values of each of the constructs in this research are ranging from 1.022 (Relational network) to 1.622 (Adaptive capability), therefore collinearity is not a concern where the VIF values of each of the constructs are below 5 (Hair et al., 2016). Second, the assessment of coefficient of determination (R^2) and the predictive relevance (Q^2) of exogenous variable on endogenous variable in this research. In the aspect of R^2 , Sarstedt et al., (2014) explain the R^2 values of 0.75, 0.50, and 0.25 as substantial, moderate, and weak, respectively. In Figure 2, the R^2 values for adaptive capability is 0.314. This suggests that structural network, relational network, and cognitive network explain 31.4% of variances in adaptive capability. Similarly, the R^2 values for innovation ambidexterity is 0.315, suggesting that adaptive capability. Third, running the blindfolding procedure, the assessment of Stone-Geisser Q^2 statistics values of endogenous variables on endogenous variable. The values of the Stone-Geisser Q^2 value of 0.268 for adaptive capability, which is large than 0, suggests that structural network, relational network, and cognitive network possess predictive capacity over adaptive capability (Hair et al., 2016). Similarly, the Q^2 value of 0.121 for innovation ambidexterity, which is

larger than 0, suggests that adaptive capability possesses predictive capacity over innovation ambidexterity.

Fourth, the results of path co-efficient assessment using 5000 sub-sample bootstrapping procedure for the hypothesised relationships. Hypothesis 1, hypothesis 2, and hypothesis 3 predict that the relationships of structural network, relational network, and cognitive network with innovation ambidexterity, respectively. In Table 4 and Figure 2, the relationship between structural network ($\beta=0.304, p < 0.001, f^2 = 0.097$), relational network ($\beta=0.096, p < 0.1, f^2 = 0.013$), and cognitive network ($\beta=0.183, p < 0.01, f^2 = 0.030$) are positively related with innovation ambidexterity. Thus, hypothesis 1, hypothesis 2, and hypothesis 3 are supported. Moreover, Hypothesis 4, hypothesis 5, and hypothesis 6 predict that the relationships of structure network, relational network, and cognitive network with innovation ambidexterity are mediated by adaptive capability. In table 4 and Figure 2, the results indicate that the structure network ($\beta=0.304, p < 0.001, f^2 = 0.097$), relational network ($\beta=0.096, p < 0.1, f^2 = 0.013$), cognitive network ($\beta=0.183, p < 0.30, f^2 = 0.030$) are positively associated with innovation ambidexterity. Adaptive capability ($\beta=0.185, p < 0.01, f^2 = 0.034$) is significantly associated with innovation ambidexterity. As shown in Table 5, the indirect effects of structural network ($\beta=0.080, p < 0.01, T=3.124$), relational network ($\beta=0.018, p < 0.1, T=1.803$), cognitive network ($\beta=0.033, p < 0.1, T=2.028$) on innovation ambidexterity through adaptive capability are significant. According to Hair et al., (2016), the mediating effect may only be supported when there is no zero between lower limit (LL) and Upper Limit (UL) of confidence interval. As shown in Table 5, the values between any of the confidence intervals of each of the relationships have a positive sign with no zero in between the LL and UL. Hence, the result shows that adaptive capability fully mediates the relationships of structure network, relational network, and cognitive network with innovation ambidexterity, respectively. Thus, hypothesis 4, hypothesis 5, and hypothesis 6 are supported empirically.

 Insert Figure 2 About here

 Insert Table 4 About here

 Insert Table 5 About here

4.0 Discussion and conclusion

Majority of the studies conducted on ambidexterity focus on the effects of ambidexterity on firm performance through several contingent models. On the top of that, in response to the call for further research on innovation ambidexterity at the individual level (e.g., Gibson & Birkinshaw, 2004; Rogan & Mors, 2014) of social network sub-dimensions (e.g., Josserand et al., 2017; Junni et al., 2015) through adaptive capability, this research examines the mediation effect of adaptive capability between structure network, relational network, and cognitive network on innovation ambidexterity. This research aims to provide a better understanding of the social network with controversial effect on innovation ambidexterity.

The results of this research demonstrate that structural network, relational network, and cognitive network are positively associated with innovation ambidexterity, respectively. This shows that innovation ambidexterity can be achieved when the individual actors of a firm possess a level of strong density network / structural-hole (structural network), relational trust (relational network), and shared value / vision (cognitive network). Moreover, this research discovers that adaptive capability fully mediates the relationships of that structural network, relational network, and cognitive network with innovation ambidexterity, respectively. Despite the contribution of empirical evidence, the mediation effect of adaptive capability shows that individual actors can transfer their valuable and rare resources and information into innovation ambidexterity activities through two means.

The first one is that the individual actors can directly transfer their resource (e.g., customer information) into the innovation ambidexterity through their social network features. The second way is that the resources from social networks can be reallocated and reconfigured through individual's adaptive capability, which in turn to facilitate innovation ambidexterity. Thus, the results indicate that the individual level of structural network, relational network, and cognitive network together with adaptive captive are the means to develop innovation ambidexterity. The results are in line with previous studies on network perceptiveness on individual level of ambidexterity (e.g., Rogan & Mors, 2014). As such, managers should pay attention on those variables including structural network, relational network, and cognitive network as well as adaptive capability in developing innovation ambidexterity for their firm with the various paths.

5.0 Limitations and future research

There are some limitations in this research. First, the study adapts the cross-sectional design to examine the relationships of three dimensions of social network and adaptive capability on innovation ambidexterity. Longitudinal study should be applied to put more focus on the antecedents and effects of innovation ambidexterity, and to take into account the cycle of innovation ambidexterity development. Second, this study focused on a limited sample of economic sectors (manufacturing industry) within a limited geographic territory (Malaysia). It is suggested that this research can be replicated in different sectors of economy (i.e. service or financial industries) and tested on large samples, which allow further validation and refinement of the conceptual model and the measurement instrument. Lately, this research only focuses on three dimensions of social networks on innovation ambidexterity through social network. Current study focuses on three dimensions of social networks on innovation ambidexterity. Further research may investigate: how does the top management team behaviour impact on ambidexterity through social networks (Yitzhack Halevi, Carmeli, & Brueller, 2015)?

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Table 1

Measurement of constructs validity and reliability

Constructs	S. F.		C.R	AVE
	L	a		
Innovation ambidexterity		0.810	0.863	0.513
To what extent does each of the following statements describe your firm is able to...				
1. Improve the efficiency of products and services.	0.722			
2. Facilitate the existing products and services quality.	0.763			
3. Recombine the existing knowledge and skills for the existing market.	0.739			
4. Offer novel ideas and solutions to solve the complicated issues.	0.720			
5. Search for new technologies and skills for business.	0.762			
6. Experience with new and creative approaches for innovative activities.	0.575			
Adaptive capacity		0.940	0.962	0.893
To what extent does each of the following statements describe your employees are able to...				
1. Disseminate new information and knowledge R & D activities.	0.929			
2. Allocate the main resource and information for innovation activities.	0.959			
3. Adapt new market techniques and skills.	0.947			
Structural network		0.723	0.844	0.644
To what extent does each of the following statements describe your employees are able to...				
1. Exchange the resources and information to each other.	0.740			
2. Remain frequency interaction relationship.	0.856			
3. Acquire information and advice for decision-making.	0.808			
Relational network		0.891	0.932	0.821
To what extent does each of the following statements describe your employees are able to...				
1. Trust each other	0.901			
2. Develop close relationships relied on trust with other employees.	0.921			
3. Exchange their own ideas and mind-set with others.	0.897			
Cognitive network		0.909	0.943	0.846
To what extent does each of the following statements describe your employees are able to...				
1. Pursuit their collective missions and targets for the innovative activities.	0.944			
2. Agree on what is important for their work and how to make the relationship works.	0.885			
3. Share the similar ambitions and visions with other college.	0.929			

Note: S.F.L= Standardized Factor loading; C.R. -Composite reliability; a= Cronbach's a; AVE= Average variance extracted

Table 2 The Fornell-Larcker Criterion and Heterotrait-Monotrait Ratio

	Mean	St. Dev	1	2	3	4	5
1. Innovation ambidexterity	3.58	0.77	0.717	0.463***	0.607***	0.173***	0.497
2. Adaptive capacity	3.40	0.74	0.416	0.945	0.476***	0.148**	0.571***
3. Structural network	3.60	0.76	0.471	0.399	0.802	0.045*	0.625***
4. Relational network	3.57	0.87	0.141	0.137	0.015	0.906	0.09*
5. Cognitive network			0.442	0.530	0.505	0.080	0.920

Significant level: *p < 0.10; **p < 0.05; ***p < 0.01; ****p < 0.001

Table 10 Common method bias analysis

Construct	Indicator	Substantive factor loading(R ₁)	R ₁ ²	Method factor loading(R ₂)	R ₂ ²
	SC1	0.826***	0.682	-0.068	0.005
	SC2	0.863***	0.744	-0.027	0.007
	SC3	0.714***	0.510	0.010	0.001
	RC1	0.899***	0.808	-0.003	0.000
	RC2	0.923***	0.852	-0.008	0.000
	RC3	0.897***	0.805	0.011	0.001
	CC1	0.902***	0.814	0.047	0.002
	CC2	0.940***	0.884	-0.054	0.003
	CC3	0.917***	0.841	0.008	0.000
	AC1	0.915***	0.837	-0.029	0.001
	AC2	0.955***	0.912	0.051	0.003
	AC3	0.964**	0.930	-0.023	0.005
	OA1	0.593***	0.352	0.231*	0.053
	OA2	0.725***	0.526	0.017	0.000
	OA3	0.673***	0.567	0.057	0.003
	OA4	0.819***	0.671	-0.097	0.009
	OA5	0.771***	0.594	0.003	0.000
	OA6	0.813***	0.661	-0.236*	0.056
Average		0.839	0.722	0.006	0.008

Significant level: *p < 0.10; **p < 0.05; ***p < 0.01; ****p < 0.001

Table 4 Measurement Coefficient of Constructs

path	Path Coefficient	effect size(f2)
AC to IA	0.185**	0.034
CN to AC	0.431***	0.200
CN to IA	0.183**	0.030
RN to AC	0.099*	0.014
RN to IA	0.096*	0.013
SN to AC	0.179**	0.035
SN to IA	0.304***	0.097

Significant level: *p < 0.10; **p < 0.05; ***p < 0.01; ****p < 0.001, IA=Innovation ambidexterity, AC=Adaptive capacity, RN=Relational network, SN=Structural network, CN=Cognitive network

Table 5 Test of mediation by bootstrapping approach

Model		Bias corrected 95% Confidence interval		
Indirect effect		lower	upper	
Path	Coefficient	t-value		
CN to IA	0.080**	3.124	0.031	0.132
RN to IA	0.018*	1.803	0.003	0.042
SN to IA	0.033*	2.028	0.008	0.071

IA=Innovation ambidexterity, AC=Adaptive capacity, RN=Relational network, SN=Structural network, CN=Cognitive network, Bootstrapping 95% confidence interval based on 5000 samples, significant level: †p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001.

Figure 1 Conceptual Model

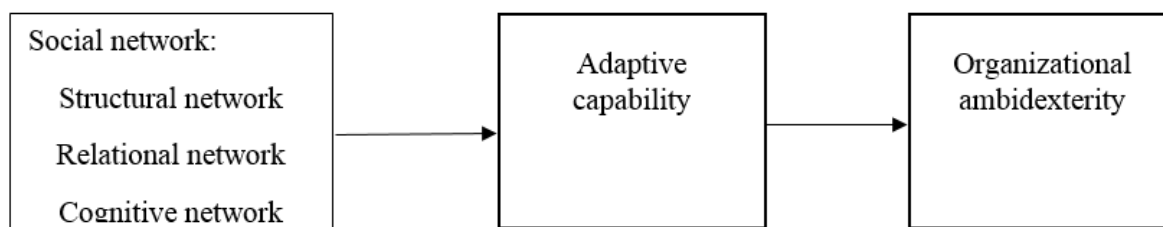
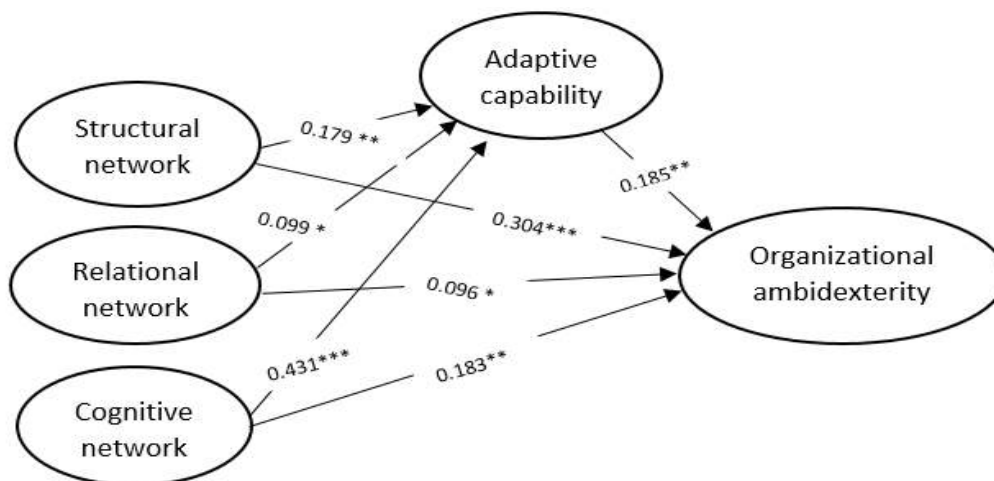


Figure 2 Results of PLS-SEM analysis



Significant level: †p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001.

10. Organisational Behaviour Delivered Paper Session

Why do powerful leaders feel less lonely?

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10. Organisational Behaviour Delivered Paper Session

Why do powerful leaders feel less lonely?

ABSTRACT: *Loneliness is an important well-being concern. However, the understanding of why some leaders experience loneliness is very limited. Drawing on social penetration theory (Altman & Taylor, 1973) and the power literature, we hypothesised that leader self-disclosure to superiors and followers would mediate the negative relationship between feelings of power and leader loneliness. Across three waves of surveys with 196 managers, we found support for the mediating role of self-disclosure to superiors, but not to followers. We further showed the positive associations of leader loneliness with emotional exhaustion, ego depletion, and sleep problems. This study implies that top leaders may experience loneliness because self-disclosure to superiors is less available. It also adds leader loneliness to the under-developed literature of leader well-being.*

Keywords: emotions, interpersonal behaviour, organisational structure, stress and stress management

Loneliness, defined as the subjective feeling of social disconnectedness (Cacioppo, Cacioppo, & Boomsma, 2014), is an important well-being issue at work. The growing literature theorised that workplace loneliness has two components, namely emotional deprivation and a lack of social companionship (S. L. Wright, Burt, & Strongman, 2006). Previous work has shown that employees feeling lonely at work perform worse, are less committed to the organisation, and have higher risks of burnout and depression (Lindorff, 2001; Ozcelik & Barsade, in press). This phenomenon among leaders has attracted attention in both academic and business communities (Larcker, 2013; Rokach, 2014). A recent study showed that leader loneliness was quite prevalent, as half of the CEO respondents reported feeling lonely at work (Saporito, 2012).

Despite the growing attention in practice (e.g., Johnson, 2014; Viva, 2011), the unique processes underlying the emergence of leader loneliness are still poorly understood. Previous studies have focussed on structural factors in organisations, such as hierarchy and managerial status. Their results showed that leaders who attained higher positions should experience lower levels of loneliness (Bell, Roloff, Van Camp, & Karol, 1990; Reinking & Bell, 1991; S. L. Wright, 2012). Empirical evidence from experimental and survey studies also found that individuals experiencing power would feel less lonely (Waytz, Chou, Magee, & Galinsky, 2015). It is possible that occupying higher

positions provides more resources to cope with social disconnectedness. However, these studies are less relevant to explain why, given the same positions, some leaders feel lonely while others do not.

A mechanism that is readily available to more powerful individuals and that can counteract feelings of loneliness is self-disclosure. Self-disclosure is the sharing of sensitive information to another person (Schug, Yuki, & Maddux, 2010). It is instrumental to relationship quality, trust, closeness, and satisfaction of the belonging needs (Dumas, Phillips, & Rothbard, 2013; C. N. Wright, Holloway, & Roloff, 2007). Leaders who more often share, for example, their weaknesses, may build more transparent relationships (Diddams & Chang, 2012). Meanwhile, experiencing power is disinhibiting (Guinote, 2017; Lammers, Galinsky, Dubois, & Rucker, 2015). Powerful leaders may disregard situational constraints and hence, are motivated to open up themselves to their colleagues.

In this study, we focussed on mid-level managers in the organisational hierarchy, because they could disclose themselves to either their own superiors or to their followers. We also tried to establish the relationship between leader loneliness and well-being concerns that affect the daily functioning of leaders. Our mediating model was tested with three waves of surveys in a group of middle-managers. Overall, this study presents a new theoretical lens to approach leader loneliness to the under-developed literature of leader well-being (Barling & Cloutier, 2017).

Loneliness and Leadership

Loneliness is the unpleasant, subjective feeling of social disconnectedness (Cacioppo et al., 2014). It is different from actual social isolation (sometimes discussed as social exclusion or ostracism), which means one can still feel lonely without being social excluded, and *vice versa* (de Jong Gierveld, van Tilburg, & Dykstra, 2018). In work settings, loneliness is conceptualised to have two components, namely (a) emotional deprivation, i.e., a sense of emptiness, and (b) a lack of social companionship, i.e., perception of few social ties (S. L. Wright et al., 2006). Workplace loneliness is related to negative work outcomes, such as poor job performance, low organisational commitment, poor exchange relationships with colleagues, and interpersonally deviant behaviour (Lam & Lau, 2012; Ozelik & Barsade, in press; Thau, Aquino, & Poortvliet, 2007).

In the leadership context, loneliness has received increasing attention in both science and practice. The topic has been described and featured in practitioner-oriented journals such as *Harvard*

Business Review (Gumpert & Boyd, 1984; Saporito, 2012), *Insights by Stanford Business* (Larcker, 2013) and *Ivey Business Journals* (Adamson & Axmith, 2003). Loneliness seems a likely reality among leaders, but the academic understanding of the phenomenon is still limited. There are three major issues in the literature. First, there is a lack of an empirically tested theory. To date, only one psychodynamics theory is available to explain the emergence of leader loneliness (Kets de Vries, 1989). The theory was difficult to test or to guide empirical research. There are a few qualitative studies based in the education settings, offering insights to the triggers of loneliness among school principals, such as time demands and the “gate-keeping” accountability in the role (Howard & Mallory, 2008; Kelchtermans, Piot, & Ballet, 2011). Nevertheless, these studies do not serve the primary goal to build a generalisable theory. Second, little is known about the mechanisms underlying leader loneliness. Instead, existing empirical studies focussed on comparing loneliness across hierarchy and managerial status (Bell et al., 1990; Reinking & Bell, 1991; S. L. Wright, 2012). These studies implied that leaders should not feel lonelier than followers, but could not explain why some leaders experience loneliness while others do not.

Moreover, relevant findings from the general loneliness literature have not been integrated to examine leader loneliness. For example, leader loneliness is still often conceptualised and operationalised as a one-dimensional feeling of social disconnectedness (Waytz et al., 2015; S. L. Wright, 2012), but loneliness is a more nuanced experience. The process involved in leader-follower relationship development has not received any attention either. In particular, self-disclosure is an important behaviour to develop and maintain relationships at work (Boyd & Taylor, 1998). In view of the above research gaps, this study contributes to the existing insufficient literature by exploring leader self-disclosure as the mechanism of how power, as experienced by some leaders (Vince & Mazen, 2014), would affect the two dimensions of leader loneliness (S. L. Wright et al., 2006).

Leader Self-disclosure

Self-disclosure is more than just sharing. It is the sharing of personal, sensitive information to others (Schug et al., 2010). It is an important relationship-building strategy recognised in both the literature of loneliness and leadership. According to social penetration theory (Altman & Taylor, 1973), relationships are developed and maintained through the exchange of intimacy and mutual

disclosure. The personal information shared may vary in breadth (topic areas) and depth (Utz, 2015). In general, positive outcomes of self-disclosure include lower levels of loneliness, improved relationship quality, and higher levels of relationship satisfaction and commitment (große Deters & Mehl, 2012; Phillips, Rothbard, & Dumas, 2009; Utz, 2015; Wei, Russell, & Zakalik, 2005; C. N. Wright et al., 2007). Similarly, the merits of self-disclosure are also recognised by some leadership scholars. Leaders who reveal personal information, especially about their limitations that are in line with the flawed human nature, are more likely to feel and be seen as authentic (Diddams & Chang, 2012; Hamman, 2013). In addition, self-disclosure helps leaders engage, inspire, and relate to their followers (Boyd & Taylor, 1998; Dumas & Sanchez-Burks, 2015). A study among small business owners found that loneliness stemmed from the inability to admit difficulties or show any sign of weakness at work (Gumpert & Boyd, 1984).

If self-disclosure is so beneficial, why do some leaders hesitate about it? There are two possible reasons. First, some leaders feel uncertain about their positions (Rast, Hogg, & Giessner, 2013). The position demands leaders to demonstrate emotional competence and regulate their emotional display in face of their colleagues (Cangemi, Burga, Lazarus, Miller, & Fitzgerald, 2008; Gardner, Fischer, & Hunt, 2009). Uncertain about meeting these demands, some leaders may develop superficial work relationships and are prone to loneliness. Second, leaders usually value information as an important job resource. Some leaders who engage in self-disclosure may feel they are losing power and status, especially when initially they are distant from their colleagues (Earle, Giuliano, & Archer, 1983; Phillips et al., 2009).

We posit that sense of power, as implied in leadership (Giessner & Schubert, 2007), affects the self-disclosing tendency among leaders. Sense of power is defined as “perception of one’s capacity to influence others” (Anderson, John, & Keltner, 2012). We focus on subjective power, instead of objective power (perceived control over valued resources; Lammers, Galinsky, Dubois, & Rucker, 2015), because it is more predictive of actual behaviour and subjective psychological experience, especially in interpersonal contexts (Hoogervorst, De Cremer, van Dijke, & Mayer, 2012). In the power literature, there is consistent support that experiencing power disinhibits individuals to pursue immediate goals (Lammers et al., 2015). Applying to leader-follower interactions, feeling powerful

helps self-expressions while being less attentive to the social constraints (Guinote, 2017). Therefore, leaders who feel more powerful are more likely to engage in self-disclosure.

In order to understand the importance of the disclosure target, we explored both the superiors and followers as the audience of leader self-disclosure. As disinhibited by sense of power, leaders may be more proactive to share with their superiors to seek instrumental and emotional support, especially when they see themselves similar to their superiors (Dumas et al., 2013). Meanwhile, powerful leaders may be less concerned about norms and expectations from followers and open up more easily when they feel the need for relational support (Lammers et al., 2015).

Hypothesis 1a: Self-disclosure to superiors partially mediates the relationship between power and leader loneliness. Specifically, power is positively related to self-disclosure to superiors, which then is negatively related to leader loneliness.

Hypothesis 1b: Self-disclosure to followers partially mediates the relationship between power and leader loneliness. Specifically, power is positively related to self-disclosure to followers, which then is negatively related to leader loneliness.

Based on the literature on power, we do not expect a full mediation of self-disclosure. Previous studies have shown a positive link between subjective power and various well-being outcomes. Elevated power is related to positive affect such as happiness and enthusiasm, while reduced power is related to negative affect, such as depressive mood, anxiety and fear (Lawler & Proell, 2009). It should be noted that this group of negative affect is common affective features of loneliness (Heinrich & Gullone, 2006). Experiencing power is also associated with higher levels of subjective well-being and job satisfaction, since power increases the sense of authenticity and agency (Kifer, Heller, Perunovic, & Galinsky, 2013; Wang, 2015). Finally, a recent article found a general negative association between trait power and loneliness power-unrelated relationships (Waytz et al., 2015). Using a series of surveys and experiments, the study showed that experiencing power can satisfy the need to belong, which is then related to lower levels of loneliness.

Hypothesis 1c: Subjective power is negatively related to leader loneliness.

Leader Loneliness and Leader Well-being

Due to its unpleasant nature, loneliness has been argued to be a well-being burden to leaders in academic essays (Cooper & Quick, 2003; Quick, Gavin, Cooper, Quick, & Gilbert, 2000). There is some anecdotal evidence that leaders who suffer from loneliness are more stressed and even commit suicide (Davies, 2016; Lindorff, 2001). Nevertheless, no empirical study has attempted to establish the link between leader loneliness and specific aspects of leader well-being. Responding to the recent call for research on leader well-being issues (Barling & Cloutier, 2017), we examined three well-being dimensions that affect daily functioning of leaders. First, emotional exhaustion, as a commonly used dimension of burnout, was chosen because loneliness is often seen as an interpersonal stressor (Lindorff, 2001; Maslach, Schaufeli, & Leiter, 2001). Second, ego depletion, the capacity to override and alter behaviour (Christian & Ellis, 2011), was selected for its connection with self-control, abusive supervision and decision making (Yam, Fehr, Keng-Highberger, Klotz, & Reynolds, 2016). Finally, we included the number of sleep problems as an indicator of the physical well-being, which predicts lower productivity (Kühnel, Bledow, & Feuerhahn, 2016). Based on the undermining, draining effects of loneliness, we proposed the following hypothesis:

Hypothesis 2: Leader loneliness is related to lower levels of leader well-being, as indicated by higher levels of ego depletion, emotional exhaustion, and more sleep problems.

Based on the above discussion together, we also test the following sequential mediation hypothesis as a corollary:

Hypothesis 3: Self-disclosure to superiors (H3a), self-disclosure to followers (H3b) and leader loneliness sequentially mediate the relationships between subjective power and leader well-being (i.e., subjective power → self-disclosure → leader loneliness → leader well-being).

Figure 1 is the conceptual framework that guided the study.

Insert Figure 1 about here

METHOD

Participants & Procedures

This study adopted a cross-lagged design with three waves of surveys. The time lag between surveys was two days, as a short time lag is sufficient to unfold the psychological processes over time in panel studies (Dormann & Griffin, 2015). Participants were recruited via Prolific Academic, an

online survey panel based in the United Kingdom. They received £4.75 for completing all surveys as a token of thanks. Participation was anonymous.

To explore the targets of leader self-disclosure, we recruited only middle managers for the current study. Middle managers could be vulnerable and lonely because they often have to tell different stories about their organisations to superiors, followers and themselves (Sims, 2003). Out of the initial pool of 332 middle managers, 231 of them completed all three surveys. Another 30 participants were excluded because they had part-time employments. Four participants were removed from analysis since they completed at least one survey too quickly; another one was removed since some responses were missing. The final sample size was 196, with an average age of 36.64 (SD = 8.74) and 53% of them were female. The average perceived hierarchy of the managers on a ten-point scale was 6.22 (SD = 1.40) and on average, each manager had 11.08 followers (SD = 13.78).

Measures

Power (measured at Time 1). The personal sense of power at work was measured by an eight-item, seven-point scale (Anderson et al., 2012). Participants were asked to rate the extent to which the statements described their interaction with people at work. Examples of these statements are “I can get others at work to listen to what I say” and “If I want to, I get to make the decisions”. The scale reliability in this sample was .85.

Self-disclosure (measured at Time 2). The self-disclosure behaviour to superiors and followers was measured by a 13-item self-developed scale. Nine of these items were extracted from previous studies on self-disclosure (e.g., “your most embarrassing experience in your current position”) (Dumas et al., 2013; Hackenbracht & Gasper, 2013; Miller, Berg, & Archer, 1983) and four of them were self-generated (e.g., “work-related information that should be kept to yourself for now”). The same set of items was used to assess the tendency to disclose to both superiors and followers. These statements were rated on a seven-point scale (1 = very unlikely; 7 = very likely).

This measure was first piloted with 13 separate employees and 12 academic researchers to confirm the content validity. The reliabilities of these two scales were .92 for self-disclosure to superiors and .89 for self-disclosure to followers.

Leader Loneliness (measured at Time 3). The experience of loneliness was measured by a 16-item, seven-point scale (S. L. Wright et al., 2006). The scale measured two dimensions, emotional deprivation (e.g., “I feel abandoned by people at work when I am under pressure at work”; $\alpha = .96$) and lack of social companionship (e.g., “I feel part of a group of friendships at work”; $\alpha = .92$) respectively.

Emotional exhaustion (measured at Time 3). This well-being indicator was assessed by the nine-item sub-subscale of the Maslach Burnout Inventory (Maslach & Jackson, 1981). Participants rated statements such as “I feel used up at the end of the workday” on a five-point scale ($\alpha = .92$).

Ego depletion (measured at Time 3). Excluding exhaustion-related items, we used eight items of the state self-control capacity scale (Christian & Ellis, 2011) to evaluate the depletion of self-regulatory resources. An example of these items, as rated on a five-point scale, is “I am having a hard time controlling my urges”. The scale showed satisfactory reliability ($\alpha = .81$).

Sleep problems (measured at Time 3). We used a four-item measure to assess sleep problems that corresponded to insomniac symptoms on a six-point scale (Törnroos et al., 2017). A sample item is “difficulty staying asleep”. The reliability was $\alpha = .84$.

Control variable. At Time 2, we assessed the middle managers’ need to belong by a ten-item scale on a five-point scale (1 = not at all, 5 = extremely) (Leary, Kelly, Cottrell, & Schreindorfer, 2013). These items include “If other people don’t seem to accept me, I don’t let it bother me” and “I want other people to accept me” ($\alpha = .79$).

Demographics. Finally, we asked the participants to provide information about their age, gender, hierarchy and span of control. Hierarchy was assessed by a subjective single-item evaluation on a ten-point scale (Bell et al., 1990).

Strategy of Analysis

We tested our hypotheses with multiple regression analysis, using the SPSS PROCESS Macros and bootstrapping results using 5,000 resamples (Hayes, 2013). For our main hypotheses about explaining leader loneliness (Hypotheses 1a to 1c), we conducted two separate sets of regression analyses, each with one of the two components of leader loneliness as the dependent variable.

Following recent methodological recommendations, we first tested the model without any control variables in the models (Becker et al., 2016; Bernerth, Cole, Taylor, & Walker, 2018). Next, we controlled for need to belong since this individual difference may be an alternative explanation to leader loneliness (Leary et al., 2013). Demographic variables were not controlled since they did not show any significant or strong associations with leader loneliness (Becker et al., 2016) (see Table 1).

Insert Table 1 about here

RESULTS

Descriptive statistics and correlations of the focal variables in the study are presented in Table 1. We found consistent support for Hypothesis 2: leader loneliness was related to lower levels of well-being. Specifically, the two components of loneliness, emotional deprivation and a lack of social companionship, were all significantly related to higher levels of emotional exhaustion ($r_s \geq .49$), ego depletion ($r_s \geq .26$), and more sleep problems ($r_s \geq .25$).

Table 2 presents the results of the regression analysis. We found full support for the mediating role of self-disclosure to superiors (Hypothesis 1a). Middle managers who felt more powerful at Time 1 were more likely to disclose themselves to their superiors at Time 2 ($b = 0.42, p < .01$). At Time 3, they then felt lower levels of emotional deprivation ($b = -0.14, p < .05$) and lack of social companionship ($b = -0.20, p < .01$). The indirect effects of power on emotional deprivation ($b = -0.06$, 95% bootstrap CI: -0.14 to -0.00) and lack of social companionship ($b = -0.08$, 95% bootstrap CI: -0.16 to -0.03) are statistically significant. The conclusions remained after controlling for the need to belong.

Insert Table 2 about here

We only found partial support for the mediating role of self-disclosure to followers (Hypothesis 1b). A positive relationship between power at Time 1 and self-disclosure to their followers at Time 2 was also shown in this sample ($b = 0.39, p < .01$). The negative relationship of self-disclosure to followers at Time 2 was marginally significant with emotional deprivation ($b = -0.13, p = .07$) and was significant with lack of social companionship ($b = -0.13, p = .04$) at Time 3. The indirect effect of power on emotional deprivation ($b = -0.05$, 95% bootstrap CI: -0.14 to $.00$) was statistically non-significant while that on lack of social companionship ($b = -0.05$, 95% bootstrap CI: -0.12 to -0.00) was statistically significant. After controlling for the need to belong, all the indirect

effects were non-significant. Finally, all models provided full support to Hypothesis 1c – power was negatively related to emotional deprivation and lack of social companionship.

In addition, we compared the effects of the two self-disclosure mediators to determine the unique effects. As demonstrated in Table 3, self-disclosure to superiors among middle managers could best explain why sense of power at Time 1 would predict felt social companionship at Time 3.

Insert Table 3 about here

Finally, results of the sequential mediation analysis are seen in Table 4. The sequential mediation from power to leader well-being via self-disclosure to superiors and leader loneliness was statistically significant, providing full support to Hypothesis 3a. Meanwhile, Hypothesis 3b, which proposed a similar mediation, only with the replacement of self-disclosure to followers as the first mediator, was mostly supported. The only non-significant indirect effect path was from power to emotional exhaustion via self-disclosure to followers and emotional deprivation.

Insert Table 4 about here

DISCUSSION

Despite its importance, the emergence of leader loneliness is still poorly understood. This study contributes to a better understanding in three ways. First, building on the previous literature on relationship development and power, we identified leader self-disclosure as a mechanism to explain why leaders who experience more power would feel less lonely. Second, we adopted the two-dimensional view to operationalise leader loneliness. We found that sense of power and self-disclosure are particularly relevant to explaining the feeling of lacking social companionship among leaders. Finally, we provided empirical support that leader loneliness is an overlooked well-being concern, as it would affect the daily functioning of leaders through emotional exhaustion, ego depletion and poor sleep quality.

An interesting finding from our study is the consistent support for the mediating role of self-disclosure to superiors, but not to followers. Although the study was designed to sample middle managers, our theoretical framework could explain why top leaders were prone to loneliness (Cooper & Quick, 2003; Saporito, 2012). As leaders climb up the organisational hierarchy, conversations with their superiors are more formalised and instrumental (Mao & Hsieh, 2012). Top leaders like CEOs

even do not have any superiors in the organisational structure. Instead, they have to report to the board of directors and stakeholders, who are not suitable targets for self-disclosure. Consequently, they feel vulnerable and abandoned by other members in the organisation, as reported in a qualitative study of the CEO boardroom dynamics (Brundin & Nordqvist, 2008). In short, this finding implies that top leaders experience loneliness as self-disclosure to superiors is less available.

Another major finding is the direct negative relationship between sense of power and leader loneliness. Leaders may interpret not feeling powerful as a social threat, which then triggers the self-reinforcing loop of loneliness and withdrawal from workplace relationships (Cacioppo et al., 2014). The low sense of power may also be frustrating since power is expected in leadership positions (Vince & Mazon, 2014). Our finding does not support the social distance theory of power, which argues that power could increase loneliness by lowering the motivation to affiliate with others and raising the expectations to be approached (Magee & Smith, 2013). A plausible explanation is that the predictions of the theory depend on how power is construed by the leaders. For example, leaders who see their power as an opportunity to exercise control, instead of as a responsibility, may hold a more instrumental and cynical view towards workplace relationships (De Wit, Scheepers, Ellemers, Sassenberg, & Scholl, 2017; Inesi, Gruenfeld, & Galinsky, 2012). These leaders may feel emotionally deprived, but not necessarily feel that they lack social companionship.

This study has the practical implication that leader self-disclosure is one of the strategies to reduce loneliness. Nevertheless, some scholars also remarked the danger of too much self-disclosure. For instance, over-sharing the fear and insecurity of the leader may trigger expectations of failure among followers, thus hampering the team performance (Hamman, 2013). This warrants future research to explore the boundary of leader self-disclosure.

Limitations and Future Research

Despite our attempt to reduce the common method bias by collecting data from three time points, our study has some limitations that call for further research. First, being a relationship-building strategy, it is possible that leader loneliness motivates more self-disclosure. We designed our study by assessing self-disclosure before measuring loneliness to prevent the issue of reversed causality. Future research can establish the causal relationship by experimentally manipulating the content and medium

of self-disclosure. In addition, considering the systematic differences between face-to-face and virtual interactions identified in the self-disclosure literature (Nguyen, Bin, & Campbell, 2012), it is important to investigate the effects of virtual leader self-disclosure to both superiors and followers. This agenda has high practical relevance to the contemporary work environment, in which leaders often have to manage multiple teams virtually (Schulze & Krumm, 2017).

Second, currently there are multiple ways to conceptualise leader loneliness. This study only focussed on the more stable aspect of loneliness, which should have developed over some time in leadership positions. However as some previous qualitative studies revealed (Alvinus, Johansson, & Larsson, 2017; Tahir, Thakib, Hamzah, Said, & Musah, 2017; B. Wright & Barling, 1998), leader loneliness may also be experienced as a temporary feeling of disconnectedness when leaders have to make difficult, people-related decisions alone. The field is in need for further research on this form of situational leader loneliness to understand its antecedents, consequences, as well as how leaders cope with this unpleasant experience. An inductive research approach that focusses on the narratives and sensemaking among leaders may be useful to tease out the nuances of the phenomenon.

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Table 1

Descriptive Statistics and Correlations of Focal Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1 Sense of Power T1	5.40	0.83												
2 Self-disclosure to superiors T2	3.76	1.28	.27**											
3 Self-disclosure to followers T2	3.76	1.18	.27**	.58**										
4 Need to belong T2	2.89	0.63	-.06	0.12	.17*									
5 Emotional deprivation T3	2.66	1.30	-.46**	-.25**	-.24**	-.05								
6 Lack of social companionship T3	2.64	1.13	-.45**	-.33**	-.25**	-.11	.80**							
7 Emotional exhaustion T3	2.61	1.00	-.45**	-.25**	-.22**	.03	.65**	.49**						
8 Ego depletion T3	2.04	0.67	-.30**	.01	.04	.23**	.40**	.26**	.43**					
9 Sleep problems T3	2.89	1.21	-.16*	-.13	-.21**	-.08	.34**	.25**	.54**	.15*				
10 Age	36.64	8.74	-.03	-.05	-.13	-.15*	-.04	-.00	-.01	-.20**	.11			
11 Gender (0 = male; 1 = female)	0.53	0.50	-.12	-.06	-.18*	.08	.01	-.07	.16*	.13	.20**	.06		
12 Hierarchy	6.22	1.40	.17*	.27**	.21**	.13	-.16*	-.15*	-.17*	-.03	-.01	.11	-.02	
13 Span of control	11.08	13.78	.19**	.02	.05	-.14*	-.01	.01	.03	-.01	.13	-.00	.03	.06

Note. N = 196

*p < .05, **p < .01, two-tailed.

T1: Measured at Time 1; T2: Measured at Time 2; T3: Measured at Time 3

Table 2

Results of multiple regression analysis

Variable	SDC to superiors T2		SDC to followers T2		Emotional deprivation T3				Lack of social companionship T3			
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Step 1: Control												
Need to belong T1		.29*		.36**			-.14	-.13			-.19 ⁺	-.20 ⁺
Step 2												
Sense of power T1	.42**	.44**	.39**	.41**	-.67**	-.68**	-.68**	-.69**	-.52**	-.56**	-.54**	-.57**
Step 3												
SDC to superiors T2					-.14*		-.13 ⁺		-.20**		-.18**	
SDC to followers T2						-.13 ⁺		-.12		-.13*		-.11 ⁺
R	.27	.31	.27	.33	.48	.48	.49	.48	.50	.46	.51	.48
R ²	.07	.09	.07	.11	.23	.23	.24	.23	.25	.22	.26	.23

Note. N = 196

**p < .01, *p < .05, ⁺p < .10, two-tailed.

SDC: self-disclosure; T1: Measured at Time 1; T2: Measured at Time 2; T3: Measured at Time 3

Table 3

Indirect Effects of Power to Leader Loneliness

	Estimate	SE	Bootstrapping ^a	Remarks
DV: emotional deprivation				
Self-disclosure to superiors	-.04	.05	[-.16, .03]	Non-significant
Self-disclosure to followers	-.03	.05	[-.13, .06]	Non-significant
Total	-.07	.04	[-.16, -.01]	Significant
DV: lack of social companionship				
Self-disclosure to superiors	-.08	.04	[-.19, -.02]	Significant
Self-disclosure to followers	-.01	.04	[-.08, .06]	Non-significant
Total	-.09	.00	[-.17, -.03]	Significant

Note. N = 196

^a Bias-corrected 95% confidence intervals

Table 4

Indirect Effects of Power to Well-being

	Estimate	SE	Bootstrapping ^a	Remarks
DV: emotional exhaustion				
SDC to superiors & ED	-.03	.01	[-.06, -.00]	Significant
SDC to superiors & LSC	-.03	.01	[-.06, -.01]	Significant
SDC to followers & ED	-.02	.02	[-.06, .00]	Non-significant
SDC to followers & LSC	-.02	.01	[-.04, -.00]	Significant
DV: ego depletion				
SDC to superiors & ED	-.01	.01	[-.03, -.00]	Significant
SDC to superiors & LSC	-.01	.01	[-.03, -.00]	Significant
SDC to followers & ED	-.01	.01	[-.03, -.00]	Significant
SDC to followers & LSC	-.01	.00	[-.02, -.00]	Significant
DV: sleep problems				
SDC to superiors & ED	-.02	.01	[-.05, -.00]	Significant
SDC to superiors & LSC	-.02	.01	[-.06, -.00]	Significant
SDC to followers & ED	-.02	.01	[-.05, -.00]	Significant
SDC to followers & LSC	-.01	.01	[-.04, -.00]	Significant

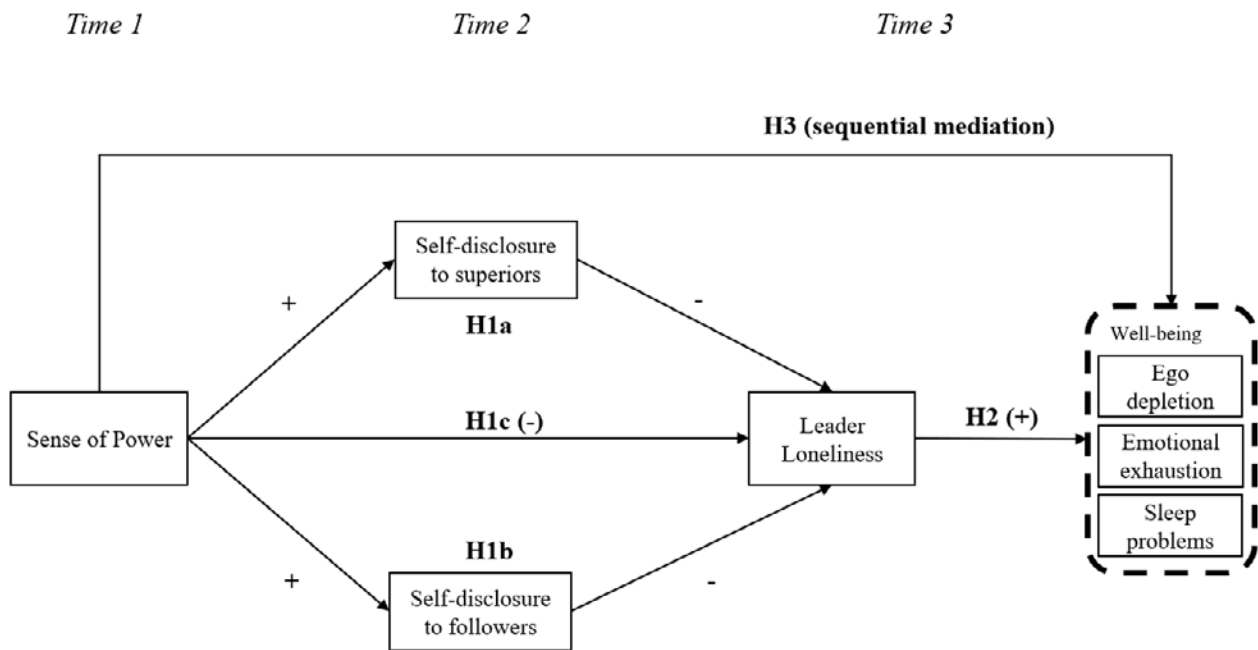
Note. $N = 196$

SDC: self-disclosure; ED: emotional deprivation; LSC: lack of social companionship

^a Bias-corrected 95% confidence intervals

Figure 1

Conceptual Framework of the Study



**Making trouble or contribution ? A pilot study and future research framework of entrepreneurs'
roles in managing intragroup conflict**

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Making trouble or contribution ? A pilot study and future research framework of entrepreneurs' roles in managing intragroup conflict

Abstract

Most entrepreneurial endeavors tend to be undertaken by teams rather than single entrepreneurs. However, conflict between entrepreneurs and top management teams (TMT) is the crux of this conundrum. Research has concluded that conflict has critical implications for venture performance, but how entrepreneurs handle the conflict and achieve successful venture performance remains less understood. Data analysis results of our pilot study suggest that cognitive conflict has positive effect, while affective conflict has negative effect on venture performance. Furthermore, we develop a future research framework to investigate how entrepreneurs induce the affective and cognitive conflict between themselves and TMT, and how entrepreneurs could strengthen effects of their behaviors on cognitive conflict while weaken effects on affective conflict through developing suitable organizational culture.

Keywords:

TMT, Intragroup conflict, Coping strategy, Organizational culture, Venture performance

Introduction

With entrepreneurship becoming increasingly central to economic growth, there is growing interest in understanding how entrepreneurs and the top management team (TMT) that they form work together to run their businesses successfully (Friedman, Carmeli, & Tishler, 2016; Lim, Busenitz, & Chidambaram, 2013; Wang, Holmes, Oh, & Zhu, 2016; West, 2007). Most entrepreneurial endeavors, including the identification of new opportunities, the positioning of a product, and target market selection, tend to be undertaken by teams rather than single individuals (Beckman, Burton, & O’Rielly, 2007; Knockaert, Ucbasaran, Wright, & Clarysse, 2011). However, conflict is the crux of this conundrum (Ensley, Pearson, & Amason, 2002; Zhao, Song, & Storm, 2013). Indeed, studies have suggested that on the one hand, conflict improves decision quality; on the other, it may weaken the ability of the group to work together (e.g., Chun & Choi, 2014; de Wit, Greer, & Jehn, 2012; Korsgaard, Soyoun, Mahony, & Pitariu, 2008). Conflict has been defined as a process in which one party sees its interests opposed or negatively affected by another party (Wall & Callister, 1995). It is a multi-faceted phenomenon with two facets: cognitive conflict and affective conflict. Cognitive conflict may be described as disagreement among group members about what should be done and how it should be done. Affective conflict refers to interpersonal disaffection or negative emotions experienced among decision makers. Although cognitive and affective conflict are distinct from each other, unfortunately, they most often occur together (Amason, 1996).

Research has concluded that conflict has critical implications for venture performance (Chun & Choi, 2014; Forbes, Korsgaard, & Sapienza, 2010; Jehn & Bendersky, 2003; Wennberg, Delmar, & McKelvie, 2016), but how entrepreneurs handle the conflict and achieve successful venture performance remains less understood, the current knowledge of the mediating processes is rather

fragmented. It is theoretically and practically important to examine the mediating mechanisms linking conflict and venture performance. Therefore, we conduct this pilot study to provide an empirical attempt. Specifically, we use the theory of psychological stress and coping (Folkman & Moskowitz, 2004; Lazarus & Folkman, 1984) to unfold the relationship between conflict and venture performance. Coping refers to the thoughts and behaviors used to manage the internal and external demands of situations that are appraised as stressful and is used by individuals in situations they consider as personally significant and that exceed their coping resources. Coping has two widely recognized major functions: regulating stressful emotions (emotion-focused coping) and altering the troubled person-environment relation causing the distress (problem-focused coping). We propose that entrepreneurs would use emotion-focused coping and problem-focused coping to deal with the conflict between them and top management teams, and consequently affect the performance of their ventures.

Figure 1 schematically depicts the research objectives of our pilot study.

 [Insert Figure 1 here]

Theory and hypothesis

Stress and coping theory

This study is based on a theory of psychological stress and coping developed by Lazarus and his colleagues over a number of years (e.g., Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). Coping is defined as the person's constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the person's resources (Lazarus & Folkman, 1984). There are three key features of this definition. First, it is process oriented, meaning that it focuses on what the person actually thinks and does in a specific stressful encounter, and how this changes as the encounter unfolds. Second, coping is viewed as

contextual, that is, influenced by the person's appraisal of the actual demands in the encounter and resources for managing them. The emphasis on context means that particular person and situation variables together shape coping efforts. Third, this definition makes no a priori assumptions about what constitutes good or bad coping; coping is defined simply as a person's efforts to manage demands, whether or not the efforts are successful.

Research on coping has primarily focused on two different coping approaches: problem-focused coping and emotion-focused coping. While problem-focused coping refers to dealing with sources of negative emotions and includes, for example, making a plan of action or focusing on the next steps, emotion-focused coping refers to regulating the experience of negative emotions by, for example, engaging in distractive activities, seeking emotional support, or consuming drugs and alcohol.

Mediating role of problem-focused coping and emotion-focused coping

Cognitive conflict is inevitable in top management teams because different positions see different environments. It contributes to decision quality because the synthesis that emerges from the contesting of the diverse perspectives is generally superior to the individual perspectives themselves. The theory of psychological stress and coping (Folkman & Moskowitz, 2004; Lazarus & Folkman, 1984) suggests that problem-focused coping can be able to help individuals to properly handle the cognitive conflict. For example, those who have used problem-focused coping such as the reorganization of work tasks to eliminate stressors in the past likely believe that they can deal with the cognitive conflict. Therefore, when entrepreneurs using problem-focused coping, they would be able to better cope cognitive conflict and result in better venture performance.

Affective conflict seems to emerge in top management teams when cognitive disagreement is perceived as personal criticism. As top management teams engage in cognitive conflict, they may

inadvertently trigger affective conflict. According to the theory of psychological stress and coping (Folkman & Moskowitz, 2004; Lazarus & Folkman, 1984), emotion-focused coping will enable individuals to address the emotional challenges better. That is, the use of emotion-focused coping would increase entrepreneurs' beliefs in their ability to meet the challenges of affective conflict between them and top management teams and achieve higher venture performance.

Based on the above discussion, we hypothesize that:

Hypothesis 1: Problem-focused coping mediates the positive relationship between entrepreneurs' cognitive conflict with top management team and venture performance.

Hypothesis 2: Emotion-focused coping mediates the negative relationship between entrepreneurs' affective conflict with top management team and venture performance.

Method

Sample and procedures

The questionnaires were distributed to 105 newly established ventures. Respondents were assured of the confidentiality of responses. Completed questionnaires were individually collected by the researchers. In total, 96 questionnaires were returned. The response rate thus was 91.4%. After deleting records with missing or unmatched data, a total of 90 were retained as the sample for this study.

Measures

All scales used in the questionnaires were in Chinese. To assure equivalence between the measures in the Chinese and the original English versions, a standard translation and back-translation procedure was performed (Brislin 1980). Response options ranged from (1) “strongly disagree” to (5) “strongly agree”, or (1) “very few” to (5) “very much”. One main entrepreneur was asked to rate

problem-focused coping, emotion-focused coping, and venture performance. One top management team member, who had been working closely with the entrepreneur recently, was asked to rate affective conflict and cognitive conflict between the entrepreneur and him/herself.

Affective conflict was measured with the 4-item scale by Jehn (1995). Sample items include “How much friction is there among members in your work unit?” and “How much tension is there among members in your work unit?” The scale’s alpha coefficient was .84.

Cognitive conflict was measured with the 4-item scale by Jehn (1995). Sample items include “To what extent are there differences of opinion in your work unit?” and “How often do people in your work unit disagree about opinions regarding the work being done?” The scale’s alpha coefficient was .75.

Problem-focused coping was measured with the 4-item scale by Patzelt and Shepherd (2011). Participants were asked whether, after getting angry or annoyed, they “tried to think about the situation in a different way”, “talked to the person I was angry or annoyed at”, “tried to change the situation by doing something”, and “planned how to end the relationship with the person who made me angry”. The scale’s alpha coefficient was .62.

Emotion-focused coping was measured with the 6-item scale by Patzelt and Shepherd (2011). Participants were asked whether, after getting angry or annoyed, they “had a drink or took a pill”, “talked to someone else about how I felt”, “fantasized about a magical solution to the problem”, “went out to get some exercise to make me feel better”, “yelled or hit something to let out my pent up feelings”, and “waited for feelings to pass”. The scale’s alpha coefficient was .60.

Firm performance was measured with the 10-item scale by Kollmann and Stockmann (2014). Venture performance is measured with a modified version of an instrument developed by Gupta and

Govindarajan (1984) that has often been applied to entrepreneurship research (e.g., Tang, Kreiser, Marino, & Weaver, 2010). On a 5-point Likert scale, the respondents are first asked to indicate the degree of importance their firm attaches to several growth, financial, and nonfinancial performance criteria ((1) sales; (2) sales growth; (3) market share; (4) growth in market share; (5) net profit; (6) cash flow; (7) return on investment; (8) customer satisfaction; (9) competitive capacity; (10) feasibility of self-financed growth). Then on a second 5-point Likert scale, they are asked to indicate the extent to which they are currently satisfied with their firm's performance concerning each of the criteria. For each case, a weighted average performance index is then computed. The scale's alpha coefficient was .93.

Control variables. We controlled student's demographic characteristics in our study, such as gender, age, education, major in university, business experience, and relationship length between entrepreneurs and top management teams.

Data analysis

Following Kenny, Kashy and Bolger's (1998) recommended conditions for establishing mediation, we tested our hypothesis using regression analysis. Specifically, to obtain the unique mediating effect of problem-focused coping and emotion-focused coping, we entered both two mediators in the regression analysis of mediation.

Result

Descriptive statistics

Table 1 presents the means, standard deviations, and correlations of the variables for descriptive purposes.

 [Insert Table 1 here]

Mediating effects test

As shown in Table 2, problem-focused coping mediates the relationship between cognitive conflict and venture performance. Thus, Hypotheses 1 was supported.

 [Insert Table 2 here]

As shown in Table 3, problem-focused coping, but not emotion-focused coping, mediates the relationship between affective conflict and venture performance. Thus, Hypotheses 2 was not supported.

 [Insert Table 3 here]

Discussion and future study framework

Based on our pilot study, we propose a future research framework to advance our study. Firstly, our findings show that cognitive conflict is positively related to venture performance, however, affective conflict is negatively related to venture performance. Therefore, the dilemma for research and practice alike is to understand the antecedents of cognitive and affective conflict, as well as the conditions that may moderate these processes. Previous studies have identified various variables as antecedents of intragroup conflict, such as demographic diversity, task and incentive structures, geographic distribution of members, and psychological characteristics of group members (Chun & Choi, 2014; de Wit, Greer, & Jehn, 2012; Korsgaard et al., 2008). For small entrepreneurial firms, in the absence of resources and formal routines, entrepreneurs act as a resource platform providing experiences, skills, abilities that the firms can rely on. But entrepreneurs and other executives vary in their personality, values and attitudes and thus may also exhibit different behaviors that may lead to

cognitive or affective conflict. However, limited studies have been conducted to investigate the roles of entrepreneurs in inducing cognitive and affective conflict with TMT. Therefore, we suggest that it is meaningful to examine two different types of behaviors that entrepreneurs may frequently do and consequently may significantly trigger cognitive or affective conflict with TMT. These two types of behaviors are proactive behaviors and deviant behaviors. Proactive behavior is defined as self-initiated and future oriented action that aims to change and improve the situation or oneself. It has become increasingly important to anticipate opportunities and initiate actions to operate effectively in complex and uncertain work environments (Crant, 2000). Research has shown that proactive behaviors across many domains, such as voice, problem prevention, feedback inquiry, job change negotiation, strategic scanning, issue selling and so on (Parker & Collins, 2010; Wu, Parker, Wu, & Lee, 2018). Deviant behavior refers to employees' volitional behavior that violates significant organizational norms and threatens the well-being of the organization or its members (Bennett & Robinson, 2000; Huang, Wellman, Ashford, Lee, & Wang, 2017; Zhang, Mayer, & Hwang, 2018). We examine the interpersonal workplace deviant behaviors that direct toward individuals, such as aggression, gossiping, rudeness, and so on.

Furthermore, theories and empirical findings from organizational culture and entrepreneurship research have suggested that entrepreneurs could have important influence on developing the organizational culture for venture firms (Hartnell, Kinicki, Lambert, Fugate, & Doyle, 2016; Leslie, Keller, & de Dreu, 2012; Shepherd, Patzelt, & Haynie, 2010). Meanwhile, as we have discussed above, entrepreneurs frequently trigger the conflict between themselves and TMT, which would have positive or negative effects on venture performance. Therefore, an important question here is that how entrepreneurs could make more/stronger cognitive conflict, while make less/weaker affective conflict.

We propose that it is theoretically and practically important to examine how organizational culture could moderate the effects of entrepreneurs' behaviors on cognitive or affective conflict. Organizational culture is composed of shared values and norms that inform employees about how they should perceive, think, feel, and behave in relation to organizational problems. Culture is a source of social control because it reflects shared learning that produces normative expectations about behavior (O'Reilly & Chatman, 1996). Specifically, we will examine the moderating roles of a range of organizational culture, such as fairness culture, trusting culture, psychological safety culture, concerning for individual development culture, customer orientation culture, harmony culture, innovation culture, performance orientation culture, and so on.

Upper echelon theory and top management team

We develop our future research framework based on the upper echelon theory (UET). It is built on the premise of bounded rationality, which refers to human limitations in accessing, processing, and using information (Hambrick, 2007). Due to these limitations, entrepreneurs' cognitive bases and personality traits influence their field of vision (i.e., the direction of their attention), perception (i.e., what they notice), and interpretation (i.e., how they attach meaning). In this way, entrepreneurs' cognitive bases and personality traits shape their strategic choices by influencing their personalized interpretation of the strategic situations they face (Hambrick, 2007). Research conducted under the UET has produced consistent evidence of a relationship between TMT interaction and firm performance (Hambrick, 2007; Wang et al., 2016). Despite popular legends about individual entrepreneurs, the creation and successful management of new ventures is often a team effort, shared among individuals representing a diversity of skills and experiences (Ensley et al., 2002; Friedman et al., 2016). Central to the effort to meld talent and ability is the use of conflict. Paradoxically, conflict

can be a catalyst for creativity and understanding as well as for animosity and resentment (Chun & Choi, 2014; de Wit et al., 2012).

Figure 2 schematically depicts the research objectives of our future study.

[Insert Figure 2 here]

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Figure 1: Hypothesized research model of pilot study

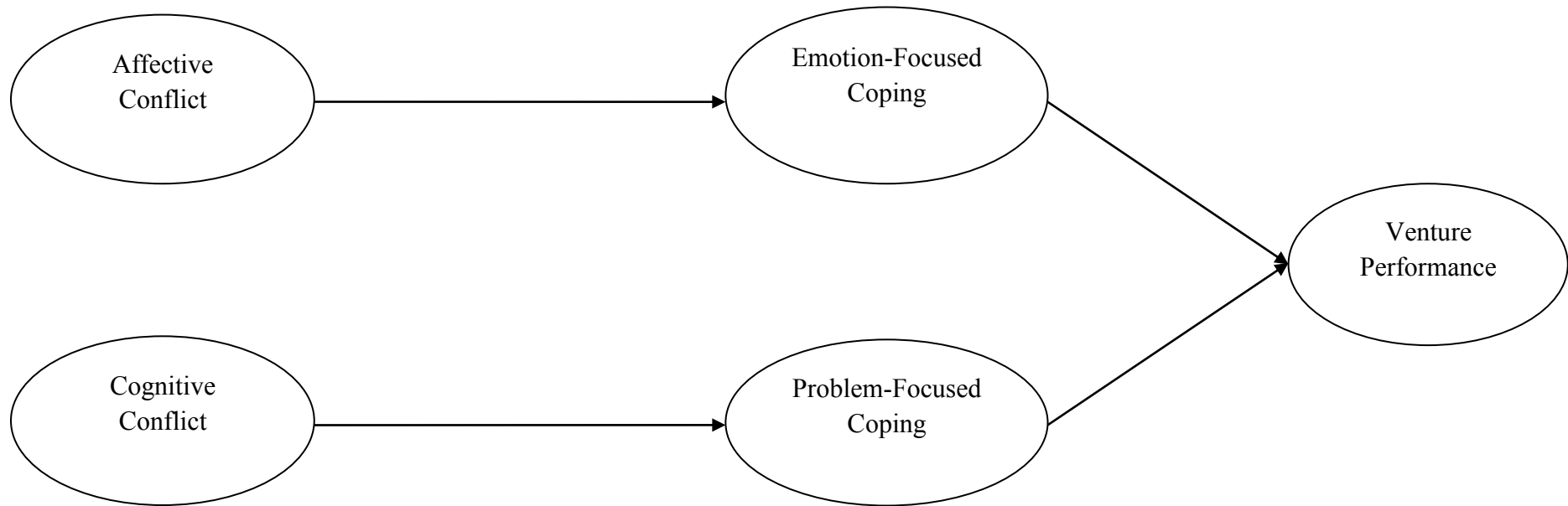


Figure 2: Future research framework

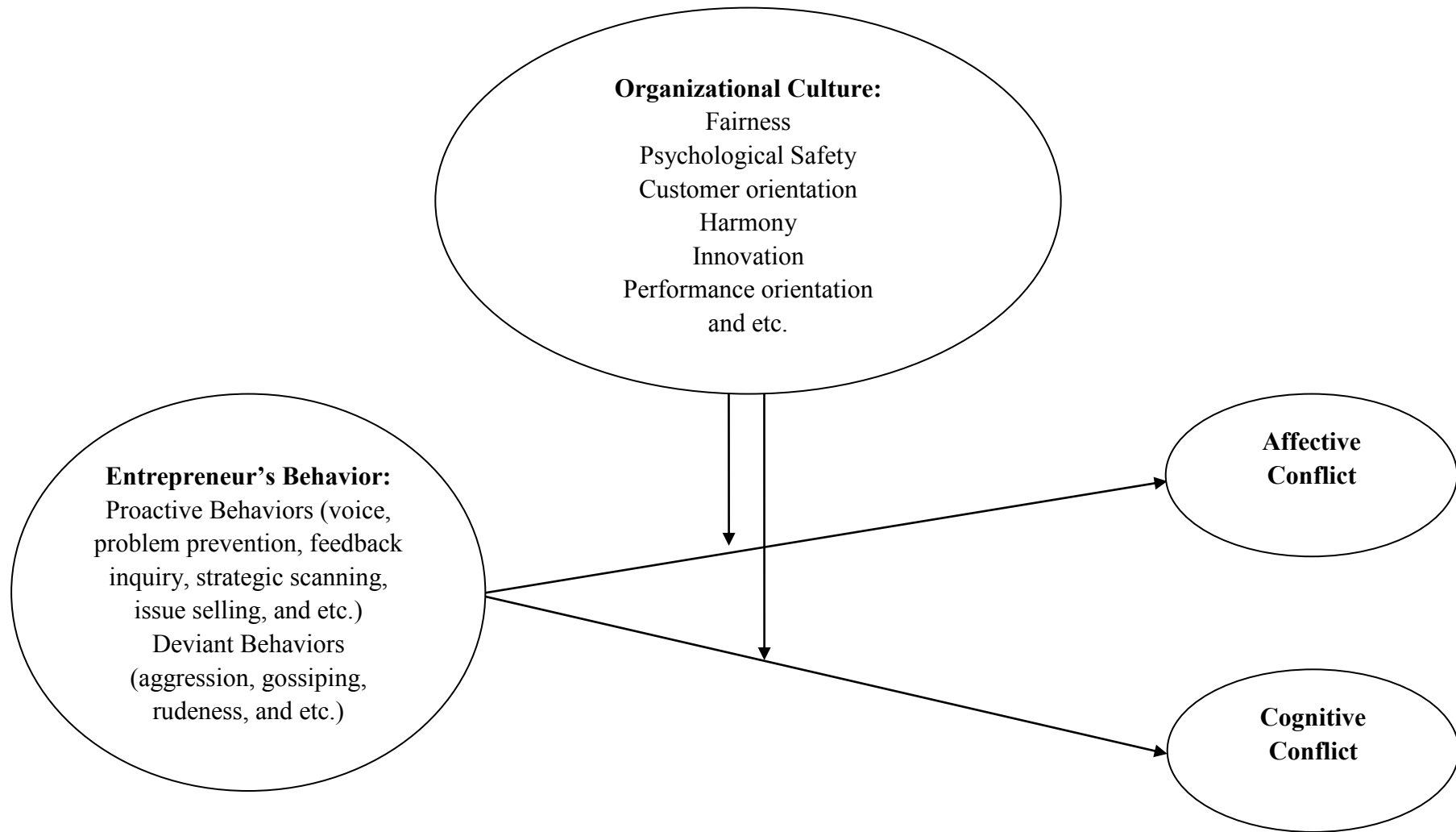


Table 1: Means, standard deviations, reliabilities, and correlations among variables

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1. Gender	.23	.43										
2. Age	2.52	.67	-.16									
3. Education	2.14	.68	-.12	.13								
4. Major	2.50	1.48	.10	-.17*	-.40**							
5. Business Experience	3.12	.99	.25*	-.20	-.06	-.03						
6. Relationship Length	1.17	.40	.03	.38**	.22*	-.10	-.02					
7. Affective Conflict	2.31	.80	.01	-.03	-.07	-.04	-.30**	.13				
8. Cognitive Conflict	2.56	.68	-.19	-.19	.03	.04	.06	.19	.32**			
9. Emotion-focused Coping	3.87	.29	-.02	-.13	.02	-.06	-.13	.16	.16	.34**		
10. Problem-focused Coping	3.96	.43	-.09	.19	-.08	-.09	-.15	.23*	.17	.36**	.83**	
11. Venture Performance	2.68	.73	-.01	-.28**	-.22*	.03	-.28**	-.15	-.00	.25*	.35**	.45**

1) N = 90 with listwise deletion.

2) * $p < .05$; ** $p < .01$.

TABLE 2: Results of mediating effect test (cognitive conflict)

Variables	Venture Performance
<u>Controls:</u>	
Age	.01
Gender	-.38**
Education	-.26*
Major	-.19
Experience	-.38**
Relationship Length	.03
<u>Direct effects:</u>	
Cognitive Conflict	.26*
<u>Mediating effects:</u>	
Cognitive Conflict	.19
Emotion-focused Coping	-.09
Problem-focused Coping	.40*
Overall R²	.39**
Overall model F	5.72**

1) N =90 with listwise deletion. Standardized regression coefficients are shown.

2) In testing for the mediating effects, we entered the controls in the first step, cognitive conflict in the second step, then entered cognitive conflict, emotion-focused coping, and problem-focused coping in the third step.

3) * $p < .05$; ** $p < .01$.

TABLE 3: Results of mediating effect test (affective conflict)

Variables	Venture Performance
<u>Controls:</u>	
Gender	.01
Age	-.38**
Education	-.26*
Major	-.19
Experience	-.38**
Relationship Length	.03
<u>Direct effects:</u>	
Affective Conflict	-.19
<u>Mediating effects:</u>	
Affective Conflict	-.19
Emotion-focused Coping	-.02
Problem-focused Coping	.39*
Overall R²	.40**
Overall model F	5.81**

1) N =90 with listwise deletion. Standardized regression coefficients are shown.

2) In testing for the mediating effects, we entered the controls in the first step, affective conflict in the second step, then entered affective conflict, emotion-focused coping, and problem-focused coping in the third step.

3) * $p < .05$; ** $p < .01$.

Stream 01. Conference Theme: Managing the Many Faces of Sustainable Work
Competitive session

Humanistic Management Performativity ‘in the Wild’:

The Role of Performative Bundles of Practices

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Humanistic Management Performativity ‘in the Wild’:

The Role of Performative Bundles of Practices

ABSTRACT: *Humanistic management practices are often perceived as ‘unrealistic’, as they stand in steep contrast to ‘normal’ business reality shaped by the commercial logic of neoclassic economics. The conceptual lens of performative practices focuses on how practices that appear to be unrealistic can be ‘made real’ through their enactment. This paper studies such performative humanistic practices of the three companies Greyston (USA), Good-Ark (China), and Allsafe (Germany). Through a thematic template analysis, we identify two distinct types of accompanying practices that enable the performativity of the core humanistic management practices studied. Enabling practices favored the initial performativity the humanistic practices by providing a local ‘proof of concept’. Disseminating practices aided performativity by spreading humanistic practices and therefore increasing practices’ global verisimilitude.*

Keywords: Values and management futures; managing for the common good; social innovation; job and work design, post bureaucratic organisations, corporate social responsibility

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“From my background, typical business... it intrigued me to see how this model could work”

(Roger, Greyston Bakery)

The commercial bakery Greyston practices open hiring, a human resources management practice invented by its CEO. The practice consists of hiring anyone who walks through the company’s door, no questions asked. Greyston does so out of a humanistic motivation to give people commonly considered ‘unemployable’ a chance. As Roger, an experienced executive, since recently working in Greyston, remarks, “this model” of open hiring was intriguing, as it appeared unlikely to “work”. He further roots this statement in the dominant neoclassic paradigm as it materializes in the tenets of strategic human resources management. Companies are understood to have to extensively evaluate new employees in order to hire the most valuable human resource for a company’s profitability, “to go through all the rigors of checking people's background and qualifications and interviewing” (Roger, Greyston). This implies that practices like open hiring based on a humanistic logic, are likely to contradict the neoclassic commercial logic of business. Therefore, they are believed to cannot exist, be ‘true’ or ‘possible’. Yet, Greyston has profitably been practicing open hiring for decades. How is this possible?

We will shed light on this intriguing phenomenon through the lens of performative practices. Greyston’s open hiring is an example of such a practice, which starts out as apparently unrealistic, but becomes real as it reshapes social reality over time (Cabantous & Gond, 2011; Kornberger & Clegg, 2011; Turnhout, Van Bommel, & Aarts, 2010). Performative practices resemble a self-fulfilling prophecy (Austin, 1962; Callon, 2007; Gond, Cabantous, Harding, & Learmonth, 2016; Merton, 1948). Apart from some very recent examples (Garud & Gehman, 2016; Garud, Gehman, & Tharchen, 2017; Ligonie, 2017; Vásquez, Bencherki, Cooren, & Sergi, 2017), we know little about how organizing for performativity might take place (Gond et al., 2016) and of how it is driven by “theoreticians in the wild” (Callon, 2007: 41).

We conduct a comparative case study of the companies Greyston, Good-Ark, and Allsafe. Greyston consists of a commercial Bakery and a foundation in Yonkers, USA. Good-Ark, a Chinese semi-

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conductor manufacturer is known to divert attention from production, even in times of high demand, in order to support employees' spiritual development. Allsafe is a southern German car and aerospace industry supplier that has largely done away with control practices such as work schedules, budgets, hierarchies, and departments, as the company refuses to limit employees' freedom. We explore how such humanistic management practices can be performative, meaning to exist and grow, although they contradict contemporary management theory's tenets of what is and can be a business reality. Our initial research interest is to better understand such performative humanistic management practices.

We pursue a conceptual lead from the theories of practices discussion, which may explain the performativity of these practices. Performative practices have been conceptualized as individual or homogeneous practices (Cabantous & Gond, 2011; Kornberger & Clegg, 2011; Turnhout et al., 2010). However, the viability and therefore performativity of practices relies on the complex interrelatedness with other practices (Nicolini, 2009; Schatzki, 2002). Greyston, for instance, claims "we are baking brownies to hire people". This implies the intimate entanglement and mutual dependence of both practices, the humanistic core practice of open hiring and the commercial practices related to bakery operations. This leads us to further scrutinize the interrelatedness of core humanistic practices like open hiring and other practices accompanying them, together forming an entangled bundle of practices: *How may the practices accompanying humanistic core practices help us to understand its performativity?*

PERFORMATIVE HUMANISTIC MANAGEMENT PRACTICES

Theories of practices are focused on the construction of the social world that takes place through the collaborative enactment of practices (Reckwitz, 2002; Schatzki, 2016; Schatzki, 2002) in entangled bundles of practices (Gherardi & Nicolini, 2002; Nicolini, 2009; Schatzki, 2002).

Innovation in Humanistic Management Practices

Humanistic management is centered on human concerns such as protecting human dignity (Davila-Gomez & Crowther, 2012; Pirson, Dierksmeier, & Goodpaster, 2014a), giving people freedom to act and develop

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(Dierksmeier, 2011), and in fostering a healthy community of persons in organizations (Melé, 2003). In humanistic management thinking, the quality with which human beings are treated in business can be arranged on a continuum of five levels (Melé, 2014): It ranges from the lowest level of maltreatment with blatant injustice, to indifference, justice, care, and on to the highest level of development, which is aimed at human flourishing.

Humanistic management may lead to unique practices of governing, managing, leading and organizing (Lawrence & Pirson, 2015; Pirson & Turnbull, 2016; Spitzeck, 2011), which contradict the taken-for-granted reality of an ‘economistic logic’ of management (Lawrence & Pirson, 2015; Melé, 2013; Pirson, Steinvorth, Largacha-Martinez, Dierksmeier, & Mulryne, 2014b; Pirson & Lawrence, 2010). This contradiction may make many humanistic management practices seem unrealistic or even impossible in a business reality dominated by the economistic logic. However, humanistic management practices have been found to be carried out (Von Kimakowitz, Pirson, Spitzeck, Dierksmeier, & Amann, 2011), and to even shape entire business models (Laasch, Dierksmeier, & Pirson, 2015; Randles & Laasch, 2016). The humanistic logic may provide practices with a new meaning that goes beyond or even against the commercial one (Laasch, 2018a; Laasch, 2018b), providing an alternative ‘social rationality’ (Ridley-Duff, 2008). While humanistic management praxis (Schatzki, 1996), the practicing or doing of humanistic management has been studied under the label of ‘humanistic management in practice’ (Von Kimakowitz et al., 2011), the specific practices of humanistic management remain largely unexplored.

In our empirical context performative practices take root in a ‘management innovation’ (Birkinshaw, Hamel, & Mol, 2008; Hamel, 2006; Mol & Birkinshaw, 2009; Stata & Almond, 1989), breaking with justifying beliefs and leading to new innovative management practices. Such humanistic management innovation, is a type of social innovation (Kanter, 1998; Mulgan, 2006, 2012; Mulgan, Tucker, Ali, & Sanders, 2007; Phills, Deiglmeier, & Miller, 2008) of management practices by managers with a heightened sense of responsibility (Hibbert & Cunliffe, 2013; Laasch & Conaway, 2015, 2016). Such humanistic management innovation, justifies practices that break with the ‘normal’, taken-for-granted

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‘economistic’ practices, for instance related to the shareholder imperative, profit maximization or the competition as dominant type of economic interaction (Lawrence & Pirson, 2015; Pirson et al., 2014b). It has been claimed that “reality proves possibility”, that practicing humanistic management may help us to create “a more realistic theory” of management (Dierksmeier, 2011: 277; Laasch et al., 2015). In this paper we turn this argument around, to claim that a humanistic theory of management may create a more humanistic managerial reality through performative practices.

Performative Practices

The idea of performativity in business has been attributed to Merton (1948) who presented performative theory as “self-fulfilling prophecy [which] is, in the beginning, a false definition of the situation evoking a new behavior which makes the originally false conception come true.” Austin (1962) provided a linguistic-psychological framing of ‘doing things with words’, creating new realities through communication. While there is a range of conceptions of performativity, we focus on the “bringing theory into being strand of performative research” (Gond et al., 2016: 447). We apply a sociological lens related to actor-network theory (Callon, 2007; Callon & Muniesa, 2005; MacKenzie, 2003). Here performativity is synonymous with ‘ontological politics’ (Law & Urry, 2004; Mol, 1999), social interventions of theorists engaging into social construction to make their theory of reality become an actual reality, to be(come) “true or at least enjoy a high degree of verisimilitude” (Callon, 2007: 346). The performativity discussion has been centered on the academic community of practice, but there also is an explicit appreciation of the performative agency of “theoreticians in the wild” (Callon, 2007: 41), particularly in the business context. An example is when a strategist theorizes models of reality, for instance, about customer needs, and engages in strategic marketing to make them come true (Vargha, 2017).

A salient role in the context of organizing performativity have performative practices whose enactment shapes new realities while making practices’ underlying assumptions come true (Cabantous & Gond, 2011; Kornberger & Clegg, 2011; Turnhout et al., 2010). Performative practices studied are of communicative nature (Cooren, 2004; Gond et al., 2016); strategizing (Kornberger & Clegg, 2011);

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decision making (Cabantous & Gond, 2011); and governing (Turnhout et al., 2010).¹ Practices may be at the heart of the process of constructing new realities, but they may also be an expression of the new reality constructed, an outcome (Gond, Cabantous, Harding, & Learmonth, 2015).

METHODS

This study began with a purposive case sampling (Coyne, 1997; Palys, 2008) aimed at finding companies considered profoundly humanistic. Using Laasch and colleagues’ description (2015), Allsafe was approached in early 2017. It provided a first hint at humanistic performativity. Theoretical sampling (Coyne, 1997; Draucker, Martsof, Ross, & Rusk, 2007) was used to identify Good-Ark in late 2017 and Greyston early 2018, both exhibiting performative humanistic practices.

Data collection involved repeated visits and ethnographic immersions, in order to observe them first hand (Antonacopoulou, 2008; Manidis & Addo, 2017). Interviewees were chosen to provide an image of companies from a variety of perspectives including all types of positions in the business structure.

Insert Table 1 about here

Semi-structured interviews allowed to adjust questions to the variety of interviewees. Interviews covered three main themes (1) individuals’ involvement in practice(s), (2) the humanistic meaning of practices, and (3) essential practices necessary for the humanistic core practices to work.

We applied a thematic template analysis (Boyatzis, 1998; Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006; King, 2004; Vaismoradi, Turunen, & Bondas, 2013), coding interviewees’ responses to identify repeating mentions of types of performative practices. This coding was centered on interview sections related to essential core practices. The outcomes are visualized in Table 2 and Figure 1.

¹ There is a strong implicit conceptual connection between the performative practices discussion and the discussion of performative aspects of routines (e.g. Feldman & Orlikowski, 2011).

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FINDINGS

In all three cases we observed how business leaders hypothesized about how business reality (of their company and beyond) may function according to a humanistic logic. As visualized in Table 2, these hypotheses materialized as humanistic core practices. Greyston’s founder Bernie Glassman hypothesized that people deemed unemployable according to the standard logic of human resources management could become productive members of an organizational community if given a chance. Good-Ark’s hypothesis was that human beings’ innate good could be brought out through spiritual education, for the benefit of both the human being and her surroundings including the company. In Allsafe, the hypothesis was that employees will assume responsibility for the company if they are given unusual freedom. This was a competing theory to the taken-for-granted business reality built around intensive control to make employees act in the best interest of a company.

Insert Table 2 about here

We will now address our research question about the performative role of bundles of practices that accompanied each of the humanistic core practices studied. We found two types of accompanying practices. Enabling practices were internally performative, fostering the humanistic core practice’s legitimization and stabilization in its local context of origin, namely the three companies studied. Disseminating practices were directed towards an external context for transplanting, fertilizing, and nurturing the growth of a humanistic practice globally, outside the organization it had grown in.

Insert Figure 1 about here

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Internal performativity through enabling practices

We identified four types of performativity-enabling practices: Practices enabled practical feasibility, ‘making it work’; economic feasibility, practices of reproducing economically; practices bolstering the new humanistic logic; and practices fostering the long-run continuity of enactment.

Practical feasibility in the case of Greyston, required practices of intensive cross-sector collaboration. One such collaborative practice was that Greyston hosted a case worker from the Westchester Jewish Community Services. The social worker supported employees in ‘private’ issues like childcare and applying for housing support, that otherwise would have kept them from coming to work. Similarly, Good-Ark’s practices such as enabling employees to more frequently see their family through additional vacation days, provided the necessary spaces employees needed to practice the Confucian values they had learnt. In Allsafe practical feasibility required the elimination of practices that stood in steep contrast to the egalitarian logic of eye-level management. This included the non-practicing of a variety of hierarchical practices, from vacation approval to budgetary spending.

In all companies we found evidence of practices for economic feasibility of the humanistic practices. The practice of open hiring was intimately entangled with commercial practices of running a bakery, providing jobs for which people could be hired and paid: “bake brownies to hire people.”² In Good-Ark, the heightened feeling of responsibility for the greater whole arising from an increasingly self-transcendent mindset of workers became a competence enabling new production practices, for instance related to eco-efficiency. These practices resulted in considerable operational improvements, which in turn meant that financial resources could be freed to pay employees during the time of their Confucian trainings. Allsafe, incentivized employees to enact their freedom responsibly to the gain for themselves and everybody else in the company by sophisticated practices of profit sharing. Consistent with Allsafe’s egalitarian humanistic culture, profit sharing included everybody, cleaning staff and managing director.

² <https://greyston.org/bakery/>

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Interviewees across companies were rather uncritical about the genuine humanistic motivation behind core humanistic practices. At first this appeared surprising as particularly the previously mentioned economic feasibility practices might have led to suspicions of instrumentality, of ‘they are only doing it for the money’. Our interviews hint at the role of rather peripheral humanistic practices without an explicit link to commercial gain, as bolstering trust into the humanistic core practices’ motivation. For instance, Greyston bakery was used to fund Greyston foundation, which in turn engaged in a variety of humanistic practices from human development through job skills training to running a community garden. Good-Ark extensively promoted volunteering in local communities and ran programs for children left behind with their grandparents as parents moved to the cities for work. Allsafe had a common practice to periodically increase the already above-average social and health benefits, often surprising employees.

Practices ensuring the long-term continuity of enactment can be exemplified through Greyston’s positive ‘outboarding’ practices. Employees who had successfully completed the open hiring program were typically encouraged to leave and were supported in their job search. This created space for a new hiree entering the practice and to give another person a chance. Good-Ark’s leadership took care to protect employees’ spiritual wellbeing from economic pressures. For instance, production was halted to address a perceived crisis in employees’ spiritual wellbeing, which had resulted in widespread gambling problems. Allsafe’s long-term feasibility practices can be summarized as practicing cautious growth. A shared perception among Allsafe’s employees was that too quick growth was threatening the company’s ability to practice eye-level-management and to give people freedom to act with responsibility. New employees were perceived to require considerable time to fully adjust to Allsafe’s unique style of work, or to decide they could not adjust and to leave voluntarily. Cautious growth practices took manifold form. Customers who did not harmoniously align with Allsafe’s values were rejected. eye-level practices were carefully cultivated in new employees to ensure they were also practiced in a new second facility close to Berlin.

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External performativity through disseminating practices

We also found several themes of practices whose performative effect was to the outside of the companies that had given rise to them. Spreading new practices, once they have been stabilized in locally came with additional efforts and new challenges for realizing practices' wider performativity. The externally performative practices were aimed at helping the humanistic core practice to strike root in new companies and new commercial contexts or locations. In 2017/2018 both Greyston and Allsafe faced a challenge in the form of transferring their practices to the first newly opened branches. Allsafe opened the second production facility in Berlin and Greyston built a new bakery in the Netherlands. A second type of practice dissemination consisted of other organizations adopting the humanistic core practices in their own context, independently from Greyston, Good-Ark, and Allsafe.

A key accompanying practice was the provision of materials describing practices, such as Greyston Founder Bernie Glassman's "Instructions to the cook" (Glassman & Fields, 2010), Good-Ark's Confucian training materials, and Detlef Lohmann's management bestseller "... and by lunch time I go home" (Lohmann, 2014). A similar practice was the production of practice-describing videos and documentaries, such as Greyston's TED talks, Good-Ark's broadcasting channel, and Allsafe's documentary 'Augenhöhe'. Both accompanying practices made the humanistic core practices visible to a wider audience and sparked other organizations interest in adopting the humanistic practices themselves.

The performative practice above, attracted attention, which was then directed to two related practices. First, all three companies regularly hosted company and researcher visits, almost like a living museum for others to learn about their practices, and to possibly adjust and transplant the practices to other contexts and locations. This often led to collaboration with NGOs, such as Greyston's partnership with the Dutch Start Foundation adjusting open hiring to and promoting it in the Netherlands. Good-Ark collaborates with the Chung Hua Cultural Education Center in Malaysia to teach their practices. All three companies' intensive collaboration with researchers studying the humanistic practices are another salient example.

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Secondly, all three companies also engaged in training the employees of other companies interested in adopting their respective humanistic practice. Greyston provided corporate trainings through the Center for Open Hiring. They also registered an open hiring trademark, to control the quality of open hiring practices elsewhere. Good-Ark is at the center of a network of Chinese, Singaporean, and Malaysian companies, together learning practices based on Confucian principles. Allsafe had been working with several multinational German companies interested in adopting Allsafe's eye-level management model.

CONCLUSIONS AND DISCUSSIONS

The purpose of this paper was to better understand the potentially performative role of practices that accompany humanistic core practices, together forming an intimately entangled performative bundle of practices. We found that the performativity of humanistic practices depended on such bundles. We identified two types of practices each fulfilling a distinct type of performative role. Enabling practices fostered initial performativity, a 'proof of concept'. Such practices fostered feasibility of the humanistic practices in the local context of the company which they emerged in. These practices showed that 'it can be done because it has been done' (Dierksmeier, 2011).

Disseminating practices instead contributed to the performativity of humanistic practices by enabling their transfer to new contexts. Disseminating practices increased the verisimilitude of the humanistic practice in the more general reality of a larger population of businesses. With every new organization adopting a humanistic practice, performativity increased as the degree of verisimilitude with which the practice's underlying assumptions were true in the business reality grew. We contribute to both, the emerging discussion of performative practices 'in the wild' of organizational realities, and to the discussion of the dissemination of humanistic practices aimed at the ultimate goal of creating a humanistic economy.

To the performative practices discussion we offer an additional grounding in the sociology of practice's rich conceptual world of bundles of heterogeneous practices (Gherardi & Nicolini, 2002; Nicolini, 2009; Schatzki, 2002). Different to the extant performative practices literature which is centered on individual

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performative practices of one type (Cabantous & Gond, 2011; Kornberger & Clegg, 2011; Turnhout et al., 2010), we pilot and suggest further research of the performative role of bundles of practices. Such research could, for instance, study the shared meanings, materials, and competences (Shove, Pantzar, & Watson, 2012) necessary for the enactment of such bundles of performative practices. This may include to study the ‘theorists in the wild’, all of whom were CEOs, including their motivations and values (e.g. Fu, Tsui, Liu, & Li, 2010; Waldman et al., 2006), but also by others enacting practices. Further research may also zoom into the bundles (Nicolini, 2009) to scrutinize the distinct performative implications of distinct patterns, or constellations of the practices in these bundles (Gherardi & Nicolini, 2002).

Secondly, we contribute to the discussion of humanistic management. We create an alternative to humanistic management’s implicit assumption that academics come up with new theories of doing humanistic management, which then have to be transferred unilaterally into managerial practice(s) (e.g. Rynes, Bartunek, & Daft, 2001). Theories of humanistic management can well emerge in practice and be proved through practice; no academic intervention required. We also connect to the notion that humanistic management can be done because it has been done (Dierksmeier, 2011), but go beyond it by creating an appreciation of how to do it and make it real through performative practices. Resourcing theory’s concept of ampliative cycles in the prosocial behavior context (Feldman & Worline, 2011) may help us to better understand the sequencing and iterative nature of the process that increases the humanistic core practices verisimilitude, and that makes them ‘increasingly real’. By introducing the conceptual lens of performativity to the humanistic management discussion we envision to create a similarly rich discussion to the one of the performative project of critical management (Cabantous, Gond, Harding, & Learmonth, 2016; Leca, Gond, & Barin Cruz, 2014; Spicer, Alvesson, & Kärreman, 2009).

The idea of bundles of performative practices creating protected environments where practices can survive and thrive in spite of their contradictions with the accepted and taken-for-granted business reality closely resembles the idea of niches in the sustainability transitions discussion that are protected from the ‘regime’ (Geels, 2002; Geels, 2005; Voß, 2014). Further research might bring those two discussions

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together by studying how bundles of performative practices create niches protected from the regime of mainstream economic logic, according to which they cannot exist. It might study how humanistic practices ‘grow legs’ to spread further and to possibly even lead to transition processes in the larger economic system. Finally, all of these insights of the performativity of practices that contradict taken-for-granted assumptions about managerial reality may lead to further research in the variety of lenses that promote management at odds with the current reality. This includes, among others, sustainability management, responsible management, and a variety of other alternative management paradigms (Battilana, Sengul, Pache, & Model, 2015; Hahn, Pinkse, Preuss, & Figge, 2014; Jay, 2013; Parker, 2002; Parker, Cheney, Fournier, & Land, 2014; Van der Byl & Slawinski, 2015).

Third, our study also holds important implications for practitioners involved in creating and disseminating new practices, theorists in the wild, just like Bernie Glassman, Nianbo Wu, and Detlef Lohmann. Our findings suggest that the success of these performative endeavors depends on the successful construction of a performative bundle of accompanying practices. Enabling bundles of practices are like the nurturing soil of a tree sapling. Disseminating practices can be considered to produce the root ball that has to be transferred with a tree when it is to be moved to a new location. We provide insights for practitioners as to what types of accompanying practices they might want to construct to increase the performative potential of their humanistic core practices.

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Table 1: Comparative Cases' Baseline Information

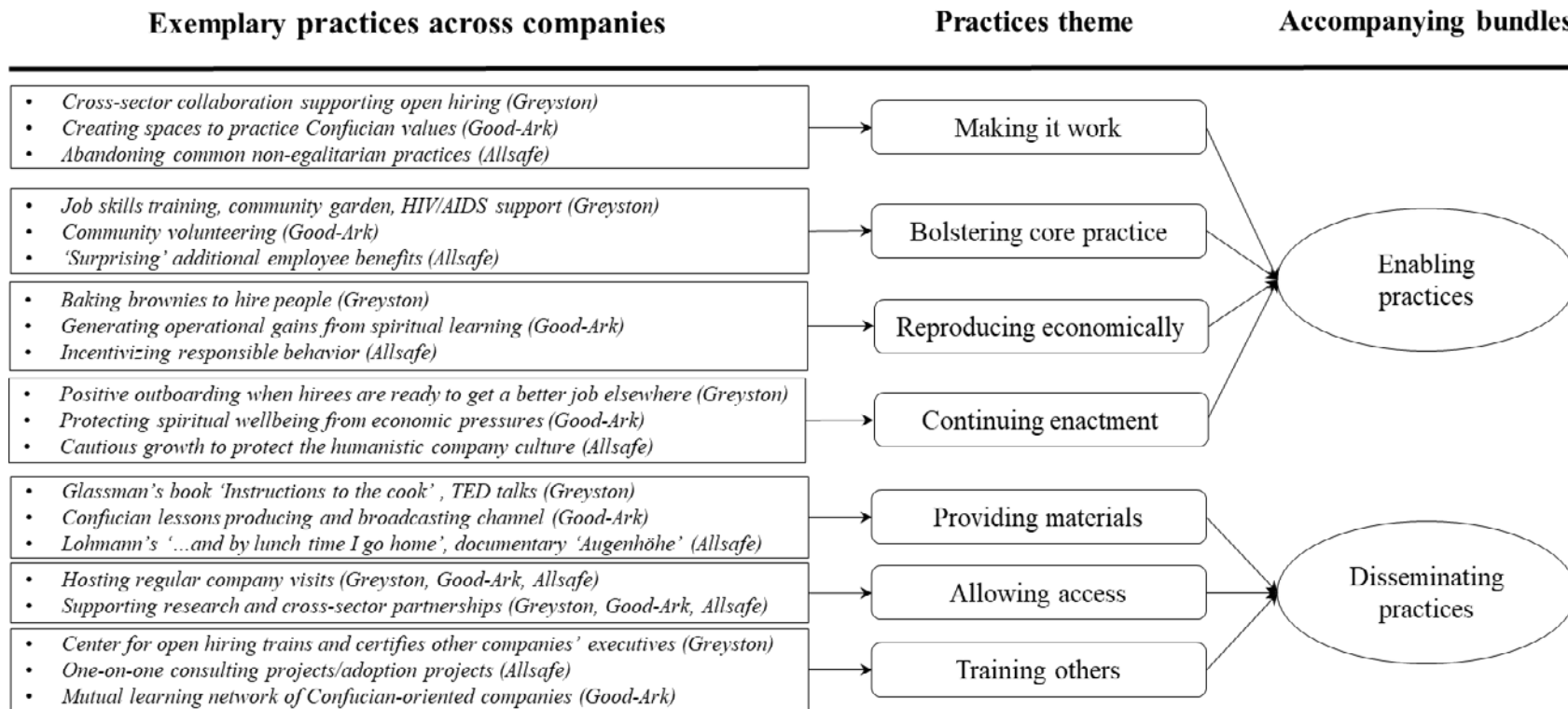
	Greyston	Good-Ark	Allsafe
Industry/ products	Foods/ Brownies	Technology/ Semi-conductors	Automotive and aerospace/ load restraints and fixtures
Location	Yonkers, New York City USA	Suzhou, Zhejiang province China	Engen, southern Germany
Size (employees/ revenues in 2017)	148/ 19 million Euros	1282/ 247 million Euros	260/ 62 million Euros
Interviewees/ individual/ group interviews	11/11/2	26/30/4	72/72/4
Exemplary interviewees' positions in company	Trainee, bakery team supervisor, social case worker, key account manager Ben & Jerry's, director center for open hiring, managing director, chief executive officer	Factory worker, human resources manager, middle manager, frontline manager, vice president Happy Enterprise Promotion, vice president Operations, company chairman	Cleaning staff, temporary worker, assembly worker, team coach, human resources manager, head of production, director organizational development, owner, general manager

Table 2: Performative Humanistic Core Practices across Companies

	Greyston	Good-Ark	Allsafe
Commercial reality/ norm →humanistic deviation from norm	Employer identifying find 'most valuable' employees →Employee self-selection no questions asked	Instrumentalization of employees' as means ('human resources') →Employee wellbeing as end	Employees control for maximum performance →giving employees freedom will lead to responsibility
Core humanistic practices	<i>Open hiring:</i> Hiring anyone putting themselves on Greyston's list without any background checks: -Receiving prospective hires spontaneously -Only asking for hires work permission, nothing else	<i>Humanistic spiritual development:</i> Educating employees in the life lessons of Confucian philosophy: -Teaching and discussion of Confucian philosophy -Sharing a phrase of Confucian wisdom a day with a co-worker	<i>'Augenhöhe' (eye-level) organizing:</i> Promoting employees' freedom and responsibility to decide and act: -Employees' self- permission (to spend money, vacation time, etc.) -Self-directed work (working hours, joining teams/ projects)

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Figure 1: Accompanying Performative Practices



01. Conference theme
Interactive session

**Exploring the cognitive schemas of traditional business models as barriers to
uptake of sustainable business models**

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Exploring the cognitive schemas of traditional business models as barriers to uptake of sustainable business models

ABSTRACT: *Radical business model transformation is required to meet the challenges facing our environment and society. A growing research area in sustainability has focused on intentional integration of sustainability into business models. However, actors embedded in traditional businesses must also transform their business models to accelerate system transformation. This research explores the cognitive schemas of actors embedded in ‘traditional’ business models, and the influence of market and sustainability logics on these schemas. I posit that traditional business model schemas are acting as a barrier to the consideration of sustainable business models. The research method will comprise a literature review and two experimental studies.*

Keywords: Sustainability; new organizational forms, business model innovation, managing for the common good

BUSINESSES ROLE IN RESPONDING TO SUSTAINABILITY CHALLENGES

Globally, significant environmental and social pressures will impact the way our societies are able to operate over the coming decades and into the future (Brundtland, 1987; GRI, United Nations: Global Compact, & wbcSD, 2015). In response, global agreements, commitments, and requirements are being established, such as the UN’s Sustainable Development Goals and the Paris Agreement on Climate Change. These initiatives are intended to be responded to not just by governments, but also civil society, and, importantly, business (Scheyvens, Banks, & Hughes, 2016).

Some businesses are aware of these challenges and that there is a role for business to play; however, the current approaches are insufficient. Schaltegger, Hansen and Ludeke-Freund argue that, ‘the usual approaches to sustainable development of philanthropy, corporate social responsibility, and

technological process and product innovation are insufficient to create the necessary radical transformation of organizations, industries, and societies toward genuine, substantive sustainable development’ (2012, p. 3). Bocken and her colleagues suggest that such approaches are added to organisations to counteract negative environmental and social impacts, and that changes are instead required ‘at the core of the business model’. Many scholars share this view that business needs to transform from its present way of interacting with the environment and society (e.g. Baumgartner, 2013; Scheyvens et al., 2016; Sondejker, Geurts, Rotmans, & Tukker, 2006).

Business models substantially influence activities and relationships in society. They shape workplaces, how goods and services are consumed, and relationships along the whole value chain from resource extraction, through manufacture, distribution, use and disposal. (Demil, Lecocq, Ricart, & Zott, 2015). The design and choice of business model therefore has implications for the degree of positive or negative impact a business has on society and the environment. This means that businesses can actively contribute to creating a future that is fairer, healthier, and happier for all people and that protects and enhances our relationship with the natural environment (wbcSD, 2010). Research into sustainable business models, which seek to reduce negative impacts and contribute positively to the environment and society, is increasing (Stefan Schaltegger, Hansen, & Lüdeke-Freund, 2016). More research is needed to understand how these approaches are different from traditional business models and what barriers to uptake exist (Dentchev et al., 2018).

The study of business models as cognitive schemas has been identified as a key stream of research that explores simplified business model representations held by managers (Massa, Tucci, & Afuah, 2017). Schemas are shaped by institutions (DiMaggio, 1997), and therefore traditional business model schemas reflect the ‘market logic’ (Thornton, Ocasio, & Lounsbury, 2012) permeating most industries and businesses today. The relationship of institutions to schemas suggests that a combination of the cognitive application of traditional schemas and the reinforcing pressure of market logic may act as a barrier to consideration and uptake of alternative business models.

In this paper I explore the influence of market and sustainability logics on business model schemas. I focus on the cognitive schemas of management consultants in the “Big 4” (i.e. EY, Deloitte, KPMG, and PwC) who work with New Zealand and Australian businesses in the retail sector. I consider the following research questions:

1. What content and structures are common in business model schemas held by management consultants working from the perspective of each of market logic and sustainability logic?
2. How do market and sustainability logics influence the choice of potential business models?

The paper is structured as follows: In the first section I present a summary of key theories and concepts from cognitive schemas in business model research and institutional logics. I then outline my planned methodology to address the above research questions through literature review and experiment. Finally, I provide a brief discussion of my expected findings and contributions from the research.

SUMMARY OF KEY CONCEPTS

Business models as cognitive schemas

Cognitive processes in business model design include the use of well-known 'industry recipes' or schemas (Schneckenberg, Velamuri, & Comberg, 2018). Martins et al. (2015, p. 105) define business model schemas as ‘cognitive structures that consist of concepts and relations among them that organize managerial understandings about the design of activities and exchanges that reflect the critical interdependencies and value creation relations in their firms’ exchange networks’. In other words, a business model schema is comprised of content (key organisational concepts or activities) and how the content is connected within the boundaries of the organisation and to its value chain (structure).

Descriptions of business models in the literature provides insight into the content and structure that may be most commonly contained in business model schemas. The details of business models are

often grouped into activities or relationships for value proposition, value creation and distribution, and value capture. For example, Chesbrough and Rosenbloom (2002) suggest the business model articulates a value proposition; describes the value chain structure and place of the organisation within the chain; and cost structure and profit capture. Amit and Zott (2010) and Doz and Kosonen (2010) also focus on the creation of financial value, as well as governance and internal structures. Magretta (2002) considers value and cost from the perspective of the customer, and how financial value is captured for the firm. From a sustainability perspective, Schaltegger, Hansen, and Lüdeke-Freund (2016) agree with the key business model structure, however they expand the concept of value to include value to stakeholders and natural and social capital. This suggests that a wide view of value is not likely to be contained in traditional business model schemas.

To reduce cognitive load when making decisions, individuals automatically draw on and apply schemas (Louis & Sutton, 1991). However, while schemas enable more efficient decision making (Laureiro-Martinez, 2014; Thorngate, 1980), they may also result in ‘impoverished views of the world’ (Weick, 1979, p68 as cited in Walsh, 1995). For example, the literature identifies that understanding of external changes may be hindered as a result of the use of schemas (Walsh, 1995). However, the individual may be provoked into active thinking (Poole, Gioia, & Gray, 1989). The provocation may arise from social facilitation (Walsh, 1995), or deliberate initiatives to prompt active thinking (Louis & Sutton, 1991).

Previous literature has explored on managers’ cognitive bias towards established business models. For example, Tripsas and Gavetti (2000) investigated Polaroid management’s inability to change its cognitive frame away from the existing model to adopt newer technologies and ways of operating. Similarly, Chesbrough and Rosenbloom (2002) found that Xerox would evaluate new technologies from the perspective of the established copier business, and as a result missed out on value creation from new technologies that needed to operate in different ways. This literature demonstrates interest in the impact of business model schemas on the ability, or inability, of organisations to consider alternative business

models. However, it doesn't explore the impact of institutional logics on business model schemas, nor does it provide insight into how business model schemas might better reflect sustainability objectives.

Institutional logics

A key stream of research in institutional theory is 'institutional logics', which are made up of and reinforce shared values, beliefs and practices. Thornton and Ocasio describe institutional logics as 'the socially constructed historical pattern of material practices, assumptions, values, and beliefs and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality' (1999, p. 804). This results in institutional logics influencing the content and structure of business model schemas to reflect accepted patterns and beliefs. However, the institutional logics approach does recognise and allow for the influence and interaction of multiple institutional logics from different areas of our lives (Thornton et al., 2012).

Some researchers have explored the impact of multiple logics interacting, including how these may result in different organisational forms. This line of research follows Friedland and Alford's (1991) argument that society is comprised of multiple institutional logics that together influence individuals' decision-making in different ways. The literature includes examples of businesses that reflect other logics in addition to the market logic. For example, community banks combine community and market logics (e.g. Almandoz, 2012) and social enterprises may combine social welfare and market logics (e.g. Battilana & Dorado, 2010). These examples are of the intentional combination of multiple logics, and result in reduction in the importance of the market logic.

In the absence of the deliberate introduction of an alternative logic, business model schemas are likely to be dominated by market logic. Thornton (2018) describes market logic as including market capitalism, competitive relationships, a focus on profits and cash flow. Glaser et al. found that decision-making in a market logic may be influenced by other logics, and 'thus [is] more open to correction, than once thought' (2016, p. 38). This suggests there is an opportunity to influence market logic even in

instances where the actors are not intentionally combining logics. However, if the sustainability logic is to be influential, it must be activated at the point of decision making (Thornton et al., 2012).

The sustainability logic has been described as identifying humanity, society and the environment as key stakeholders, and having governance objectives of being inclusive, equitable and restorative (Laasch, 2017). It is this the influence of this logic that I will explore in this research. The characteristics of the market and sustainability logics are summarised in Table 1.

Insert Table 1 about here

Summary

To respond to the significant environmental and social pressures facing society, businesses must transform their core business models. Business models generally describe activities or relationships for value proposition, value creation and distribution, and value capture. Simplified forms of these models are held in the minds of managers as schemas. The business model schema literature has explored how managers are influenced by established schema, however it does not consider the role of institutional logics on the content, structure, or activation of those schema. As the dominant logic, market logic shapes traditional business model schema; nevertheless schemas may be influenced by other logics.

METHOD

The purpose of this research is to explore how business model schemas are influenced by market and sustainability logics. The methodology will comprise three phases - a literature review and two experimental studies - and will be undertaken from a critical theory perspective. The literature review and first study will address research question 1. The second study will address research question 2.

Literature review

The literature review will inform the potential content and structure of business model schemas, for both the market and sustainability logics. Business model literature has been expanding rapidly over recent years (Massa et al., 2017), and thus provides a rich source of data for this task.

As sustainability by its nature is multidisciplinary, a wide range of databases will be used for the search (Papaioannou, Sutton, Carroll, Booth, & Wong, 2009). This will include: SAGE Journals, EBSCOHost, Taylor & Francis, SpringerLink, ProQuest Central, Emerald Insight, Scopus, and ScienceDirect. Key terms will be: business model components (or similar, e.g. elements, content, structure); business model definitions; sustainable business models; sustainable business model definitions; hybrid models; and shared value. As management reviews are exploratory in nature (Tranfield, Denyer, & Smart, 2003), the terms will be refined as the search progresses.

Review articles, and particularly those that collate definitions, will be used as a key source of data. In particular, this will utilise the archetypes introduced by Bocken et al. (2014), and further developed in Bocken et al. (2016), Lüdeke-Freund et al. (2016), and Ritala et al. (2018). Relevant additional articles will then be identified through a review of abstracts and key terms. Reference tracking and snowballing (Arshed & Danson, 2015; Booth, Carroll, Ilott, Low, & Cooper, 2013), will be used to expand the set of relevant literature. I will stop the search when it is no longer yielding significant additional data on business model content and structure (Petticrew & Roberts, 2006).

Once I have captured relevant data from the literature, I will develop a business model structure from common elements in the research. I will then synthesise the content results into categories of terms to represent potential content. This will form the basis of Study 1, when experiment participants will arrange the potential elements into business model schemas.

Experiments

Fundamental logic experiments are used to provide direct insight into theory (Bitektine, Lucas, & Schilke, 2018). Like other experiments, fundamental logic experiments establish causality (Schilke, in-press) through the setting of independent variables prior to dependent variables (Webster & Sell, 2017), however they differ in avoiding approximating natural settings that may interfere with tests of the theory (Bitektine et al., 2018). The use of experimental games, for example, have limited external validity, but can instead provide insight into schema development (Walsh, 1995). In addition, experimental research is

used in institutional theory research (Bitektine et al., 2018; Zucker, 1977), such as Glaser et al.'s (2016) investigation of the influence of two logics on varying effort in undertaking tasks. Therefore, this is an appropriate method to explore the relationship of institutional logics on business model schemas.

The research participants must meet four key criteria. Firstly, it is important that the participants have business model schemas in their minds, and therefore must be management professionals with experience of how organisations operate. Secondly, they must be working with organisations within the same sector to enable comparison of the schemas. Thirdly, they must be working in either a dominant market or sustainability logic. Finally, they must be accessible to provide a sufficient number of experiment participants. To meet these criteria, the research participants will be general advisory consultants and sustainability advisory consultants in 'Big 4' management consulting firms (i.e. EY, Deloitte, KPMG, PwC), that work with clients in the retail sector in New Zealand and Australia. Information will be captured to control for age, gender, and level of experience.

The studies will be undertaken online. While this approach has some drawbacks such as reduced control over how powerful the manipulations are, the benefits include a larger number of participants, and outweigh these drawbacks (Bitektine et al., 2018). In addition, a common weakness of online experiments is the familiarity of participants with the experimental process due to online communities who typically participate (Bitektine et al., 2018). In this research participants are from particular firms and roles, and are not likely to participate in many online experiments.

The following sections outline two studies that will explore the content and structure of traditional and sustainability business models. I will run a pilot experiment to test the proposed approach.

Study 1: Content of business model schema

The purpose of Study 1 is to extract the business model schemas held by general advisory consultants and sustainability consultants. That is, for the participants to identify the content and relationships of what they deem to be appropriate business models. The participants will be asked several

questions to confirm they are in the dominant market or sustainability logic, as appropriate. They will read a vignette of a client wishing to establish an organisation in the retail sector in Australia or New Zealand, and will be given potential components of a business model as identified from the literature review (see example in Table 2). The participants will be asked to arrange the components into 2-3 business models they would recommend to the client. The models provided will be analysed for common content and structure under each institutional logic. They will then be synthesised into three business models for each institutional logic.

Insert Table 2 about here

Study 2: Influence of logics on business model schema

This Study will build on the business model schemas developed in Study 1. The purpose of this Study is to investigate the influence of market and sustainability logics on business model advice from general advisory consultants. The experiment will be in a 3 x 3 format (see Table 3). It will comprise a market logic, sustainability logic, and a control; and a client objective that reflects the market logic, sustainability logic, or is not stated. Participants will be encouraged to perform through a statement that this is the first project they will be undertaking as a new employee in an established firm and as leader of their team. Additionally, the participants will be told that this is the first project for this client and there is potential for repeat work. This covers the potential individual drivers of the consultants. I will screen participants from Study 1 out of Study 2.

Insert Table 3 about here

The first task of the experiment will be to prime the participants with an institutional logic. I will use an induction video for a consulting firm the participant has ‘just joined’. This is the approach used by Lucas (2003), which found that participants shown induction videos that highlighted female leadership qualities were more likely to defer to female leaders in subsequent activities. In my research the prime for the market logic will refer to: the firm’s market share; the market capitalisation of its clients; the

organisational hierarchy; and sectors clients work in (such as ‘the sectors we work in include food and beverage, medical, and construction’). The prime for the sustainability logic will refer to: the organisation’s values and objectives of having a positive impact on society and the environment; and client sectors described in sustainability-oriented terms (such as ‘our clients provide nutrition, support health and wellbeing, and construct homes for our society’). The control group will have no induction video.

The participants will read a vignette of a client they are assisting to develop a business model. They will be provided with a series of business models; 3 each representing the market and sustainability logics, developed from Study 1. The participants will be told that their team members can speak to each of the business models so the decision does not reflect a fear of not being able to present a business model that may be less familiar. The participants will choose and rank 2-3 of the 6 possible business models to present to the client. A control question will be inserted to ensure participants have observed the logic and are following instructions.

DISCUSSION AND CONCLUSION

To respond to the significant environmental and social pressures facing society, businesses must transform their core business models. This means considering the goods and services provided to the market, impacts in the creation of those goods and services on the workforce and the environment, and how the value created is captured and shared. However, despite awareness on the need for this change, there has not been a significant shift among businesses. I suggest this is in part due to the business model schemas held by sector actors that reflect market logic to the exclusion of sustainability logic.

My first aim in this research is to identify commonly held business model schemas. Individuals hold personal schemas based on their own specific knowledge and experience; when groups are brought together, these form into collective schemas (Walsh, 1995). By identifying the common elements of the models developed by the research participants, I am seeking the key content and structure of these

collective schemas. Due to the two participant groups representing market and sustainability logics, I anticipate fundamental differences in the schemas developed by these groups.

My second aim of this research is to investigate the impact of market and sustainability logics on business model choices. In Study 2 I expect to see some uptake of sustainable business models where participants have been primed with the sustainability logic and been instructed that the client is interested in sustainability. I expect the uptake of these models to decrease for the groups with only one of those conditions (sustainability logic or client interest), and further decrease with the combination of market logic priming and client focus. These results would show that the priming of the sustainability logic influences the business model schemas and can lead to different advice being provided to clients. Alternatively, if no significant difference is found, it will demonstrate the strength of the market logic and associated schemas of the participants.

In Study 2 I seek to understand if the prompting of the sustainability logic can influence business model decisions. I do not seek to change the business model schemas of the participants. That is, Study 2 will invoke a temporary institutional logic for participants in the sustainability group; it is likely that the ‘chronic’ market logic will become dominant again (Thornton et al., 2012). This temporary logic is of interest because while the literature has shown that cognitive structures change over time with ongoing exposure (Walsh & Charalambides, 1990), in the short-term opportunities may be missed due to unconscious application of business model schemas that reflect current market logic. This research may therefore provide managers with insights into the efficacy of ‘priming’ teams with desirable logics prior to decision-making.

The theoretical contribution of this work is a more detailed understanding of the relationship between institutional logics, which provide the broad structure and direction for expected behaviour, and cognitive schemas, that are more narrow and specific (Thornton et al., 2012). This research also responds to calls both for greater focus on micro-foundations of institutional theory (Powell & Rerup, 2017;

Thornton et al., 2012), and the use of experiment in developing institutional theory (Bitektine et al., 2018; Zucker, 1977).

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TABLES AND FIGURES

Table 1 Institutional logic characteristics (Source: Laasch, 2017)

Characteristic	Market logic*	Sustainability logic
Reference institutions	Capitalist market system	Supra-national organisations, e.g. United Nations
Conceptual basis	Capitalism, neoclassical economics	Sustainable development, Brundtland Report, international development
Human characteristics	Opportunistic, self-interest-driven, seeing others as means to an end	Relational and caring, concerned with needs of oneself, others and humanity as a whole
Main stakeholders	Customers, shareholders	Humanity, society, environment
Basis of interaction	Contractual responsibilities, market exchange, competition	Moral responsibilities, multi-stakeholder exchange, collaboration
Environmental relationship	Exploitation, natural environment as input	Conservation, natural environment as a good
Type of value	Financial	Environmental, social, economic
Normative goal	Maximization of financial value and economic growth	Balancing and sustaining environmental, social and economic value
Time horizon	Short to medium run	Long run
Governance criteria	Efficient, effective, profitable	Inclusive, equitable, restorative
Orienting parameters	Price, cost, revenue, margin	Triple bottom line, resource conservation and replenishment
Reference publications	Friedland and Alford (1991); Pirson and Lawrence (2010); Thornton and Ocasio (2008)	Brundtland (1987); Dyllick and Hockerts (2002); Kates et al. (2005); Stubbs and Cocklin (2008)

*Laasch (2017) refers to this as commercial logic.

Table 2 Example structure and content options for participants to create business models

Value proposition	Value creation and distribution	Value capture
Product / service, customer segments and relationships	Key activities, resources, channels, partners, technology	Cost structure and revenue streams
Product longevity Product sharing End of life product take back	Lean manufacturing Reduce, reuse, recycle, re-manufacture Renewable resources Collaborative sourcing, production Licensing or franchising	Shareholder Partnership Not for profit Cooperative Social enterprise

Table 3 Experiment structure

Logic	Client objective		
	Market	Sustainability	Not stated
Market			
Sustainability			
Control			

03. Gender, Diversity and Indigeneity
Competitive Session

**Perceptions of gender diversity initiatives
— A case study of a Japanese hotel chain**

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Perceptions of gender diversity initiatives — A case study of a Japanese hotel chain

ABSTRACT: *This paper investigates the impact of initiatives to improve the position of women in a Japanese hotel chain. Improvements in the position of women in Japanese companies are becoming critically important in a very male dominated society where the working population is falling. Using a sample of 4,038 employees we demonstrate that two initiatives to improve the role of women – equal opportunity and work-life balance – both increase the engagement of employees and reduce intention to leave. The results show that perceptions of gender diversity initiatives not only directly lower turnover intentions, they also indirectly reduce turnover intentions by increasing engagement.*

Keywords: diversity management, gender diversity initiatives, equal opportunity, work-life balance, engagement, turnover intentions

Introduction

The concept of diversity management is garnering attention in the rapidly changing business environment and workplace transformations as a way to secure and maintain top-quality human talent (Pitts, 2009; Taniguchi, 2008; Tanikawa, 2012). Diversity management for companies can be defined as ‘the comprehensive process of constructing an environment where all employees can function effectively’ (Thomas, 1991, p. 10). This paper investigates the impact of gender diversity initiatives to improve the position of women in a Japanese hotel chain. Gender diversity initiatives is diversity-focused initiatives with an emphasis on gender diversity, which ensure gender diversity and provide an environment where women’s well-being is actively promoted (Ali, Metz, & Kulik, 2015).

Improvements in the position of women in Japanese companies are becoming critically important (Eweje & Sakaki, 2015; Kobayashi, Eweje, & Tappin, 2018) in a very male dominated society

(Magoshi & Chang, 2009) where the working population is falling (OECD, 2018) and there is a need to use all of the talent available. Half of women quit jobs after their first child (Gender Equality Bureau, Cabinet Office [Japan], 2017). Correspondingly, the average proportion of female managers in Japanese companies remains under 1:10, in comparison to the OECD average of 3:10 (World Economic Forum, 2015). As it is difficult for women to achieve time with their children and be equally promoted (Eweje & Sakaki, 2015), this paper focuses on two particular initiatives – improving work life balance and equal opportunity (Eweje & Sakaki, 2015).

In this context, this study sets a research question: Do initiatives to improve the role of women increase engagement hence reduce turnover intentions? This study explores the relationship between perceptions of gender diversity initiatives, engagement, and turnover intentions by using internal materials, interviews, employee satisfaction surveys, and human resources data of a hotel chain company in Japan.

The structure of this paper is as follows. The next section sets the hypotheses through a review of the existing literature. Section 3 presents the study's methodology. Section 4 presents the results and Section 5 discusses the results. The last section outlines the study's significance along with conclusions and future research directions.

Hypothesis Formulation

Based on social exchange theory, engagement and turnover intentions can be utilized as variables to measure the level of employee reciprocity where the company's gender diversity initiatives and

measures are perceived favorably by its employees. The following sections draw on the existing relevant literature to formulate hypotheses.

Perceptions of Gender Diversity Initiatives and Employee Turnover Intentions

Employee perceptions of diversity management are based on how individual employees understand the organization's actual diversity management policy and initiatives (Ashikali & Groeneveld, 2015; Bowen & Ostroff, 2004; Gilbert, De Winne, & Sels, 2011; Guest, 1997; Nishii & Mayer, 2009).

Turnover intentions are one outcome of how diversity management is perceived. Turnover intention refers to 'one's desire or willingness to leave an organization' (Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003, p.918).

Research based on social exchange theory also shows that employee perceptions of diversity management within the organization directly and indirectly suppress turnover intentions (Buttner et al., 2010; Tekleab, Takeuchi, & Taylor, 2005). When employees have a positive impression about diversity management, they reciprocate by staying with the company. Buttner et al. (2010), for example, find that perceptions of diversity management have a direct suppressing effect on turnover intentions. When gender diversity initiatives were in place, employees responded positively and thus higher gender diversity resulted in lower turnover because employees see that the organization facilitates gender diversity by providing an inclusive environment (Ali et al., 2015) Based on the above, the following hypothesis can be formulated.

Hypothesis 1: Employee perceptions of gender diversity initiatives have a negative effect on employee turnover intentions.

Perceptions of Gender Diversity Initiatives and Engagement

In the context of social exchange theory which indicates that perceptions of diversity management have not just direct, but also indirect effects on turnover intentions (Buttner et al., 2010; Tekleab et al., 2005), engagement may play a significant role in the mechanisms at work between the two. Here ‘engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption’ (Schaufeli, Salanova, González-Romá, & Bakker, 2002, p.74). Vigor is a state of high energy with respect to one’s work, with the ability to persist in the face of difficulties. Dedication refers to feelings of significance and enthusiasm and a sense of challenge in one’s work. Absorption is ‘characterized by being fully concentrated and deeply engrossed in one’s work, whereby time passes quickly, and one has difficulties with detaching oneself from work’ (Schaufeli et al., 2002, p.75). The state characterized by the above three elements is defined as engagement.

In social exchange theory, engagement functions as a way for one to repay the organization in exchange for the career and social support that one has received (Cropanzano & Mitchell, 2005; Downey et al., 2015; Maslach et al., 2001). Noting the lack of academic research regarding engagement, Saks (2006), based on social exchange theory showed a positive causal relationship between employees’ perception that initiatives are supportive of them and higher levels of engagement. The positive effect of employee perceptions of diversity initiatives on engagement has also been documented by Downey et al. (2015). In social exchange theory, there is the positive effect

of employee perceptions of gender diversity initiatives such as work-life balance and equal opportunity (an aspect of basic human rights) on engagement (Parkes & Langford, 2008; Albdour & Altarawneh, 2012). Accordingly, the following hypothesis can be derived.

Hypothesis 2: Employee perceptions of gender diversity initiatives have a positive influence on engagement.

Engagement and Turnover Intentions

Perceptions of company support through human resource management systems including diversity measures are said to have an indirect suppressing effect through engagement on turnover intentions (Karatepe, 2013; Saks, 2006).

Employee engagement can bring about positive results for the organization (Harter et al., 2002; Saks, 2006). In particular, engagement can have an effect on turnover intentions (Harter et al., 2002; Wagner & Harter, 2006). Schaufeli and Bakker (2004) and Karatepe (2011) show that employee engagement leads to lower turnover intentions. Accordingly, the following hypothesis can be derived:

Hypothesis 3: Engagement has a negative effect on employees' turnover intentions.

Methodology

Reasons for Selection of Company A

Company A, operating in the hotel industry, was selected as the research site for this study. The company operates dozens of luxury hotels across Japan. The reason for selecting Company A is that it is a leader in the field of diversity management in Japan. Specifically, the company has run a variety of diversity training programs for its upper management and workshops to support female career

advancement, as well as implemented systems to enable flexible working arrangements (a shorter working hours system, for example). These initiatives have been highly regarded by the government and the company has won awards in the field of diversity.

Data

The analysis utilizes the results of a 2015 employee attitude survey carried out in Company A. The questionnaire was administered to relevant Company A employees in the form of an online survey during November 2015. The responses were anonymous, and the questionnaire could be completed using devices located at the workplace or on the internet using a smartphone. Questions employed a 5-point Likert scale of the form ‘Disagree; Somewhat Disagree; I can’t say either way; Somewhat Agree; Agree.’ A path analysis was carried out in AMOS to verify the analysis model.

The number of valid responses to the 2015 survey was 4,038. 17.4% of the responses were from managerial positions employees and 82.6% from non-managerial positions employees. The age distribution of the sample was as follows: Under 20 (2.1%), 20s (32.0%), 30s (27.1%), 40s (21.2%), 50s (12.1%), and 60+ (5.5%). 53.3% of the respondents were male and 46.7% were female.

Measurement of the Variables

Based on the gender diversity initiatives in Company A, the questionnaire items related to gender diversity initiatives were measured from the two perspectives- equal opportunity (Albdour & Altarawneh, 2012) and work-life balance (Beauregard & Henry, 2009; Magoshi & Chang, 2009; Wang, Lawler, & Shi, 2011).

Equal opportunity is a basic human right where employees have equal access to opportunities (Albdour & Altarawneh, 2012; Ali, Nasruddin, & Lin, 2010; Ali, Rehman, Ali, Yousaf, & Zia, 2010) and refers to equal opportunity for advancement regardless of gender or age (Magoshi & Chang, 2009). Accordingly, it was measured by the following three questions: ‘Do you think that the advancement and promotion system is fair?’, ‘Do you think this company has a wealth of opportunities for advancement and promotion?’, and ‘Do you think this is a company where females can advance their careers?’

Work-life balance refers to aspects such as leave for family or personal reasons (childcare leave, paid leave) and organizational initiatives to support flexible working arrangements for employees (Beauregard & Henry, 2009; Estes & Michael, 2005). Accordingly, it was measured by the following three questions: ‘Is the atmosphere such that you can take paid leave?’, ‘Do you think that this is a company where you can continue to work even after having a child?’, and ‘Do you think that this is a company where females can continue to work even after getting married?’ (Beauregard & Henry, 2009; Magoshi & Chang, 2009; Wang et al., 2011).

Engagement comprises of the three elements of vigor, dedication, and absorption (Schaufeli et al., 2002). This was measured by six questions. Vigor was measured by the ‘Is your job enjoyable?’ question. Dedication was measured by the ‘Are you continually improving the quality of your work?’, ‘Are you working hard towards achieving your goals?’, and ‘Do you feel a sense of value and fulfilment in your current job?’ questions. Absorption was measured by the ‘In your current job, are

there times when you are so absorbed in your work that time flies by?’ and ‘Do you sense your ‘dream’ in your current job?’ questions (Schaufeli et al., 2002; Downey et al., 2015).

Turnover intentions were measured by two questions: ‘Do you want to change jobs?’ and ‘Do you want to leave the company?’ (Hwang & Hopkins, 2012; Laczo & Hanish, 1999).

Table 1 shows average values and standard deviations of each item.

Insert Table 1 about here

Confirmatory Factor Analysis Results

Confirmatory factor analysis (generalized least squares) was performed in AMOS. An analysis of a model which hypothesized covariance between the factors returned the following goodness-of-fit indices: $\chi^2=4313.676$, $df=301$, $GFI=.962$, $AGFI=.910$, $NFI=.910$, $CFI=.915$, $RMSEA=.047$, $AIC=5117.676$. A CFI of .900. Table 2 presents the inter-variable correlation coefficients.

Insert Table 2 about here

Results

A path analysis (generalized least squares) was conducted through a covariance structure analysis. Table 3 presents the result of the analysis. The goodness-of-fit indices were as follows: $\chi^2=4691.538$, $df=324$, $GFI=.958$, $AGFI=.910$, $RMSEA=.047$, $AIC=5449.538$ (Figure 1). The dummy variables for turnover intentions were: Number of years of employment (1st year, 2-3 years, 4-5 years, 6-10 years,

11-15 years, 16 years and over), Age (Under 20, 20s, 30s, 40s, 50s, 60s and above), Occupation (sales, kitchen, FB (food and beverage), reception, caddy, admin, esthetician), Division (Head Office, Hotel, Golf), Gender (Male, Female), and Employment Type (regular, non-regular).

Insert Table 3 about here

Insert Figure 1 about here

Work-life balance had a significant and negative effect on turnover intentions (-.196, p.<.001).

Equal opportunity was not found to have a significant effect on turnover intentions. Based on these results, Hypothesis 1 can be partially rejected. Equal opportunity had a significant and positive effect on engagement (.366, p.<.001) and work-life balance also had a significant and positive effect on engagement (.368, p.<.001). Based on these results, Hypothesis 2 can be supported. Engagement had a significant and negative effect on turnover intentions (-.501, p.<.001), thus supporting Hypothesis 3.

The results show that engagement had the strongest effect on turnover intentions.

Finally, Table 4 indicates indirect and total effects of the model. Equal opportunity did not have a direct effect on turnover intentions but did have an indirect effect, through engagement, on reducing turnover intentions. The indirect effect of work-life balance was of the same degree as its direct effect. Comparing equal opportunity and work-life balance, it can be seen that work-life balance had a larger total effect on decreasing turnover intentions.

Insert Table 4 about here

Discussion

These outcomes can be viewed in support of the existing social exchange theory research results which find that perceptions of diversity management increase engagement (Downey et al., 2015) and lower turnover intentions as a form of employee reciprocity (Saks, 2006). Especially, in Japan, where the culture is male-dominated (Magoshi & Chang, 2009), work-life balance and equal opportunity affect positive impact on engagement (Parkes & Langford, 2008; Albdour & Altarawneh, 2012) and lower turnover intentions as a form of employee reciprocity (Saks, 2006).

The work-life balance aspect of gender diversity initiatives directly reduces turnover intentions (Eweje & Bentley, 2006; Miller, Rutherford, & Kolodinsky, 2008). Furthermore, it has an indirect negative effect on turnover intentions through engagement. This shows that there are effects on two outcomes - turnover intentions and engagement - when employees are positively impacted by work-life balance. While equal opportunity is an aspect of basic human rights that increases engagement (Albdour & Altarawneh, 2012), it does not directly reduce turnover intentions, but affects them indirectly through engagement. This shows that employees who view equal opportunity in a favorable light have higher engagement through increased work-related motivation, thus resulting in lower turnover intentions. Conversely, this indicates that even if equal opportunity is practiced it will be difficult to reduce turnover intentions if employees' work-related motivation is not increased.

A comparison of the total effects showed that the effect of work-life balance was stronger than that of equal opportunity. This result can be interpreted as follows. Equal opportunities for advancement are a fundamental human right that must be provided to employees. Rather than directly reducing turnover intentions, it may be that, as shown in previous studies, this is a factor in increasing engagement. On the other hand, the need to address the issue of overwork and long-working hour in Japan has led to the need for increased work-life balance as one way to enable more flexible working arrangements (Kobayashi et al., 2018). Flexible working arrangements has also been demanded for women who got married and hold child (Eweje & Sakaki, 2015; Kobayashi et al., 2018). According to Company A's corporate planning department, the need is particularly high among the younger generations, meaning that whether or not work-life balance can be achieved is one of the keys to securing and retaining talent.

Based on interviews with Company A, one factor posited as a reason for the improvement in the perceptions of gender diversity initiatives was that top management took the initiative in promoting diversity training. Company A's gender diversity initiatives appears to have been strengthened by training that increased understanding among managers in the workplace.

Conclusion

This paper focuses on two particular initiatives – improving work life balance and equal opportunity. The results show that perceptions of gender diversity initiatives do not only directly lower turnover intentions, they also indirectly reduce turnover intentions by increasing engagement.

The theoretical significance of this study is based on the social exchange theory and clarifies the relationship between perceptions of corporate initiatives, such as diversity management, and turnover intentions, the results support the importance of engagement, as argued by Saks (2006). The practical significance of this study is that it used the example of a Japanese company to show the value of gender diversity initiatives, even though there are concerns whether this practice can actually lead to results. This study can contribute to the hotel industry in Japan from the perspective of talent retention, as Japan is facing a serious human resources shortage due to its decreasing birth rate and aging population.

This paper presents two directions for future research. First, the general applicability of the results has to be enhanced. In order to achieve this, Company A survey data from other periods should be used to investigate the relationship between perceptions of diversity management, engagement, and turnover intentions. Second, there is a need to address the common method bias. In order to address this issue, a model which includes turnover rate and turnover cost (discussed below), aggregated separately from Company A's survey and on a hotel-by-hotel basis, should be constructed and used as the dependent variables. Third, a variable representing the climate for inclusion needs to be in the model. Recent research has pointed out the need for a climate for inclusion due to the fact that diversity management can give rise to inter-group conflict (Nishii, 2013). Doing so should further serve to elucidate the mechanisms at work between perceptions of diversity management, the climate for inclusion, engagement, and turnover intentions.

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	Average Value	Standard Deviation
Do you think that the advancement and promotion system is fair?	3.403	1.114
Do you think this company has a wealth of opportunities for advancement and promotion?	3.671	1.102
Do you think this is a company where females can advance their careers?	3.772	1.030
Is the atmosphere such that you can take paid leave?	3.626	1.371
Do you think that this is a company where females can continue to work even after getting married?	3.499	1.143
Do you think that this is a company where you can continue to work even after having a child?	3.405	1.172
Do you want to leave the company?	2.427	1.305
Do you want to change jobs?	2.448	1.341
Is your job enjoyable?	3.812	1.001
In your current job, are there times when you are so absorbed in your work that time flies by?	3.721	1.149
Do you feel a sense of value and fulfilment in your current job?	3.758	1.028
Do you sense your 'dream' in your current job?	3.321	1.176
Are you working hard towards achieving your goals?	4.044	0.848
Are you continually improving the quality of your work?	4.030	0.834

Table 1: Average Values and Standard Deviations

	Work-life Balance	Equal Opportunity	Engagement	Turnover Intentions
Work-life Balance	-			
Equal Opportunity	0.597**	-		
Engagement	0.558**	0.564**	-	
Turnover Intentions	-0.491**	-0.342**	-0.611**	-

**p<.01

Table 2: Inter-Variable Correlation Coefficients

			Estimated Value	Standard Deviation	Probability
Engagement	<---	Equal Opportunity	0.366	0.018	***
	<---	Work-life Balance	0.368	0.03	***
Turnover Intentions	<---	Engagement	-0.501	0.021	***
	<---	Equal Opportunity			n.s.
	<---	Work-life Balance	-0.196	0.038	***
	<---	Golf	0.022	0.064	**
	<---	Hotel	0.06	0.031	***
	<---	Head Office			n.s.
	<---	Under 20	0.086	0.108	***
	<---	20s	0.23	0.066	***
	<---	30s	0.133	0.061	***
	<---	40s	0.053	0.06	***
	<---	50s			n.s.
	<---	1st year	-0.093	0.054	***
	<---	2-3 years			n.s.
	<---	4-5 years			n.s.
	<---	6-10 years	0.034	0.049	***
	<---	11-15 years			n.s.
	<---	Sales	-0.052	0.056	***
	<---	Kitchen			n.s.
	<---	FB	0.026	0.058	***
	<---	Reception			n.s.
	<---	Caddy			n.s.
	<---	Admin/Planning			n.s.
	<---	Esthetician	-0.057	0.052	***
	<---	Mnagement			n.s.
	<---	Regular Employee			n.s.
	<---	Male	-0.03	0.029	***

***p < .001, **p < .01

Table 3: Results of the Analysis

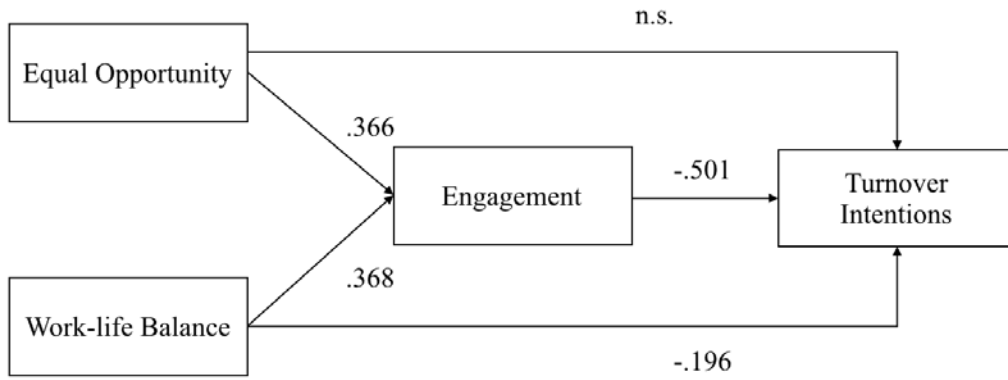


Figure 1: Results of the Analysis

	Direct Effect	Indirect Effect	Total Effect
Equal Opportunity	n.s.	-0.183	-0.170
Work-life Balance	-0.196	-0.184	-0.380

Table 4: Indirect and Total Effects

Stream Number: 14

Stream Title: Sustainability and social issues in management

Competitive Session

Title: Introducing family engagement in organizational practices for attaining the common good

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Introducing family engagement in organizational practices for attaining the common good

ABSTRACT

The paper explores a possibility through which employees and their families can be engaged in building work-family policies. A conceptual framework is proposed to amalgamate representatives from work and family domains of an employee develop work-family policies. While researchers have established that work-family policies positively relate to employees' well-being and organizational performance, there is ample research to indicate their improper implementation. It is expected that engaging all the relevant stakeholders in developing work-family policies will facilitate its better execution. The framework demonstrates that family engagements may vary from being information sharing to being participative. The paper also presents the levels at which family engagement may happen in organizations. Future research direction and implications are also discussed.

KEYWORDS

Family engagement, work-family policies, family supportive organizations, interventions to improve family engagement

Work-family policies are an essential area of human resource management which is receiving increasing attention from policymakers, researchers, organizations,, employees and their families globally. At micro level, work-family policies are identified as an important source for employees' wellbeing, higher motivation and commitment, job-life satisfaction, better quality of life, reduced turnover intentions (Bae & Yang, 2017; Frye & Breugh, 2004; Moen et al., 2016; Moen et al., 2017; Saltzstein, Ting, and Saltzstein, 2001). At macro level, work-family policies are positively associated with the value of a firm, employer branding, and business performance (Berkery, Morley, Tiernan, Purtill, and Parry, 2017; Butts, Casper, and Yang, 2013; Kotey, 2017).

Work-family policies are recognized as matter of priority yet several studies have claimed them to be unimpactful if there is poor supervisor-support, co-worker backlash, lack of top-leaders involvement, unfavourable work-family culture, mismatch between the family requirements and policies offered, lack of awareness of work-family entitlements (Anderson, Coffey, Byerly, and 2002; Beauregard & Henry, 2009; Kirby & Krone, 2002; Kossek, Baltes, and Matthews, 2011; Kodz, Harper, and Dench, 2002; Kossek, Lautsch, and Eaton, 2006; Kossek, Pichleer, Bodner, and Hammer, 2011; Wayne & Casper, 2016). There is a gap between availability and usability of work-family policies (Sánchez-Vidal, Cegarra-Leiva, and Cegarra-Navarro, 2012). Lack of involvement and support from the stakeholders (supervisors, leaders, co-workers, family members) is one of the critical reasons for the

gap between formulation and implementation of work-family policies (Eaton, 2003; Kossek, 2005; Ryan & Kossek, 2008). Therefore, work-family policies in isolation may not be sufficient to facilitate a balanced lifestyle of employees, and there is a need to make a system level change which can provide built-in support from all the stakeholders and improve usability or effectiveness of the policies in mitigating employees' work-family challenges.

This study aims to propose a conceptual framework (Figure 1) that suggests strategy through which organizations may attain support from all the stakeholders in the formulation of work-family policies thus ensuring better implementation and enhanced effectiveness. The model is based on participative leadership approach. The participative theory of leadership view participation in decision making as a means to gain cooperation, morale, expand employees' influence, and full use of employees' abilities (Bendix 1956, Gress, 1974). Thus, a participative approach in the formulation of work-family policies can elicit support, and responsible behavior from all the immediate stakeholders in one's family, and workplace.

[Insert Figure 1]

While research points to the importance of supervisor/management support (Straub, 2012) and co-worker support (McMullan, Lapierre, and Li, 2018), little is known about the process through which, organizations could team-up with employees' family to build an effective policy formulation and implementation system. By engaging employees' families, it refers to a partnership among management, employees and employees' families for ensuring that policies formulated for the betterment of individuals are in sync with wants, needs, and preferences of the beneficiaries. The objective is that organization's policymakers (representative from HR, supervisors/line-managers) and a representative from every family (anyone family member nominated by the employee) work in active partnership (while this naturally involves employees, as it is all about them, for the sake of simplicity focus is kept on organization and employees' families) at various levels across the organization for better employee and family well-being. It is important to point here that while the proposed framework refers to engagement of all the stakeholders in formulating work-family policies, it highlights the aspect of family

engagement. It is followed because already leaders, managers, and HR representatives are part of the policy-making process and there is a need to explore the role of the family precisely.

Engaging employees' families in the process of policymaking will not only tap actual needs of employees, but this collaborative approach between the employees' families and organization will also increase a sense of responsibility and support towards one another. Work-family policies prepared through shared leadership between organizations and employees' families may lead to better implementation of the policies at the organizational level, more appreciation of the policies at the family level, and better management of work-family responsibilities by the employee as all the concern parties become more active, informed, and influential.

Cultural context plays a vital role in work-family research (Putnik, Houkes, Jansen, Nijhuis, and Kant, 2018) and formulation of work-family policies (Stehle & Erwee, 2007). When explored from cultural perspective engaging employees' families is all the more crucial for India and other Asian countries which, are described as collectivistic/ universalism societies. While individualistic societies value self-reliance, independence, autonomy and personal achievement, collectivistic societies give more weight to family cohesion, cooperation, solidarity, and conformity (Bochner, 1994; Hassan, Dollard, and Winefield, 2010, Jeffrey, Yang, Hawkins, and Ferris, 2004, Powell, Francesco, and Ling, 2009).

Cultural differences are also the reason for the difference in self-conceptions (Markus & Kitayam, 1991; Triandis, 2018). For a collectivistic society like India, the self is defined relative to others, is concerned with belongingness, dependency, empathy, and reciprocity (Kagitcibasi, 2017; Neisser & Jopling, 1997). It is believed that Indian employees work to meet their family responsibilities and attain social security, unlike western societies where an individual intention to work is to fulfill needs of self (Annor, 2016; Skillman, 1999). As per theories of motivation 'actions are determined by one's need'. In collectivist societies 'family' holds a special place and motivation to work primarily comes from fulfilling the family responsibility. Therefore, it is important for multinationals to look into the provision of engaging employees' families at the workplace. On the contrary few studies have highlighted through Western societies are considered as more career oriented and Eastern societies are

considered more family oriented (Chadda & Deb, 2013; Gupta, Levenburg, Moore, Motwani, and Schwarz, 2009; Hofstede, 2001) still in West corporations and government pay more attention to work-family needs of individuals (Chandra, 2012; Yang, Chen, Choi, and Zou, 2000). This study takes an ecological perspective and encourages policymakers to take steps that may improve work-family policy formulation and implementation in a holistic way.

OBJECTIVE OF THE FRAMEWORK

The proposed framework aims to extend research on work-family policy formulation, implementation, usability in several ways. Firstly, the proposed model may extend current research on strategies for engaging employees' families in formulating work-family policies. The model demonstrates horizontally three range (sharing information-consultative-participative), and vertically three levels (individual-organizational design-governance) at which employees' family may be engaged in work-family policy formulation. It gives a perspective on how representatives from family and organizations can work together for an ecological development. Further, focus on engaging employees' families provides an avenue for multinationals to act '*Glocal*,' as it gives power in the hand of family members thus answering collectivist country's cultural need to involve families at the workplace and thus may help organizations gain competitive advantage.

Second, India is witnessing fast changing work-family interface owing to several factors such as advancements in technologies which keep individuals active beyond usual working hours, a shift from joint to the nuclear family system, an increase of dual career couples, increased career aspirations, and desire of better lifestyle. These factors are well known to complicate the work-family interface (Lyness & Erkovan, 2016; Masterson & Hoobler, 2015; Miano, Salerno, Merenda, and Ciulla, 2015). Besides, there are several past studies that have pointed that a troublesome work-family interface can lead to stress, depression, deterioration in physical health, turnover intention, and poor job satisfaction in Asian countries (Foley, Han-Yue, and Lui, 2005; Ng, Fosh, and Naylor, 2002; Noor & Zainuddin, 2011; Lu, Kao, Chang, Wu, and Cooper, 2008; Spector, Allen, and Poelmans, 2007). Therefore, in a quest for the positive work-family interface, it is significant to identify factors that may enable a more balanced and enriching life. Though much has been emphasized on benefits of the positive work-family

interface, this line of research is in its embryonic stage of development both theoretically and empirically, particularly in Asian context (Mishra et al. 2017; Shaffer, Joplin, and Hsu, 2011). The proposed model explains the process of enhancing enriching experiences in both work and family lives in Asian societies.

Third, the model expands on theoretical perspectives and approaches [Social-exchange theory (Blau, 1964); Systems theory (Bertalanffy, 1969); and Family ecology theory (Bubolz & Sontag, 1993)] anchored in research on work-family policies.

Fourth, the paper concludes by highlighting implications of the multidimensional model for the development of interventions and policies. It also provides future research directions that may be required to apply the model and thus enhances engagement.

ENGAGING EMPLOYEES AND FAMILIES IN FORMULATING WORK-FAMILY POLICIES

The family systems theory suggests that individuals cannot be understood in isolation from one another, but rather as a part of their family, as the family is an emotional unit. This viewpoint is especially relevant in collectivistic societies where family members are part of in-group and family needs are given priority over self (Triandis, 2018). Since family members are one of the beneficiaries of work-family policies, it is vital to include them in its formulation. In this paper engaging employees' families refer to collaboration between organizations and employees' families and the degree to which organizations attempt to incorporate recommendations of employees' families in the formulation of work-family policies. There is a large body of research which has explored how engaging families can be beneficial, such as, hospitals have found that patient's recovery is faster if their families are aptly engaged in the treatment (Lindblad et al., 2017), similarly schools have found that children perform better if their parents/families are engaged in the learning process (Schaub, 2015). This study examines the possibility of engaging employees' families at the workplace.

In India established business professionals have identified the need for engaging employees' families, to quote a few: *"Families influence the employees, and their well-being affects the employee's*

work life" (Mr. Anil Sharma, Vice President - HR, ITC Group of Hotels, India as printed in Business Insider, 2015); In Ericsson, promotion letters are mailed to employees' parents. As stated by Mr. Sameer Khanna, VP, and Head - HR, Ericsson India "*It is much more satisfying when your family tells you about your promotion*" (Chaturvedi, A in Trainer's Digest, 2015). The concept of engaging families has been answered to some extent, such as medical reimbursement for family members, school quota, subsidized recreational facilities for family members, encouraging family members to contribute to the company magazine, career counseling services for children, inviting family members on Founder's Day celebration. However, this paper suggests there is a need to move beyond mere 'feel good' factor. In the cultural context where 'families' are so important that they drive individuals' need there is a possibility that organizations can strategize ways through which, engaging families can attain competitive advantage and directly impact the bottom line.

Despite the significance of engaging employees' families in finalization of work-family policies, it is understandable that organizations may find it difficult to formulate policies for each group. Therefore, it is suggested that organizations may conduct the process of engaging families in formulating work-family policies at the group level. The groups can be divided on the criteria that are known to influence work-family interface such as, marital status, parental status, gender, family structure- nuclear or joint, life stages (Allen & Finkelstein, 2014; Martins, Eddleston, and Veiga, 2002). Individuals in the same group, may relate more to the nature of work-family challenges of other's in the group (as all must be facing similar life situations) and thus empathize. Therefore, grouping individuals by similar characteristics may also be beneficial in promoting co-worker support.

As shown in Exhibit 1, our multidimensional framework includes three critical aspects of family engagement. First, engagement level ranges along a continuum, from information sharing to consultation to participative (as depicted horizontally in the figure). Each range will differ regarding degree and depth of collaboration between the representatives from family, and organizational representatives (assigned managers, or HR representatives). Second, engagement may occur at different levels, i.e., individual-organizational design-governance (as depicted vertically in the figure). Each level may operate at any of the three-engagement ranges. Third, need for interventions to support the framework. All three aspects are discussed below:

The range of engagement

The range of engagement characterizes the degree to which family is engaged in formulating work-family policies. The range of engaging employees' families in the formulation of work-family policies may vary from organizations being limited to information sharing with the employees and their families, to being consultative, to taking participative/shared leadership approach in work-family policy formation. At the lower end of the range (information sharing), employees and their families have limited power in the decision making as organizations define their plans and then allow employees and their families to choose a which suits them best. Here the engagement of employees' families is least as their engagement is limited to making choices from already set policies/benefits by the organizations.

In the middle range (consultation), organizations take a more consultative approach in which, they collect preferences of the employees and their families on the policies formulated by them. Here the level of engagement is more than the previous level as suggestions are considered and modifications are made in the policy structure. Though the decision making is still with the organization.

At the highest end of the range (participative/shared leadership), the process of formulating policies is through participation and shared leadership. Organizations conduct brainstorming sessions, and surveys with employees and their families before finalizing the work-family policies. Here the level of engagement is maximum as the participation of employees, their families and organization are equally valued. In the entire process of formulating policies, information flow is continuous, and bi-directional also the responsibility of arriving at a consensus is shared. To illustrate in the first state organizations may provide its preferred bucket list of work-family benefits such as teleworking, flexible hours, shared hours, counseling services, yoga and other recreational activities, to the employees and their families and then ask for their suggestions if any. Whereas, in the highest end state organizations may consider grouping their employees into life stages and then engage them from the beginning for formulating policies.

The levels of engagement

- (i) **Micro Engagement:** At this level organizations integrate employees and their family's needs, values, experiences, and perspectives about work-family policies and benefits.

Engagement at this level varies on a continuum from information sharing to participative, i.e., from just receiving information to actively participating in policy formation. conducting surveys to collect employees feedback on the pre-set plan. In the engagement at the participative end of the range, the decisions are taken mutually. Employees and their families partner with organizational leaders, and managers, in the planning of a work-family policy. For example, an employee may request information on risks and benefits associated with various medical policies. Organizations may help employees getting timely, understandable, and detailed information on various medical policies available. They then may discuss factors such as treatment preferences, values, and risk tolerance to mutually finalize on health policy. As discussed earlier, by certain similar characteristics different groups should be formed as it will be helpful in precisely answering needs of employees and attaining co-worker support.

- (ii) **Organizational Design:** At this level, engagement means amalgamating employees and their family's needs, values, experiences, and perspectives into the organizational design. On the continuum of information sharing range, it represents that organizations formulate a formal mechanism to select family representatives. The organizations may have a mechanism such as voting, yearly revolving of the members, to select these representatives from each group in an unbiased way. Organizations define the plan and policies and share it with family representatives to provide inputs and seek clarifications if any. On the consultative range, engagement refers to organizations engaging family representatives as a member of the family advisory council. As a member of the family advisory council, family representatives are engaged in designing and implementation of work-family policies. Even though the inputs are taken and incorporated before finalization of the work-family policies the main onus and decision making power still lies in the hand of organizations. Whereas towards the participative range it refers to organizations inviting representatives from employees' families to co-lead work-family committees. Family representatives in this stage are engaged meaningfully and hold a decision-making power. At this end of the

continuum, representatives participate in finalizing plans, define priorities, and share leadership.

Need for interventions

The possible benefits that the proposed model may bring to the implementation and usability of work-family policies and holistic well-being of the employee demand special focus on such an initiative. Thus, it is important to introduce interventions for the practical working of the proposed framework. The proposed framework highlights three critical implications of introducing interventions to promote engagement. First, once empirical evidence confirms that family engagement improves impact and usability of work-family policies, then interventions should be designed to enhance teamwork and shared leadership between the key stakeholders. Second, interventions can be introduced to manage the factors such as domain knowledge of the family, launching feedback systems, training supervisors importance of family-engagement and shared leadership, which may impact family engagement. It may be that few highly motivated individuals may contribute without clear opportunities and invitations, many may need interventions to get engaged. Third, the proposed framework suggests various levels at which interventions can be introduced and a possibility that interventions introduced at one level may facilitate engagement at another level. For example, the intervention of providing adequate training to the family advisory council may also improve the quality of suggestions or contributions made by a family representative at the individual level.

FUTURE RESEARCH DIRECTIONS

The proposed framework demonstrates that engaging stakeholders can lead to an improved work-family interface and hence facilitate well-being and performance. However, it is required to empirically test the model to confirm what applies and—just as important—what does not apply in achieving and sustaining productive family engagement. Future researchers may focus on exploring factors or combinations of factors that may impact family engagement. It is also important to understand the linkage between different levels such as when an intervention is introduced to facilitate engagement efforts at one level then what support may be required at the other level or how does an intervention

introduce at one level may effect engagement outcomes at another level or which intervention may be most suitable to facilitate engagement at the highest end of the range? There are some other aspects that may need to be answered for the application of the model, such as what may be the most effective ways through which organizations and policymakers encourage families to engage? What changes may be required in organizations' culture, structure, and processes? What mechanism may be applied to select family representatives for family councils? How role and responsibilities may be distributed in family council? What may be an ideal way to collect feedback, and evaluate the working of the entire process? What may be various outcomes of family engagement and do they improve over time?

CONCLUSION

We must realize that for improving work-family wellbeing, we need stronger foundation. The proposed multidimensional model has strong foundational support from System theory and Ecological system theory. System perspective states that individuals are in constant interaction with their environment. These interactions may yield positive or negative experiences for the individual. Ecological system perspective gives a closer look into how an individual relate to his environment and assumes that if connection is positive then functioning improves. Taking support from both the theories the proposed multidimensional model brings together work and family: two important systems of an individual's life. It explains a possibility to collaborate efforts of members of work and family domains for employee's work- family well-being. The proposed model explains the process through which a feeling of trust, mutual respect, responsibility and acknowledgement can be simultaneously evoked between work and family members. There is a connection/bond established between members from work and family systems. As explained by social exchange theory the collaboration between the work and family members will be encouraged through the positive reciprocal relationship.

The proposed framework suggests a possibility to engage all the crucial stakeholders- employees, families, managers, HR personnel- and thus ensure their support during implementation. Support from all the stakeholders helps deal with issues of inequality, backlash, and stigma associated with work-family policies. It also justifies a means through which each employee enjoys work-family

policies that actually answers the work-family problem that s/he is facing, for example, a single may have different kinds of work-family issues when compared to a married couple or couple with young children, or a single mother hence may need different kinds of policies to address his/her challenges.

The main limitation of the model is that it is not tested. It may be noted that scarce resources and insufficient desire of the management or family members may be the biggest hindrance to the application of the framework. It is possible that because of other priorities organizations may prefer to limit the family involvement at a superficial level, i.e., participation in organization's annual day or an opportunity to write for organization's policy, but that is not enough. We have reached a time when family engagement is need of the hour. It must be remembered that organizations in isolation may not be able to improve work-family quality of its employees rather it may be inappropriate to make organizations responsible for work-family stress that an individual goes through when there are other players involved in the entire dynamics of work-family interface. Organizations need to encourage family participation and increase awareness about the benefits of engagement. Family engagement will not only promote employees' wellbeing but may also improve job performance. Therefore, the pathway of attaining the common good involves working in partnership with employees and families.

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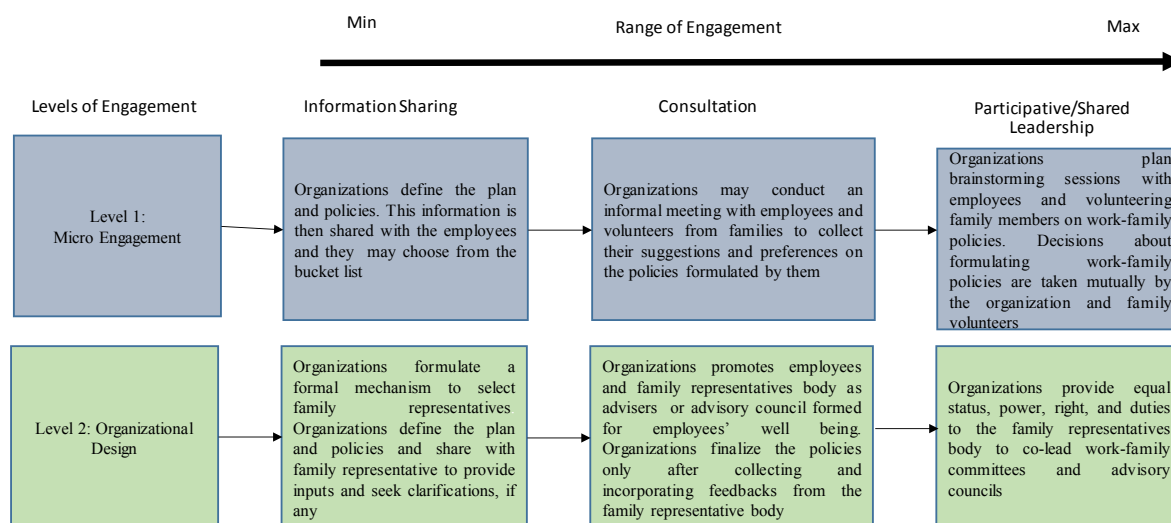
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Figure 1: Framework for Employee and Family Engagement



03. Gender, Diversity and Indigeneity
Competitive Session

**WOMAN ON THE TOP LEVEL:
Shattering the glass ceiling**

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WOMAN ON THE TOP LEVEL: Shattering the glass ceiling

ABSTRACT

The glass ceiling faced by woman leaders in politics has not been studied widely and become a public and academic debate. Moreover, the lack of women representation as political leaders in developing countries, especially Indonesia, makes it appealing to explore.

This study used a single case study in Sragen, Indonesia. The results show that the woman leader experienced glass ceiling since the beginning of her candidacy for leader of the region, in the form of gender stereotype and black campaign. Self-imposed barriers are found to be significant, which caused by work-life balance issue and personal values. The glass ceiling is overcome by building a network with a coalition partner, building public trust, and proving woman's ability to become a leader.

Keywords: discrimination at work, equal employment opportunity, gender in organizations, occupational segregation

"A woman is like a tea bag - you cannot tell how strong she is until you put her in hot water."

(Eleanor Roosevelt)

Women's participation in the workforce has been increasing for more than three decades since the ratification of the UN convention, known as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1984. International Labor Organization (2016) reported that the gap between men and women in South - Eastern Asia and Pacific has narrowed since 1995. According to this report, the female participation rate in the labor force has slightly increased (from 58.0% in 1995 to 58.8% in 2015). Nevertheless, women are still underrepresented in decision making and leadership positions. A more prominent –yet similar- phenomenon occurs in politics. ESCAP United Nations (2017) data showed that women's representation in politics in the Asia-Pacific region was lower than in other regions; where women parliamentary members reached 23.6% globally, while the percentage in the Asia-Pacific region was only 18%. In particular, women's involvement in parliament in Indonesia is only 16%, which makes Indonesia ranked 16th in the Asia-Pacific region (ESCAP United Nations, 2017). The rating is below the involvement of women in parliament of Pakistan, Bangladesh, and Cambodia.

Eagly, Makhijani and Klonsky (1992) acknowledge that only a few women served as leaders at higher levels in organizations, raising the question of why women's access to leadership roles tended to be limited. Using gender role congruity theory, Eagly and Karau (2002) explain that people beliefs about leaders were more similar to men, while women had nothing in common with leaders instead. But such argument is not fully confirmed in various studies. Several studies have shown that women can serve as a leader, even they were in the risky leadership positions when the organization faced serious problems (Ryan and Haslam, 2005; Sabharwal, 2013). On the other hand, Glass and Cook (2016) stated that women used high-risk assignments to prove their leadership ability. These inconsistency findings of the previous studies indicated that gender role congruity theory has not been fully confirmed.

Many studies investigate women leaderships in various organizational contexts. Previous studies show the women difficulties in achieving a higher managerial position in companies (e.g., Vianen and Fischer, 2002; Cross and Linehan, 2006; Glass and Cook, 2016). The difficulties faced by women to achieve higher levels increases as women enter politics, because political space is considered a harsh environment for women and has been a predominantly masculine occupation (Wilson, 2003; Bligh and Kohles, 2008). Under such conditions, there is an imbalance of power distribution, with women fall into a minority (Ryan, Haslam, and Kulich, 2010; Folke and Rickne, 2016). Therefore, Ryan et al. (2010) assert that there is still a need for research undertaken to explore gender imbalances in political leadership.

Indonesia clearly illustrates the phenomenon of limited women involvement, particularly in politics. Women's participation in politics has been quite low. Women who run for candidates are still very few, reaching only 7.96% in 2016 and 7.83% in 2017, which indicate the lack of women's involvement in executive positions (General Elections Commission, 2017). According to Parawansa (2002), one of the causes of the lack of women's representation in politics is the patriarchal culture in Indonesia, where women's opportunity to become politicians is relatively limited because of society's perception regarding the division of roles between men and women, which tends to be bias towards limiting the role of women in household affairs.

This study advances research on women's leadership and fills the existing gaps. Gender role congruity theory (Eagly and Karau, 2002), which believe in the similarity of leader figures with men, seems to be unable to explain the phenomenon of women's success in becoming leaders. In addition, previous studies were focused on differentiating treatment between men and women in terms of leadership (e.g. Folley, Kidder, and Powell, 2002; Vianen and Fischer, 2002; Ryan and Haslam, 2005; Sabharwal, 2013; Glass and Cook, 2016), but has yet to review the women's process in achieving leadership positions.

Thus, this study aims to explore the career journey of a woman leader to become regional head, so the research question is focused on how the career dynamics of a woman to become the regent? In Indonesia, women's political representation in the regional head elections has yet to progress significantly. In 2017, there were only 10 women who succeeded in becoming regents, while two women became vice-regents, out of 286 candidates (General Election Commission, 2017). The achievement decreased compared to the regional heads elections in 2015, which resulted in 35 elected women candidates (General Election Commission, 2015). In general, these numbers show the lack of women who managed to become regional leaders. This current study was conducted in Sragen, regency located in Central Java, Indonesia. Currently, Sragen is led by a woman regent, who is known for her attention to women development through the vision, mission, and government program. This case is unique considering that the woman regent had applied to become a regent twice, in which the second, she was successfully elected as a regent.

LITERATURE REVIEW

Women's Leadership in Social Structural Theories Perspectives

Whether or not the difference exists between men and women in organizational leadership are questioned and become a focus of leadership studies until now. Yukl (2010) explains that during the 20th century, gender discrimination was supported by old beliefs that men were more qualified than women for leadership roles. Schein (1973, 1975) mentions that successful leader figures are associated with characteristics inherent in men, including emotional stability, aggressive, able to lead, confident, competitive, objective, ambitious, and compelling.

One school of thoughts that discusses gender distinctions in social behavior --including leadership-- is a social structural theory. This theory emphasizes that the underlying cause of gender-differentiating behavior is the different roles between men and women, which arise from differences in physical, environmental, and social conditions (Eagly and Wood, 1999). One of the theories that support this school of thought is the social role theory developed by Eagly (1987). This theory argued that the reason men and women justifying gender stereotypes was that they act according to the social role for each gender (Eagly, 1987). In this case, women are inclined in feminine behaviors such as care and concern for personal relationships; whereas male show more masculine behavior such as assertiveness and leadership qualities (Vogel, Wester, Heesacker, and Madon, 2003).

In its development, Eagly and Karau (2002) propose gender role congruity theory, which explained people's beliefs about the roles of men and women, as well as differences in behavior between them about other functions, especially in leaderships. According to this theory, women who become leaders will face two forms of prejudice, namely: (1) less favorable evaluation of woman leaders' potency, because the leadership capabilities are more stereotypical in men; (2) less favorable evaluation of woman leaders' behavior, since such behavior is deemed less desirable for women figures (Eagly and Karau, 2002). The prejudices show that gender roles are placed on normative expectations, which are instilled early in society and have been manifested in various contexts of life, including social sanctions for violations (Vogel et al. 2003).

Social structural perspectives provide a broad theoretical scheme, embracing theories of gender-based behaviors which focus on the process of establishing gender-differentiating behavior in society (Eagly and Wood, 1999). Leuptow, Szabo, and Lueptow (2001) also remark that social structural theories become the most widely used paradigm for explaining gender differences.

Women's Career Development

Career development becomes more complicated when considering gender, due to other factors outside of work, as White (1995) argues that women face with the problem of work-life balance that affects the development of their careers. Similarly, O'Neil and Bilimoria (2005) suggest that women's career development is different due to the context of their lives with family responsibilities that have consequences for women's career patterns, sustainability, and development.

In developing their career, women face potential barriers. Various studies have identified career barriers for women, including in the form of glass ceiling (US Glass Ceiling Commission, 1995; Bell, McLaughlin, and Sequiera, 2002; Foley et.al, 2002). Weyer (2007) defined glass ceiling as an invisible barrier for women and minorities which prevents them from achieving higher levels of the organization. Cross and Linehan (2006) identify organizational barriers in the form of regulatory policy and attitude bias, work environments that do not support and hinder women managers' ability to work effectively, as well as promotional barriers. Cross and Linehan (2006) also find another barrier that is sourced from oneself, called as the self-imposed glass ceiling, which is women's belief that their careers are considered successful when they also acknowledge another life outside of their job, which is their personal life.

A study by Vianen and Fischer (2002) find that an obstacle for women to achieve a higher career path, in which masculine culture proved to be a predictor of women's position in managerial positions. Another interesting finding shows that under the history of leadership with male dominance, there is a tendency to place women as leaders in precarious leadership positions to avoid failure of men leadership (Bruckmuller and Branscombe, 2010; Sabharwal, 2013). These studies prove that women experience a rigorous process when developing a higher-level career, with various external and internal obstacles.

METHOD

This study employed a single case study, which offered a richness and an in-depth understanding of a particular phenomenon based on the first-hand experience (Denzin and Lincoln, 2010; Siggelkow, 2007). Specifically, this study was conducted in Sragen, regency located in Central Java, Indonesia. Sragen has the first woman regent in its history. This phenomenon is quite interesting to be explored more deeply, not just because she becomes the first woman who leads Sragen, but also because of the tough process she experiences until succeeded to become a woman regent. She started her career as a doctor at a private hospital in Sragen. Then she was elected as a member of Sragen Regional House of Representatives and became the Speaker of the House. For the first time, she ran as a candidate in the regional government election, yet she lost and led her to go back her profession as a doctor. Her unsuccessful candidacy did not undermine her desire to become the first woman to

lead Sragen. Five years later, in the next regional government election, she re-ran and succeeded in becoming Sragen Regent.

Purposive sampling was applied to select the informants, began with the regent who becomes a key informant related to her experiences as a woman leader. Furthermore, vice regent, community leader, religious figure, and political figure were selected to provide relevant information. This purposive sampling was based on the criteria that potential informants were those with first-hand knowledge about the candidate, the processes and the day-to-day practices both in family and politics settings. The semi-structured interview was conducted by using protocol interview, which was informed by a review of some previous studies (White, 1995, O'Neil and Bilimoria, 2005; Cross and Linehan, 2006). The interviews were conducted for approximately 45-60 minutes at the time and the location agreed with the informant(s). Another data sources are documents obtained from the Sragen Government and relevant news appearing in the mass media.

Data Analysis

To test trustworthiness, credibility was examined by triangulating data using more than one data sources, including colleague, community leader, religious leader, and political party figure; as well as triangulation theory by using multiple perspectives to interpret data. As for data analysis, the Gioia method was used in this study, consisting of several steps: (1) first-order analysis, by identifying the initial concept and grouping into several categories, and finding similarities and differences between categories; (2) second-order analysis, connecting between categories to form theoretical relationship that describes and explains the phenomena studied; (3) aggregate dimensions, by researching further to filter the themes that appear on the second order into aggregate dimension (Corley and Gioia, 2004; Gioia, Corley, and Hamilton, 2012).

FINDINGS

In this finding presentation, there are three data displays: (1) figure 1, showing the data structure, (2) figure 2, showing the emergent model, and (3) table 1, showing additional supporting data. The data analyzed by using Gioia method yield the data structure as depicted in Figure. 1.

Insert Figure 1 about here

The Career Dynamic of Woman Leader

Based on the data structure in Figure 1, a woman leader experiences career dynamic to become regent. The career dynamic has two different aspects, namely supports and obstacles aspects, originating from the external and internal environments. Each environment presents both aspects of supports and obstacles. The external environment supports comes from the general public's view of women leaders; on the other hand, the religious groups that exist in the society become an obstacle for woman leader. The internal environment provides supports through family roles and personality characteristics, yet some personal values are believed by woman to be a separate obstacle to her career. The barriers for woman to achieve the higher positions are known as glass ceiling (Bell et al., 2002; Foley et al., 2002; Weyer, 2007). These aspects, in turn, raise behavioral responses that determine the career success of woman leader, as depicted in Figure 2.

Insert Figure 2 about here

For data supporting, table 1 shows quotations from the informants.

Insert Table 1 about here

Glass Ceiling

A woman regent, who leads Sragen, faced the glass ceiling when she ran for the regent position. The glass ceiling came from two primary sources, namely the social and personal environment. In the social environment, glass ceiling occurred in the form of gender stereotypes by religious groups in the society as well as black campaigns during the campaign period. Gender stereotypes emerged from groups in a religious-based society. Ellemers, Rink, Derks ,and Ryan (2012) assert that stereotypes and beliefs against women play an essential role in shaping reality when women occupy positions in power. In line with these opinions, in the context of Indonesia, under the New Order for more than 30 years, women were defined in particular ways as citizens with gendered responsibilities, especially to carry out tasks suited to their feminine nature, for instance they were to be companions to their husbands, educators of children, and housekeepers (Blackburn, 1999). As highlighted by Rosenfield (2012), Indonesian women were in disadvantaged condition, either because the majority of traditional Muslims in Indonesian society tend to put women in domestic life rather

than showing their existence in the public space. Under this circumstances, it is difficult for Indonesian women to participate in political realm, as noted by Blackburn (1999) only a minority of Indonesian women have ever been 'active citizens' in democratic parlance, because they have not had the opportunity to become involved in public politics, and because they have been socialised to think that politics is for men.

In addition to gender stereotypes, the black campaigns also become a serious barrier faced by the Sragen Regent when running for the office. The issue of women leaders is massively exploited to inhibit and defeat the woman candidate during regional head election. Due to the onslaught of such issue at the regional head election, the Sragen regent (then still a candidate) experienced a defeat from her competitor. The widespread issue of woman leaders confirms what Bligh and Kohles (2008) argue that in the political realm, women's traditional political role is always faced with gender stereotypes, since the political arena is considered a harsh environment for women and identified with male-oriented work (Wilson, 2003).

In addition to the barriers derived from the social environment, the personal factor becomes an inhibiting factor as well, known as self-imposed barriers. Self-imposed barriers are obstacles that arise from within women, preventing them from career progressing (Boone *et al.*, 2013). Self-imposed barriers are perceived in the form of work-family conflict and certain personal values that are firmly held. As a colleague, the vice-regent also admitted that the dual roles of a career woman and personal life affect the job. In addition to work-family conflicts, specific personal values can also hinder the development of her career, such as norms of modesty and the nature of woman to be maintained. The self-imposed barriers can be significant barriers to women's career development. Baker (2003) describes the self-imposed barriers on women as 'sticky floor' in the glass ceiling, which occurs due to individual choice instead of external barriers, where the choice is related to the problem of marriage and family.

Career Supports

Apart from the challenging career dynamic experienced by the Sragen Regent, she also get some supports to achieve higher position in her career. Like the barriers, perceived supports also come from the external and the internal environments. In this context, supports from external environment

are in the form of public opinion of women leaders. The public in Sragen did not question the figure of woman leaders; they accepted leaders who put forward understanding, feelings, and maintaining closeness with the people. These characteristics lead to one of Hofstede's cultural dimensions of femininity (Hofstede, Hofstede, and Minkov, 2010). Hofstede *et al.* (2010) research show a moderate feminine score for the Asian region, where Indonesia is ranked under Taiwan, Vietnam, South Korea and Thailand.

In addition to that support, from leader's social environment, it is found that the family plays an essential role in determining the success of woman's career through the support of parents, husband, and children. This is in line with several studies acknowledging that the role of family support in determining women's career success, decreasing women's role strains, and improving family satisfaction (Nabi, 2001; Parasuraman et al., 2001).

This study also found that adding to the social and family environment, personal characteristics may also be sources for career supports. The inherent personal attributes of the Sragen Regent is acknowledged by her circle to help her in career development. As a close colleague, the vice-regent recognized the Sragen Regent figure and described her as an open and committed person. Based on the interviews, several characteristics become factors that support the success of the Sragen Regent's career, namely dare to face risk, focus on purpose, stand firm, and trustworthy. Such characteristics made her stand path when she failed on her first candidacy in the regent election. These characters were believed to help her gaining her confidence that five years later, she re-ran for the election and succeeded in becoming the first woman regent in Sragen, with more preparation to deal with the potential problems that occurred, especially the glass ceiling.

Coping with the Glass Ceiling

Before finally winning the regional head election, the Sragen Regent was defeated in the previous regional head election. At that time, she was defeated because of a black campaign that attacked the woman leader intensively. Such black campaign used the religious theorem by quoting verses of the Qur'an, in which the interpretation is the prohibition of woman leaders using brochures and flyers, the black campaign were delivered in mosques. This has lead to resistances from religious groups, which then, critiqued and protested her candidacy as a woman regent. These conditions

created a glass ceiling that ended up in her defeat in the election. However, the defeat did not make her giving up, which proven by the fact that she ran again five years later in the next regional head election. In this period she was more prepared to face the issue of women leaders.

Since the beginning of the campaign, anticipation has been made to prevent the potential issues of woman leaders. One of the efforts was to establish a coalition with one of the Islamic parties. In her second candidacy, her team used Islamic woman figures as a comparison during the campaign, as well as guarding mosques in the regent.

Besides the efforts to establish a coalition with Islamic parties to anticipate the black campaign, other attempts were conducted through building public trust by showing the ability as a woman leader highlighting the femininity as an advantage rather than as weaknesses, such as more flexible communication skills, motherly style of advising, and personal attention. This was acknowledged by the regent as well as other informants. One of the examples of flexible communication skills was represented by the way the woman regent approached people and the public during informal events, such as a wedding invitation. This shows that the efforts were not only conducted in a political context, but also in day-to-day life as this was thought to significantly support other domains of the woman leader's life.

Such range of efforts conducted by the Regent have proven to be effective, both the external or internal efforts with regard to get closer to the community as well as to the internal relatives. For the second run for election, the woman leader has finally elected to be a regent, making her the first woman regent in the history of Sragen to date.

CONCLUSIONS

This research aims to explore the career dynamics of woman leader based on the experience of a woman regent in Sragen, a regency located in Central Java, Indonesia. The scarcity of women at the top level, especially in politics that is considered predominantly masculine occupation, limits their access to power and leadership (Eagly et al., 1992; Bligh and Kohles, 2008). In Indonesia, the involvement of woman candidates running for regional government elections in 2015 and 2017 was still relatively low (General Election Commission, 2017).

The winning of a woman candidate in the regional government election proves that leader figures are not always identified with men. It also serves as a powerful symbolic cue that ‘politics is not just a man’s game’ (Karp and Banducci, 2008). This case is empirical evidence of the lack of gender role congruity theory (Eagly and Karau, 2002) in the context of the phenomenon in Sragen. Eagly and Karau (2002) believe that leadership ability tends to be stereotypical in men because of the inherent agentic characteristics are not supported in this research. The findings reinforce previous studies (Ryan and Haslam, 2005, Sabharwal, 2013) that prove the success of women become leaders, despite being in risky conditions. Also, this study confirms the persistence of the glass ceiling phenomenon in politics. Glass ceiling is not only derived from external factors, which is the social environment but may also be sourced from internal factors within the woman herself. This study finds that woman candidacy for regional head facing various obstacles, including black campaigns and the use of religious issues to undermine woman’s leadership capacity. These strengthen gender stereotyping. The gender stereotypes from the external environment reinforce the findings of previous studies (Oakley, 2000; Bligh and Kohles, 2008; Bruckmuller and Branscombe, 2010) that identify gender stereotypes as one of the obstacles faced by woman leader.

Another significant finding is the self-imposed glass ceiling, which is a limitation in women because of marriage and family factors that cause difficulties to balance obligations to family and careers (Baker, 2003; Cross and Linehan, 2006). This was also conveyed by the Sragen Regent who acknowledged how unbalanced it was between the two domains, work and family; she even believes that a balance between work and family does not really exist, sometimes the work is prioritized, while on another time, families becomes the priority. Also, there are specific personal values in woman that prevent her from progressing, namely her firm intention to maintain norms of modesty and the nature as woman. This condition strengthens the notion of Boone *et al.* (2013) that self-imposed barriers occurring in women may come from push and pull issues between family and personal life.

Finally, with the various forms of glass ceiling encountered, there are several attempts made to overcome these obstacles. Learning from the experiences is important as the leader understood what she encountered in the second running. Establishing a networking in the form of coalition partners with Islamic parties, which proved effective to ease the pressure of black campaign on woman leader

as well as building public trust through demonstrating the capabilities and advantages as a woman leader, such as flexible communication and personal attention. These has proven to attract public sympathy toward woman leadership

This study used a single case study to understand the phenomenon of a woman who strives to become a public leader as a regent. The result revealed the successful of a woman leader in facing the glass ceiling. It implies the need to re-interpret the gender roles, as described in the gender role congruity theory. Further research can explore more in-depth into how gender roles should be placed in the organizational context, including leadership. Future researches should also investigate how the self-imposed glass ceiling occurs in women and becomes a barrier to the advancement of their career. So far, many studies are still focusing on glass ceiling from external factors, as well as empirical evidence of self-imposed glass ceiling. For the public policy implication, the research findings may also encourage the Indonesian government to formulate appropriate policies, not only to promote women's representation regarding quota, but also to extend opportunities for women to occupy top positions as leaders in the public sphere.

With the use of a single case, the results of this study reflect the phenomenon in Sragen, thus it may not be necessary applicable in other cases. In other words, the generalizability does not apply to a single case context. If other scholars want to gain generalizability, then multiple-case approaches can be applied, as Cresswell (2013) argues that naturalistic generalizations can be developed by researchers through similarities and differences between cases, so that generalizations are obtained to apply to other cases. Also, this study still focused on woman leader who become regional head. Further researches should investigate the success of woman politicians in other roles, such as parliamentarians or political party chiefs. Also, future researches could make a comparison between women and men in playing their role as public leaders.

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Figure 1: Data Structure

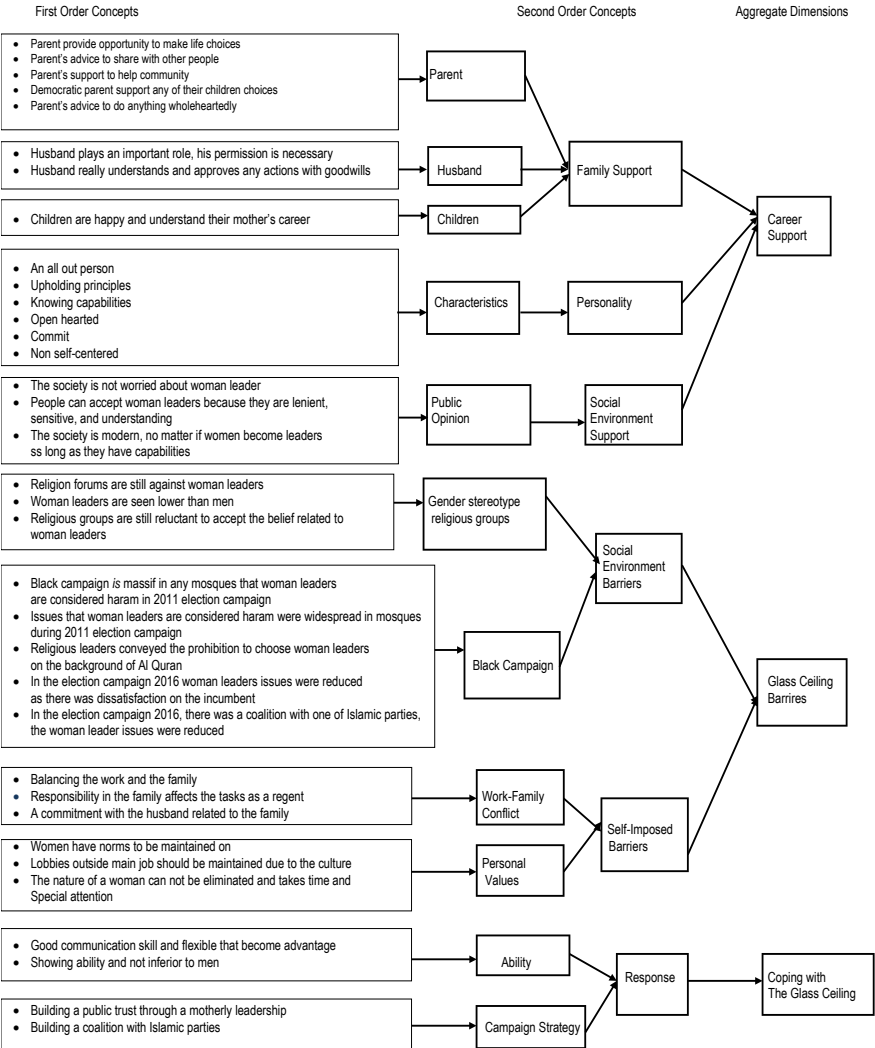


Figure 2: The Career Dynamic of A Woman Regent

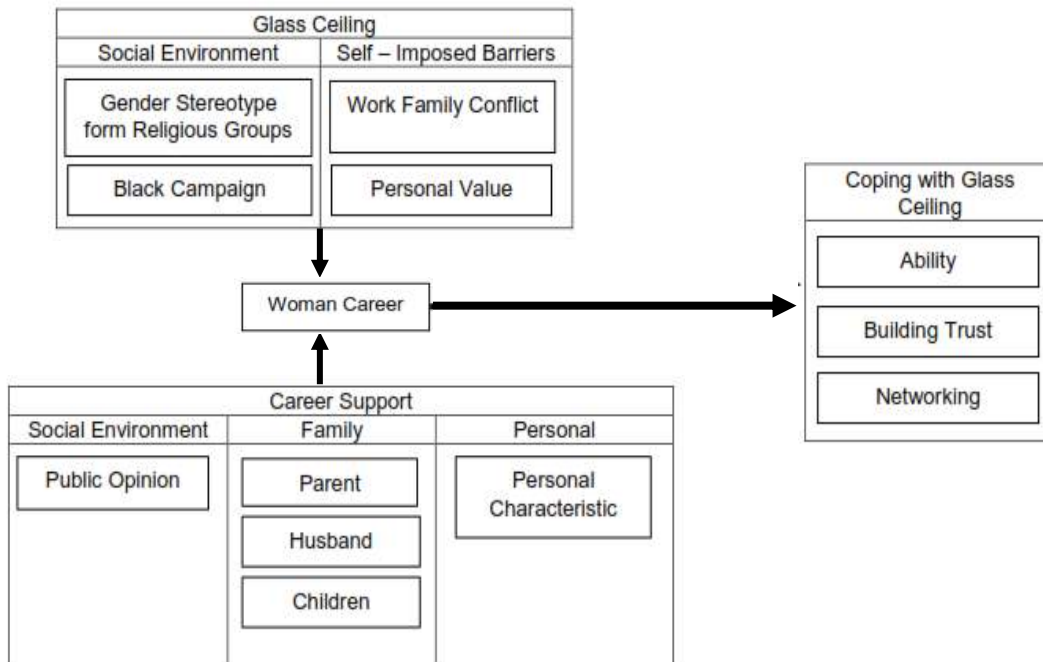


Table 1: Data Supporting Interpretation of The Career Dynamic of A Woman Regent

Theme	Quotations
	Glass Ceiling
Gender Stereotype religious groups	<p>Muslims believe a leader must be a man... In the family, men should be a from leader as well. It was mentioned in the study, <i>Pak Kyai</i> (chaplain) conveyed the Quranic argument to clarify... (A community figure)</p>
	<p>In the boarding school environment, they do not want to leave beliefs about women leaders, not at all... (A religious leader)</p>
Black campaign	<p>At that time, some people said that women should not become leaders. That was the black campaign factor. On Friday prayer, massively several mosques of certain mass organizations noted that the women leader was haram. Then the leaflets from outside of Sragen were copied and distributed throughout the mosques (Regent)</p>
	<p>Incidentally one of the problems is the women leader issue. The most prominent issue, the last before the (voting), leaflets were distributed at mosques about the leadership of women. It stated that the woman leader was haram (Vice regent)</p>
	<p>The women issue was intensely delivered...At the end of the campaign period, it was getting more intense ... It caused the failure of the woman regent ... (A political figure)</p>
Self-imposed Barriers	<p>For obstacles as a woman, I have to balance between work and family. Whatever my role is, I can certainly not underestimate the role of the household. On the one hand, I am sworn to work. On the other side, I am a wife bound by an oath as a wife and a mother as well. That should be balanced, although it is hardly achieved. Sometimes families are predominant, sometimes the work is prioritized (Regent)</p>
	<p>As a woman, unlike the man, it's still different. Family responsibility, managing family dynamics is the responsibility of the wife ... Of course, this has a lot of influence on her duties (Vice regent)</p>
	<p>Because I'm female, I'm often stumbled into husband's permission...I realize that how high and how far I go in my career, without <i>ridho</i> (blessing) from my husband, yaaa (shook her head).So, what becomes my husband's concerns, the most important thing, is that children are not neglected...My husband does not demand much, yet I should know myself (Regent)</p>
	Career Support
Public opinion	<p>(Woman leader) can be accepted in Sragen...People can accept a woman figure. <i>Wong wedok ki alus</i> (women are lenient) ...prefers feelings, understanding... As for men, on the other hand, the Javanese perceive them as having stiff behavior, less observant, less thorough ...They lack feelings...That's where the Javanese put forward that women are lenient, patient ... (A community figure)</p>

Family support Father always gives freedom to his sons and daughters, regarding life choices, do the best and must have the value that the best people are those who can provide the most benefit to others... In 2011 there was a regent election, parents asked me that this is chance, people need, don't you want to try?
(Regent)

I have a very understanding husband. Although once he had asked: *sing mbok goleki ki opo* (what is your aim, anyway)...? My husband gave an illustration if you feel that you already have a central role in a family, helping both the core and extended families, as well as your surroundings, and now willing to take over the greater responsibility, I as a husband bless it as long as it is for good.... (Regent)

Children grow up, they all have started to understand...At first, they were still asking, what is your intention, mom?... Now they are happy (Regent)

Personal It's full of risk; I do it wholeheartedly...I'm not a half-hearted person... If I have decided, I must all out, focus ... The principle and the mandate must be upheld the temptations (in politics) are extraordinarily massive... (Regent)

This regent is an open person. All problems were also conveyed to me, so I know how to give an opinion ... She has a good commitment ... not thinking about herself, but thinking more about how her duties and responsibilities are. (Vice regent)

Coping with The Glass Ceiling

Ability The woman's advantage is her communication skills are better and more flexible. *Aku pingin ning pawon ahh* (I want to go to the kitchen) ...*Aku tak rewang ya, ra ketang ngiris lombok loro* (Let me help, though only slicing two peppers) but it is directly embedded in them that the regent is very populist.
(Regent)

Building trust The woman leader is like a mother, wherever she goes...Due to the gesture...*Ora digawe-gawe* (Not contrived) ... Creating a better public trust, with the leadership we have, with motherly style, *ngandhani* (advice)...
(Regent)

Networking In the 2016 campaign there was a compromise with one of the Islamic parties, so the issue of women leaders was suppressed... The mosques were guarded, and feedback was provided by taking the women figures in the past as a comparison (Religious leader)

That's what we have anticipated. In our era, towards the last Friday of the month, we guarded all the mosques. But it turned out the issue still appeared in smaller community gatherings. I think this is something that has been considered normal in the world of politics, although it does not have to be that way. During the campaign I delivered loudly, I orated to Sragen people, we were heading to a new history, making the first woman head of Sragen.
(Vice regent)

**THE BENEFITS OF LEADERS TRUSTING THEIR FOLLOWERS:
A CEO'S PERSPECTIVE**

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THE BENEFITS OF LEADERS TRUSTING THEIR FOLLOWERS: CRITICAL REFLECTIONS FROM A CEO

ABSTRACT:

Leaders trusting their followers have a number of organizational benefits such as high levels of cooperation within groups, increased self-esteem, and high performance of followers. Despite this, there is little work published about the benefits of leaders trusting their followers and still less that provides critical reflection from a Chief Executive Officer (CEO) on their personal experiences of trusting their followers. This paper reports on the analysis of four critical reflections written by a CEO from an Australian not-for-profit organisation using an autoethnographic methodology. The findings reveal that having trust in followers led to improved communication and more responsibility being delegated to the follower.

Keywords: followership, leadership and personality, power, shared and distributed leadership, strategic leadership, trust

Leaders trusting their followers is an important element of a professional working relationship that holds benefits for the leader and the follower. Barsh & Lavoie (2014) point out that the behavior of a leader has a direct impact on her/his staff and their behavior. Brower et al. (2009) assert that followers who are trusted by their leaders are more likely to have better levels of self-esteem and perform at a higher level. Broadly, trust has a very strong influence on the behavior between individuals and within groups and leads to higher levels of cooperation (Ferrin, Bligh, & Kohles, 2007).

The literature surrounding trust of leaders and followers mainly focuses on the advantages and benefits of followers trusting their leaders and of how leaders can help develop that trust (Bijlsma & van de Bunt, 2003; Hakimi, Van Knippenberg, & Giessner, 2010; Martin, 1998). However, the literature examining the benefits of leaders trusting their followers is limited (Bligh, 2017; Brower et al., 2009; Hakimi et al., 2010). Some literature has focused on the effectiveness of trust such as Bernerth & Walker

(2009) who reported that leaders that are inclined to trust followers are more likely to have positive interactions with followers and, concurrently, more unlikely to act unethically (including lying or stealing). Brower, Lester & Korsgard (2017) note that, normally, people need to be trusted to return trust – that is ‘trust begets trust’ (Brower et al., 2017 para.4).

With the limitations of the existing literature, the aim of the current study was to document the experiences of a leader trusting his followers and to compare those experiences to the literature.

RESEARCH OBJECTIVES

The objective of this research is to document the experiences of a leader within a NFP organization trusting his followers and to compare those experiences to the academic literature.

RESEARCH QUESTIONS

The research questions to be considered are:

- What is the impact of a leader trusting a follower?
- What are a leader’s experiences of trusting followers?
- Are the experiences of the leader supported by the academic literature?

LITERATURE REVIEW

Leader and Follower

Brewer (2014) considers a leader to be someone who assists or guides a follower or followers to a goal or purpose. Adair (2003) defines leadership as influencing people to take a particular path or course and is dependent on the charismatic trait of the leader whereas others define leadership as influencing a group or an individual to achieve a goal (Hersey, Blanchard, & Natemeyer, 1979; Hersey & Blanchard, 1981). Martin (1998) considers that, by setting and articulating the vision of their organization, leaders determine the organizational culture and ensure the desire and impetus to grow the organization and undertake continuous improvement. Martin (1998, p. 42) contends that ‘trust is at the heart of all great leadership’.

To be effective, a leader needs to be cognizant that achieving organizational goals is dependent on the attitudes of followers and employees and therefore needs to understand the values of the follower and be able to relate to those values, in part, to build trust (Martin, 1998; Mineo, 2014).

Leaders need to ensure they communicate to their followers the information needed to make appropriate decisions that contribute to the organization.

Finally, 'Leadership is done with people, not to people' (Hersey & Blanchard, 1996, p. 44).

A 'leader', therefore, can be defined as a person who provides influence, support, or guidance so that the follower(s) can reach a certain goal.

Brewer (2014) defines follower as someone who works with and accepts the direction of a leader irrespective of whether they agree with the leader. This paper defines the term 'follower' in the same way.

Trust

Martin (1998) tells us that trust is to believe without hard evidence. Lencioni (2002) defines trust as confidence that a person's intentions are good and requires the other person to be vulnerable. Like others, Mayer, Davis & Schoorman (1995) and Brewer (2014) define trust in terms of the preparedness of a person (the trustor) to be vulnerable and dependant on the actions of another (the trustee) on the basis that the trustee will undertake a task or tasks important to the trustor. This definition is similar to Bligh (2017) who defines trust as an expectation that another person's behaviours and advice can be trusted and that they intend to do as they promise. Trust based on vulnerability, Lencioni (2002) argues, allows the trustor to be able to totally focus on the job-at-hand.

Leslie (2014) gives a very practical example of the relationship between trust and vulnerability by recalling a time when she was conducting interviews and those she interviewed trusted her enough to share very sensitive material but they did not want it included in the record of interview – that is, they were trusted Leslie (2014) enough to be vulnerable with her and gave her the information she was asking for their trust did not extend to the next level of users of that information and they felt too vulnerable for that information to be passed. That is, they trusted Leslie and were happy to be vulnerable to her but not further. Lavalley & Leslie (2016) highlight that when trust is broken it can take a considerable amount of time to be re-established and can have long-term consequences.

Trust goes hand in hand with risk (Bijlsma & van de Bunt, 2003) and vulnerability – that is the trustor makes her/himself vulnerable to the actions, words and intentions of the trustee (Bligh, 2017) and in the process willingly exposes her/himself to the potential for risk. While trust and risk are inter-linked (Bijlsma & van de Bunt, 2003; Mayer et al., 1995) it is not clear whether a preparedness (or willingness) to take a risk leads to trust or is the result of trusting someone (Mayer et al., 1995).

Trust, then, is strongly linked to vulnerability by the trustor in the trustee (Bligh, 2017; Ferrin et al., 2007; Lencioni, 2002; Martin, 1998) and a willingness by the trustor to take a risk that the trustee's skill, advice and behaviours can be relied on – risk is, therefore, fundamentally a main pillar of trust (Bijlsma & van de Bunt, 2003).

Adair (2003, p. 290) defines trust as 'an assured reliance on the character, ability, strength or truth of someone'. Using this definition in the workplace trust can be thought of as the preparedness to rely on a person's ability to do the job they are employed for.

Trust is based (at least in part) on the trustor's experiences and expectations based on those experiences and determines the trustor's actions and reactions (Bijlsma & van de Bunt, 2003; Hakimi et al., 2010). It is an important characteristic to ensure a positive and flourishing relationship and helps the follower to feel motivated and energised (Brower et al., 2009; Hakimi et al., 2010; Martin, 1998). Trust, therefore, is relational and both leaders and followers have a responsibility in developing and maintaining the relationship (Bligh, 2017).

Gaining or giving trust is not a one-time event but, like any element of a relationship, needs to be maintained (Martin, 1998; Mineo, 2014). It is the leader's responsibility to step out and show trust as a first move (Martin, 1998). More critically, it can easily be lost by, amongst other ways, poor communication or by not keeping promises (Lavalley & Leslie, 2016; Martin, 1998). Citing his own experience over 40 years, Mineo (2014) identifies that many people are not prepared to take time to build a trust relationship or put the effort in that is required, in short they are after an immediate response.

By empowering followers, a leader demonstrates her/his trust in her/his followers and sooner (or later) the trust will be returned (Mineo, 2014). Hakimi, Van Knippenberg & Giessner (2010) point out that a key element of empowerment is the delegation of authority allowing followers to make

decisions that may impact to a greater or lesser degree on the leader's goals. Followers/employees that are empowered have greater levels of authority and responsibility than those that are not empowered (Brower et al., 2009; Hakimi et al., 2010).

METHOD

Autoethnography

This study utilises autoethnography for its research method. Ethnographic research has its origins in anthropology and studies cultures through observation of participants (Zikmund, D'Alessandro, Winzar, Lowe, & Babin, 2017). Autoethnography is a qualitative research method that uses ethnographic research from an autobiographical perspective. It gives voice to the personal experience of the author rather than a third party (Sparkes, 2000; Wall, 2008). It commences with a personal story and connects that story (or stories) to a greater sociological context (Wall, 2008). Baumeister, Stillwell & Wotman (1990, p. 995) highlight that the autobiographical nature of this research method has a high level of external validity because these are 'people's actual accounts of genuine events from their everyday lives'. This method complements controlled studies and positions the writer within the narrative context (Houston, 2007). Autoethnographic texts allow the reader to feel and experience, to some degree, what the author has experienced and to engage with the issues and the story in a personal way (Wall, 2008).

Wall (2008) points out that there is an expectation that (so-called) hard data is used as evidence and an expectation that the memory of the researcher/autoethnographer is not sufficient. Wall (2008) highlights that memories of a person or group collected by a researcher and documented are accepted as hard data but that the memories of the autoethnographer are considered somehow invalid or at the very least sub-standard. Ethnographic research is reliant on the memories and the recollections of individuals contextualized within their ongoing life experience.

Primary data was collected/created from June to October 2017 as a number of distinct critical reflections chosen by the author of events involving trust in his career. These were formatted using the DIEP (Describe, Interpret, Evaluate, Plan) Reflective Writing Strategy ("Reflective Writing: DIEP," 2010 (adapted from Boud 1985, Reflection: Turning Experience into Learning). This approach was chosen to assist the author 'to think about and understand... (his) learning experiences' in a structured

way ("Reflective Writing: DIEP," 2010). Pseudonyms were used in the reflections to protect the privacy of the followers.

This paper focuses on six of those reflections.

RESULTS & DISCUSSION

Table 1 presents the four critical reflections in summary.

INSERT TABLE 1 HERE

Three themes arose from the data:

- Trust and Communication; and
- Trust and Delegated Responsibility; and
- Trust and Followers as People.

Trust and Communication

Bligh (2017, p. 31) notes that ‘leaders and followers who “get off on the wrong foot” may have a difficult time developing a trusting relationship’ because the mistrust, or perceived mistrust, at the beginning of the relationship often results in a lack of co-operation or information sharing. This has the potential of leading down a continuing spiral of additional mistrust and even less co-operation until the situation or relationship is beyond repair. Kovac & Jesenko (2010) state it more bluntly and argue that the level of trust directly impacts the quality of communication and, more importantly, has direct bearing on the willingness (or openness) to share. Importantly, trust is not based on positional hierarchy but on a preparedness to be vulnerable and to take a risk that the trustee will “not deliver” – it assumes that the trustee has good intentions (Lencioni, 2002). Brower et al. (2009, p. 332) note that when there is mutual lack of trust between leader and follower “each will be reluctant to initiate exchanges, effectively stalling the process of reciprocity, empowerment, and self-fulfilling prophecy that lead to performance. Subordinates then may lack investment in the relationship and be unwilling to exert effort beyond minimum requirements.”

This author’s experience (Reflection 1) highlights the connection between trust and communication. In one case (Reflection 1b), the author experienced an absence of trust from the beginning– that is the author did not trust the intentions of his follower (Tony). In particular, there was

an inconsistency in the messages being received from Tony and as a result, the author felt unsure of what he was being told by Tony and did not have the same deep and fruitful discussions he had with other followers. Hakimi, Van Knippenberg & Giessner (2010) note that followers who are not consistent in the information they give or who provide information the hearer wants to hear will not be trusted by their leader and this was certainly true in Tony's case. As time went on it was apparent that Tony had not been forthright in what he had told the author. It is not clear whether Tony's less than complete communication was part of his nature or a direct result of the author's lack of trust in him. What is clear is that the author demonstrated a lack of trust in Tony and that Tony did not tell the author everything that was going on in his team. It is not clear to the author why he did not trust Tony other than a 'gut feeling' that Tony was not working within the same expectation and performance paradigm that the author favoured. What is clear is that by not trusting Tony the author wasn't prepared to have the same frank and open discussions he had with others. Discussions with Tony to discuss his future, either in or outside of the Company, took about three months and involved a lot of discussions but the discussions were difficult and, in the end, involved Trade Union representation. The relationship never improved, and Tony left the organization within the first year of working with the author.

In another situation (Reflection 1a), the author trusted Barbara from the beginning of their relationship and showed that trust through various means. The discussions with Barbara were frank, open and honest. So much so that one of the more difficult discussions a leader has with a follower (in this case the person's ongoing suitability for their role) was a relatively quick, painless, and agreeable discussion. The author and Barbara were able to immediately discuss Barbara's unhappiness in her role without needing to skirt around the issue. The author and Barbara had developed enough of a trusting relationship to be able to not feel vulnerable or uncomfortable despite the sensitive nature of the discussion. As a result of the trust between the author and Barbara they were able to start discussions about Barbara's unhappiness in her role, identify the reasons for their unhappiness and move to a solution that included Barbara leaving her role almost immediately – and Barbara feeling less stressed and more relaxed after the discussion than she did before. This result, which can often take a considerable amount of time to get to, only took 90 minutes. This contrasts to the three months

or more of discussions between the author and Tony in the previous example. Subsequent discussions with Barbara confirmed that, while this was a difficult time for her, the trust between her and the author helped her to deal with the issues involved in moving from her role and helped her deal with times of anxiety.

Trust enabled communication allows for passionate and honest debate and disagreement without the fear of reprisal (Lencioni, 2002). It is particularly important for leaders to be prepared to lose face so that trustees are confident they can do the same without fear (Lencioni, 2002). It is also important for followers to be truthful and consistent in their statements to ensure they do not lose the trust of their leader (Hakimi et al., 2010).

In another event (Reflection 4) a follower (Bernadette) the author had trusted had failed to inform him (as her direct leader and supervisor) of a very critical incident. As a result, the author immediately lost all confidence and trust in her (other issues had reduced the author's confidence in Bernadette). Bernadette had a long-standing and recurring set of run-ins with some Company Board members and this issue (which the author would have to report) had the potential for the Board to demand her employment be terminated. Bernadette had not been truthful (through deception) and, as predicted by Hakimi, Van Knippenberg & Giessner (2010), the author lost trust in Bernadette. In addition, the author felt that the risk was too great that Bernadette would withhold other critical items from him and the author was not prepared to remain vulnerable to Bernadette's future actions (Lencioni 2002).

The literature accurately predicted the responses and behaviour of the author. It is clear from the literature, and the author's experiences confirms, the connection between trust and communication. Communication is more difficult and less meaningful and complete when there is reduced or no trust – the level of trust determines the depth and honesty of the communication. Conversely, the lack of truthfulness (either through lies or deception) can have a significant and immediate impact on trust. Furthermore, this section confirms the connection between trust and vulnerability and preparedness to take risk. In both the case of Tony and of Bernadette, the lack of a desire to be vulnerable (or to be prepared to take a risk) meant the author had reduced trust in the individual. This then had an impact on communication levels and ultimately the ongoing working relationship.

Trust and Delegated Responsibility

While trust is freely given by the author based on his assumptions and experience (as outlined earlier) it is enhanced (or reduced) for an individual based on his experience with that individual over time. Reflections 1, 2, and 3, all recount events for the author that demonstrate the relationship between trust and delegated responsibility. In Reflection 3 the author trusted the skills of his follower despite the follower not having the hands-on experience for that situation. Based on that trust (which itself was based on the author's assessment of the follower's skills) the author gave the follower (or, more correctly, did not take from the follower) the responsibility for making the appropriate decision. In Reflection 2 the author lost trust and withdrew responsibility from the follower – again based on his interactions with the follower. A similar analysis applies in Reflection 1b where, based on intuition (or gut feeling), the author never fully trusted Tony and did not delegate responsibility fully.

Brower et al. (2009) notes that leaders are more inclined to take risks with (and empower) followers they trust which then has a motivating effect on those followers. Brower et al. (2009) also notes that leaders are more inclined to delegate important work to a follower they trust because, rightly or wrongly, they are more confident that the task will be completed correctly. Hakimi, Van Knippenberg & Giessner (2010, p. 708) contend that 'highly conscientious leaders were more inclined to empower followers when their trust in their follower's integrity and performance was high'. The author's experience fits with this assertion.

The literature is clear that the level of trust guides the inclination to delegate important work. The author's experience confirms the literature as his own experience is that he is more likely to delegate significant tasks to those he trusts the most. This is not surprising – from earlier we know that trust is closely linked to being vulnerable (and a willingness to take risk) so the notion that sensitive or important work is delegated to those we most trust makes logical sense. A leader's sense of vulnerability will not (normally) allow her/him to entrust a task to someone she/he does not think (or trust) can do the job.

While most leaders delegate based on their trust in a follower without thinking about it, it is helpful for leaders to be aware of the interplay that occurs in their subconscious. Being aware of why leaders make these decisions in most cases won't change the decision but will help them to understand

the reason and the possible impacts on staff (including messages these decisions may send about the level of trust).

Trust and Followers as People

The term ‘human resource’ is commonly-used in business to refer to the employees of an organization. Another term (used less often) is ‘human capital’ (Gittens & Pilgrim, 2013). These are terms that the author has preferred not to use because of their implication that people are an asset (human capital) or input (human resource). This author had not previously related this view to trust, however Bligh (2017) argues that viewing staff as a commodity, or as an input in to a process, negates the advantage of trust-based leadership. Mineo (2014) identifies respect of staff as including concern and care for them recognizing that they have lives private lives that extend beyond their employment. This resonates well with Spiller et al. (2017, p. 9) who, in reflecting on management from Māori world view, makes the point that staff ‘are not silo-ed from their wider environment and relationships’ but that modern staff management ‘objectifies and tends to consumerise individuals (and) treat them as a tool ...as disposable and easily replaceable’. Spiller et al. (2017) goes on to point out that modern/western approaches to managing staff focuses on the commitment of employees to their employer and job but not their well-being.

This author’s experience (Reflection 5) is that to treat followers with respect and take into account their lives beyond work (Mineo, 2014; Spiller et al., 2017) builds trust and shows a caring and humane side of the leader. To respect followers and show care for them builds trust capital (Bligh, 2017) with followers. In organisations where the focus is on targets, knowledge and problem solving without regard to the individuals involved, developing trust is more difficult (Bligh, 2017). This author’s experience is that by the leader focusing first on the person and then on the job-at-hand results in greater commitment by followers to the organization and to their job (Brower et al., 2017).

In Reflection 6 this author recounts the long-standing effects on people that are not treated well by their leaders. In this reflection, the treatment of a follower without respect for them or their concerns had long-standing impact that carried across to future employment. In this reflection, Horatio’s previous leader failed him by failing to respect him as an individual leading to a trust deficit

by Horatio (Bligh 2017). What Bligh (2017) does not comment on but is clear in a practical sense from this author's experience with Horatio is that the trust deficit may not be with just the current follower but may (as it did for Horatio) result in a trust deficit in future leaders from the outset. This supports comments by Bijlsma & van de Bunt (2003) and Hakimi, Van Knippenberg & Giessner (2010) that trust is based on experiences that in turn determine future trust actions and reactions.

What Reflection 6 has made obvious to this author is that leaders may well have followers (inherited or brought onto the team) who start with a trust deficit and require patience, understanding and guidance to develop trust – in other words, who require more work than most to gain trust from. Martin (1998) considers that the actions of leaders should assist followers to strive for improvement. From Reflection 6 it is clear that actual behaviour of leaders is not always as conducive to improvement as Martin (1998) would hope. Considering the definitions of leadership and leader by such as Adair (2003), Brewer (2014), Martin (1998) and Mineo (2014) it may be reasonable to question whether Horatio's experience came from a true leader or whether his boss/manager/supervisor was in a more senior role within the organizational hierarchy without being a true leader. It is clear that the behaviour of Horatio's former leader (as interpreted by Horatio) led Horatio to have no confidence that his former leader had good intentions (Lencioni 2002). Interestingly, when Horatio came to work with this author, he carried with him that distrust from his previous experience and was unprepared to be vulnerable and therefore unprepared to be trusting at the outset (Bligh 2017; Brewer 2014; Mayer, Davis & Schoorman 1995). Horatio's behaviour shows the inverse of the assertion by Lencioni (2002) that vulnerability enabled trust allows the trustor to focus on their job – that is, Horatio's lack of vulnerability leading to lack of trust in this author led to him have a multifocal approach of protecting his position in the Company and his reputation AS WELL AS doing his job.

CONCLUSION

The literature discussing the benefits of followers trusting their leaders and how leaders illicit that trust is plentiful but the literature examining the impact of leaders trusting their followers is less plentiful.

This paper has found that the literature identifies a number of organisational benefits that derive from leaders trusting their followers. Most of these benefits involve improved communication between the leader and followers and improved motivation by followers.

Three themes arose from the data:

- Trust and Communication; and
- Trust and Delegated Responsibility; and
- Trust and Followers as People

Through these themes this paper explored the experiences of this author in his career and finds his experiences supported by the literature and adds a personal insight to the literature that is largely missing.

It is clear that the relationship between trust, vulnerability (and preparedness to be exposed to risk), and communication are strong, and leaders need to be cognizant of the close relationship between these three elements. It is important that leaders understand that their level of communication with an individual (or group) can be impacted by their level of trust in that individual (or group).

Table 1: SUMMARY OF REFLECTIONS

Reflection No.	Summary
1	<p>(a) A strong relationship with Barbara based on trust results in a (relatively) easy discussion to move her off her job when she became dissatisfied and frustrated with her leader’s expectations of her in her role. As with the other members of the Executive team that were in place when the leader took up his role the leader showed Barbara that he trusted her by acknowledging her expertise in her field and by asking and respecting her advice and opinion on issues relevant to her skills and expertise.</p> <p>(b) Compares with a previous follower, Tony, who the author didn’t trust from the beginning and the poor communication that followed. The author had gotten on with Tony at a superficial level but did not trust him and did not show trust to him at any stage. He was suspicious of Tony from the beginning based on quantitative data about his programme and a gut feeling about Tony that couldn’t be explained that led me to not trust him.</p>
2	<p>The author reflects on a time when trust was eroded. The author realised soon after commencing in his role that there was an issue between Celeste’s Team (and herself) and a major (and key) strategic partner that provided sizeable funding. The advice from the partner agency and from other staff was that Celeste’s behaviour was less than professional and that both she and her counterpart in the other agency were constantly at loggerheads and were both being passive aggressive including at joint meetings.</p>

	Discussions the author had with Celeste quickly highlighted that she had a personal dislike for her Departmental counterpart and thought he was unprofessional. She found fault with everything Jack did or offered and made sure others in her Organisation were aware of Jack’s ‘failings’. Celeste had been trusted but her unprofessional behaviour in meetings and via email in relation to the key stakeholder eroded the author’s trust in her professionalism and ultimately in her competency.
3	Sharon was inexperienced in dealing with an issue of one of her follower’s disloyalty to the organization. The author mentored and guided Sharon through the process of, ultimately, letting the follower go. While the process took longer than if the author had taken action, the author believed that the authority delegated to Sharon would be used properly with the right guidance and that she would learn from the process.
4	The author’s trust in Bernadette’s ability to adapt to a new paradigm declined over time as she failed to become more strategic and less ‘hands-on’. Trust was eroded (literally overnight) when it became evident she had not disclosed a significant incident that had the potential to cause catastrophic damage to the Company.
5	The author has always resisted the use of the term ‘human resource’ or ‘human capital’ because he does not like the notion of people being thought of as a resource or input into a process or as an asset – equal with resources such as raw products, time, money or assets such as machinery or buildings. He prefers to treat them as humans with lives that extend beyond their employer and taking into account that they have other issues in their lives and that their lives extend beyond the Company.
6	A newer member of the Executive team (Horatio) presented with low self-esteem

	<p>and a sense of distrust about whether he was going to be properly recognised for his contributions. Discussions soon revealed that he had worked in an organization where his ideas were taken by his leader and presented as the leader's own without reference to Horatio. In addition, he had been chastised for minor mistakes and these two issues had impacted his trust of his then leader and flowed on to a distrust of me.</p>
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Stream #6. International Management

Competitive Session

Patterns of coping in expatriate spouses: A longitudinal study

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Patterns of coping in expatriate spouses: A longitudinal study

ABSTRACT

The adjustment of expatriate spouses/partners is a stressful process. Little is known however, about the stressors encountered, or the relative effectiveness of coping mechanisms employed. This paper explores the experiences of expatriate employees' partners in the regional setting of Sarawak, East Malaysia. Using a longitudinal, narrative-based research design, ten partners' experiences were explored throughout their first year. Altogether twenty-nine coping mechanisms emerged. These were categorised into five coping approaches: acceptance, active emotion-focused coping, active problem-focused coping, active cognitive reframing, and avoidance. A broad range of coping strategies was observed to achieve the highest level of adjustment. Where fewer strategies were used, problem-focused coping or cognitive reframing were effective. These findings may inform HRM practices aimed at supporting spouses' successful expatriation.

Keywords: cross-cultural management; international HRM; qualitative

INTRODUCTION

The successful adjustment of expatriate employees' accompanying spouses and partners (for brevity referred to hereafter as expatriate spouses) to life in a host country has been widely accepted as influencing the adjustment of their working partner, and therefore the success of an international assignment (Takeuchi, Yun, & Tesluk, 2002; van Erp, van der Zee, Giebels, & van Duijn, 2013). While very much a stakeholder in expatriate management, the accompanying partner's indirect relationship with employers has meant their experiences remain poorly understood, both by human resource management practitioners and researchers. Although stress and coping frameworks have underpinned dominant models of adjustment in expatriate literature, there have been few attempts to

detail the range of stressors encountered by expatriate spouses, and even less discussion of the coping mechanisms which might help them face such stressors (Chen & Shaffer, 2018). Focussing on expatriate spouses' stress and coping stories as they emerged longitudinally over a one year period, this paper presents a nuanced view of the variety of coping mechanisms employed over time, and reports on patterns of coping effectiveness.

LITERATURE REVIEW

Psychological stress and coping theories have been widely used to frame research relating to cross-cultural adjustment of expatriates (Sussman, 2011). From this perspective cross-cultural adjustment is conceptualised as a stressful transition involving stressors in the host environment that the expatriate does not have the resources to meet. In their widely used stress and coping framework, Lazarus and Folkman (1984) define coping as “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (pg 141). Subsequent research has supported Lazarus and Folkman’s conceptualisation as a shifting process in which different forms of coping may be employed at different times, or even simultaneously (Amiot, de la Sablonniere, Terry, & Smith, 2007; Berjot & Gillet, 2011; Ebata & Moos, 1994; Roth & Cohen, 1986; Smith, Amiot, Smith, Callan, & Terry, 2013).

Early cross-cultural adjustment literature conceptualised adjustment as a unitary construct, a state of psychological shock that must be overcome (e.g. Lysgaard, 1955; Oberg, 1960). An influential expatriate adjustment model by Black, Mendenhall and Oddou (1991) similarly characterised adjustment as a stressful transition, which they measured on a single dimension – the degree of perceived psychological comfort of the expatriate. Looking at spouse experiences, Shaffer and Harrison (2001) later conceptualised expatriate spouse adjustment in similar terms, emphasising the importance of a personal adjustment domain, in addition to social (‘interaction’) and cultural adjustment domains. While these prominent models of expatriate and expatriate spouse adjustment have been the basis for many advances in the field, there are now growing calls for critical re-evaluation of the adjustment construct (Hippler, Caligiuri, Johnson & Baytalskaya, 2014;

Kubovcikova, 2016). Adjustment is now more widely accepted to be multidimensional, including affective, behavioural and cognitive components (Haslberger, Brewster & Hippler, 2014).

Accordingly, a well-adjusted expatriate may be defined as “an individual who feels neutral or positive emotions, is adequately confident regarding his or her knowledge about the host society, and shows effective behaviours appropriate to the cultural and specific situation” (Haslberger & Brewster 2005, p. 5). As emphasised by Berry (1997) however, it is important to note that adjustment does not necessarily imply a positive adaptation, but may involve resistance, attempts to change the environment, or attempts to move away from it.

From the stress and coping theoretical perspective, antecedents which have a positive relationship with adjustment such as personality and social support, are viewed as coping resources that can be used by expatriates to overcome their stressors. Psychologists have attempted to classify such coping strategies (Carver, 1997; Carver, Scheier, & Weintraub, 1989; Folkman & Lazarus, 1988; Tobin, Holroyd, Reynolds, & Wigal, 1989). Pearlin and Schooler (1978), for example, identified three broad categories of coping strategies : (a) responses that change the situation out of which the stressful experience arises; (b) responses that control the meaning of the stressful experience after it occurs but before the emergence of stress; (c) responses that function more for the control of stress itself after it has emerged. Lazarus and Folkman (1984) in contrast, described two different forms of coping: emotion focused or problem focused, both of which can facilitate and impede each other in the coping process. Roth and Cohen (1986) instead classified coping strategies as either approach or avoidant, that is, cognitive and emotional activity is either oriented toward or away from a threat. These various classifications do not contradict each other, but rather overlap, and focus on different aspects of coping.

While some coping strategies are viewed by psychologists as generally effective and others as generally problematic (Carver, 1997; Folkman & Moskowitz, 2004; Lazarus & Folkman, 1984), context is important as various kinds of coping mechanisms may be more or less effective in different situations (Folkman & Moskowitz, 2004; Lazarus & Folkman, 1984; Pearlin & Schooler, 1978; van Erp, Giebels, van der Zee, & van Duijn, 2011). Denial and other avoidant strategies, for example, have been found to be effective in dealing with some stressors in the short term, especially if the

individual perceives that they cannot control the situation, but tend to be maladaptive over the long term (Matheson & Cole, 2004; Suls & Fletcher, 1985).

In studies of expatriates, Ward and Kennedy (2001) found that an avoidant coping style was a predictor of poor psychological adjustment, whereas an approach coping style and humour were associated with successful psychological adjustment. Selmer (2001a) found problem-focused coping to be positively related to both psychological and sociocultural adjustment of Western managers in Hong Kong, while psychological withdrawal was found to have a negative relationship with adjustment. In a later study of coping strategies in female expatriate employees in Hong Kong, however, Selmer and Leung (2007) reported no relationship between problem-focused coping and either sociocultural or psychological adjustment, but reported that emotion-focused coping had a negative effect on sociocultural adjustment. Stahl and Caligiuri (2005) explained such mixed results as indicating that the effects of coping mechanisms on adjustment may not be direct.

Proposing a move away from the predominant reactive behavioural paradigm which views expatriates as having to cope with demands faced in their environment, Ren, Shaffer, Harrison, Fu, and Fodchuck (2014) examined proactive resource-based pathways to expatriate adjustment. They emphasised positive framing and relationship building as proactive tactics for building personal and affective resources to facilitate adjustment. This approach highlights the idea that expatriates can tactically shape their experiences of expatriation (Ren et al., 2014).

In studies of coping relating specifically to expatriate spouses, Copeland (2003) reported that spouses who coped with relocation stress by trying to control their emotions, or escape and avoid their problems, had poor adjustment in comparison to those who coped through effective problem solving and positive reasoning. While coping strategies which are problem-focused and address a stressor directly have been found to predict psychological adjustment in expatriate spouses, the spouses also cited attitudinal strategies including optimism, sense of humour, flexibility and open-mindedness as being important coping resources (Bikos et al., 2007). More recently, Chen and Shaffer (2018) reported evidence that problem focused coping results in higher levels of adjustment for expatriate spouses than emotion-focused coping. From these observations, the questions addressed in this paper are; a) which coping strategies are most commonly used by expatriate spouses, and b) which

strategies might be most effective for facing their various stressors, or for proactively building personal resources?

METHODOLOGY

In response to calls to use longitudinal data to track adjustment of expatriates over time (Bhaskar-Shrinivas, Harrison, Shaffer, & Luk, 2005; Richardson, 2018), this research is part of a larger study of ten expatriate spouses' relocation experience, recorded throughout their first year of living in Sarawak, Malaysia. The longitudinal approach is vital to understanding the patterns of stress which participants described experiencing, the evolving nature of their responses to those stresses and the consequences of these responses for successful adjustment to the new country/location. This approach offers insights that may be missed in cross-sectional research, such as when (if any) expatriate adjustment stresses began to emerge, whether these stresses and the attendant coping responses changed over time, how successful these responses were, or if the stresses compounded and consequently became entrenched in patterns of unsuccessful adjustment.

The research design was based upon the constructionist assumptions that there may be multiple locally constructed realities in the social world, and that the investigator and investigated object are interactively linked. From this research approach, narrative interviews were conducted with participants to enable them to articulate the situation from their own perspective. As such, the interviews began with broad, open-ended questions aimed at eliciting narratives which foregrounded the interviewees' perceptions and experiences. This open, narrative approach was useful in helping researchers understand the participants' relevancies and subjectivities as their expatriate experience developed. The degree participants were interpreted by the researchers to have become more or less well-adjusted, was based changes in behaviour, emotion or cognitions, as featured in their narratives at different points of time throughout the year in which they were interviewed.

Eight female and two male expatriate spouses were interviewed at four intervals throughout their first year in Sarawak; at approximately three, six, nine and twelve months after arrival. The interviews were modelled on Flick's (2000) episodic interviewing method, in which participants were invited to tell stories of recent events that they remembered as being meaningful. The first author, an

insider in expatriate spouse networks in Sarawak, conducted the interviews, which lasted between 35 and 70 minutes each.

The ‘insider’ position of the interviewer offered the opportunity to develop strong relationships with the interviewees and provide a ‘backstage’ or participant-observer insight into their first year in Sarawak. This insider advantage also comes with limitations, which are discussed in the final section of this paper.

All interviews were recorded on a digital voice recorder and transcribed verbatim. Pseudonyms were used in transcriptions, and identifying features were removed or amended to ensure anonymity of the participants.

RESULTS

Sources of Stress

A total of 29 sources of stress were identified from the data as being experienced by participants throughout the year, which were grouped into four categories:

- a) Stressors related to the new *physical and cultural environment*. Some, such as setting up house abated over the first six months, while others, such as feeling frustration with local culture, were ongoing for some participants.
- b) Stressors related to *spousal relationships*, especially increased tensions between the partners, peaked in the middle of the year. While these were resolved for some participants, for others, they escalated further in the second half of the year.
- c) Stresses related to *broader social relationships* linked to family and friends at home, and new relationships in the host environment. For some, these were minor and overcome in early months. For poorly adjusted spouses, these were problematic throughout the year.
- d) Stressors related to *personal uncertainties* such as the question ‘what will do here?’ Participants who demonstrated high self-esteem upon arrival spoke of relatively few stressors in their first interviews, while those with low self-esteem experienced the first months as more difficult. Further details of these stressors are available in a related paper [XXX].

Coping Mechanisms

In total, 29 coping mechanisms were engaged with by participants. These coping mechanisms were categorised according to five categories, as listed in Table 1.¹

[Insert Table 1 about here]

Acceptance: Participants who emerged well-adjusted in all domains, all spoke explicitly of accepting that life in Sarawak would not be the same as in their home country, while the narratives of the poorly adjusted spouses did not. This reflects a proactive, positive attitude and willingness to adjust across behavioural, affective and cognitive domains. Marie for example, told the story of her and her son’s sadness at having said farewell to his grandmother in a matter-of-fact manner:

Sunday morning he bolted out of the room and ran down the passage. Stormed into the room that my mother was sleeping in, and said “Where’s Granny!?” [Husband] said to him, “she’s gone home” and he was really sad. So it’s, it’s just... where we are at the moment, and it’s just the way it is.

Active emotion-focused coping: Participants who used predominantly active emotion-focussed mechanisms described seeking to reduce their negative emotional responses to stressors. Seeking social support was helpful for dealing with stressors related to the broader social environment, and the use of humour, were most commonly cited in reference to spousal tensions. Exercise was also an important outlet for several participants, including Angel:

I feel better when I’m finished exercising. Because it’s like...you know, just getting rid of everything.

Active problem-focused coping: Participants who used predominantly active problem-solving mechanisms described how they actively engaged with their stressors. These were particularly helpful

¹ Code counts represent the total number of occasions these stressors featured across all participant narratives throughout the first year.

for addressing personal uncertainty stressors over which they had a degree of control, such as by seeking employment or study opportunities. As Marie explained:

'I was thinking maybe now for the next year or two, to just do [study by] correspondence. You know, where I don't have to attend a lecture and I don't have to be anywhere. I can fit that into my daily routine.

Active cognitive reframing: Participants who were able to cognitively reframe stressful aspects of their situation to view them more positively were particularly successful in coping, especially with the stress of personal uncertainty. There were many ways of cognitively reframing stressors, including emphasising the situation as temporary:

It is not a long-term solution. We are not going to be settling down here, it is just a passing phase and there are much worse places to be in the world than Sarawak.

Some of the approaches to cognitive reframing, such as making effort to 'look on the bright side' were more effective than others, such as trying to 'talk themselves into it'. Here, the difference lay in the degree of acceptance of the situation that the participant held – cognitive reframing appeared more effective as a coping mechanism for those participants who appeared to have a high level of acceptance of their situation, compared to those who did not.

Avoidance: Avoidance strategies were described by participants, for example, as 'hoping for the best' and just 'trying to keep busy'. Participants who demonstrated a predominantly avoidant approach to coping were those who had been the most reluctant to relocate. Lacking in strong personal coping resources such as high self-esteem or a high locus of control, their long-term avoidance of dealing directly with stressors included social withdrawal, which then compounded their sense of loneliness and dissatisfaction with their situation:

A couple of months ago I was really feeling depressed. Really depressed. But um, I think now with keeping myself busy...it's getting a bit better.

Patterns in Coping & Adjustment

Four distinct patterns emerged in regard to participants' use of various coping mechanisms:

- a) Participants who used a predominantly active approach, even if a relatively small range of mechanisms was used, were able to cope relatively well throughout the year.
- b) Participants who used a broad range of coping mechanisms demonstrated a greater degree of adjustment than those who used a narrow range. As stressors of a different nature emerged at various times throughout the year, they were able to apply suitable coping mechanisms to deal with them, including at times, emotion focussed and avoidant coping.
- c) Participants who used predominantly avoidant or emotion-focused coping strategies seemed to cope well initially, but in the second half of the year began to struggle to cope with the ongoing stressors. These coping mechanisms were effective in dealing with strains in spousal relationships, broader social relationships and physical or cultural stressors for the short-term, but not the long term.
- d) Participants who used a narrow repertoire of largely avoidant coping mechanisms, were least successful in managing their long-term stress.

DISCUSSION

This study has demonstrated that general approaches to coping found to be successful for expatriate managers (Selmer, 2001b; Stahl & Caligiuri, 2005) also apply to their spouses. (Selmer, 2001a; Stahl & Caligiuri, 2005) (Selmer, 2001a; Stahl & Caligiuri, 2005) (Selmer, 2001a; Stahl & Caligiuri, 2005) (Selmer, 2001a; Stahl & Caligiuri, 2005) This indicates a positive association between adjustment and active, problem focused and emotion focused coping strategies in spouses. The results are partially congruent with a recent study by Chen and Shaffer (2018) which reported problem-focussed coping as having a positive effect on spouse adjustment, and emotion-focussed coping as having a negative effect. From our results, we emphasise that emotion-focussed coping is not harmful per-se, and when combined with other coping mechanisms, also has a place in supporting adjustment. It is however, better suited as a short-term coping mechanism for dealing with stressors over which a person has little ability to influence.

The present research further adds to our understanding of the role of coping strategies in the adjustment processes by identifying 29 distinct coping strategies variously utilised by adjusting

spouses. It also contributes by offering the observation that the more successfully adjusted spouses are those who used not only predominantly active coping strategies, but also a broad range of coping strategies in response to the various stressors they faced. This observation is consistent with theories of coping that predict that the efficacy of different coping styles depends on the extent to which the person can control the situation (Pearlin & Schooler, 1978; Roth & Cohen, 1986).

Additionally, we observed cognitive reframing of a situation to be an important proactive coping mechanism for spouses who are unable to change a situation, that is, spouses need the flexibility to mentally change their interpretation of the situation. Our observation that some of the approaches to cognitive reframing were more effective for some participants than others, is congruent with Folkman and Lazarus' (Susan Folkman & Lazarus, 1988) argument that the degree to which cognitive coping is effective depends in part on how much distortion of reality is involved.

In accordance with theories of the self which view self-esteem as a buffer or psychological resource for facing stressful events (Cast & Burke, 2002; Pearlin & Schooler, 1978), having high self-esteem prior to the relocation appeared to act as a buffer to initial stressors in the early months. Where coping strategies were largely avoidant, self-esteem and satisfaction with spousal relationships and the new location did not improve over time.

Our interpretation of positive coping and adjustment is based on the multi-dimensional model of Haslberger, Brewster & Hippler, 2014), viz. adjustment across cognitive, affective and behavioural dimensions. Importantly, our observations and analysis of the narratives of the ten expatriate spouses introduced new insights into the effectiveness of coping mechanisms in the domains of personal adjustment (identity, self-esteem), relationship adjustment (spousal, relationships with children and broader relationships, locally and back home) and cultural adjustment to the new location.

Implications for Practice

The observed differences in coping strategies used by more or less successfully adjusted spouses have implications for the training or support offered to adjusting spouses. Including training or counselling programmes that focus on developing appropriate coping strategies could be of particular benefit to those spouses who have few coping resources when they arrive in a new location,

especially those spouses with low self-esteem or a high external locus of control. Researchers have recommended that during cross-cultural training expatriates be informed about effective problem-focused coping strategies and warned of the potential dangers of emotion-focused coping (Chen & Shaffer, 2018; Selmer, 2001a). This may be too simple a message to convey. For spouses who are dealing with many stressors that they may not be in a position to change, conversations with them should include consideration of when problem-focused, emotion-focused, active, avoidant and cognitive reframing may have a place in their repertoire of coping strategies. Another consideration in providing advice to couples exploring relocation overseas is to consider the strength of their spousal relationships and home-based networks and whether these could withstand significant stress and reframing of roles. For example, changes involved when a formerly two income couple family move to an employed breadwinner and dependent spouse partnership, or, replacing close family relationships with long distance sibling/daughter/parent relationships.

Limitations

A limitation of the in-depth analysis of ten cases is that findings cannot be generalised in the conventional sense. The specific location of the study, a small city with no formal expatriate networks, compounds this limitation. It can provide sensitising concepts however, to help expand our understandings of the complex process of expatriate adjustment, which may be tested in larger samples and in diverse locations.

While studies conducted by insiders in the community being studied are often celebrated for the ease of access, rapport building ability, and the contextual understanding their positionality brings to analysis, there are also potential drawbacks with this. Close social proximity may lead to self-censoring by participants, particularly on sensitive or controversial topics, and (although not necessarily a disadvantage) it must be acknowledged that the analysis is filtered through the researcher's situatedness.

Conclusions

For expatriate spouses faced with a variety of stressors throughout their life abroad, particularly during the first half year, it is important to have a variety of mechanisms to draw on to

cope. These need to address the various dimensions of stressors and adjustment patterns required, including cognitive, behavioural and affective. This study provides an in-depth look at the range of coping mechanisms used by spouses during their adjustment, and provides evidence that the wider and more active the range of coping mechanisms a spouse applies, whether through their internal resources, or external support, the more positively and quickly adjusted they will emerge. In contrast, predominantly avoidant or withdrawal-based coping strategies tend to lead to less effective adjustment outcomes. Spousal relationships can deteriorate where coping strategies used by the spouse are ineffective, and further complicate the spouse's pattern of coping. This in turn can endanger the success and longevity of overseas expatriation. These findings have significant implications for the adjustment of expatriates and their spouses in international relocations, which should be incorporated into HRM practices for supporting expatriate couples before and during their expatriate experience.

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Table 1: Coping Mechanisms Observed

Category	Code Label	Description	Code Count
Acceptance	Putting faith in God	Accepts it is “God's Will” that the family is living in Sarawak	7
	Things are not the same as at home	Emphasises Sarawak is “not the same” as at home, and they have to accept their new circumstance	23
Active emotion-focused coping	Exercise	Joining a gym as making participant feel “good about myself”	6
	Humour	Joking about situation, or describing times that they employ humour to cope with stressors	17
	Recreating food from home	Recreate dishes from home country important to create a sense of continuity in life	8
	Seeking emotional support	Seeking people to communicate with about their emotions (looking for a “shoulder to cry on”)	19
Active problem-focused coping	“Keeping busy”	Efforts made to engage with activities that will "fill in their day" in a fulfilling manner	7
	Changing the situation	Taking action, or attempting to take action to change a stressful situation	25
	Exploring study options	Making inquiries into options for engaging in higher education	23
	Negativism	Consciously and explicitly pushing against expectations of spouse and society	18
	Planning for the future	Weighing options and putting mental plans in place for the future	37
	Seeking a creative outlet	Engaging in creative activities	9
	Seeking employment	Actively seeking employment or business opportunity	46
	Seeking information/advice	Seeking information or advice from other people, or from online sources	21
Active cognitive reframing	Comparing situation with others	Comparing self to peers in other situations and seeing “it could be worse”	10
	Looking on the bright side	Consciously accentuating the positive aspects of a situation	75
	Self-blame	Blaming self for creating stress in their life	20
	Self-affirmation	Demonstration knowledge or experience to reinforce self-worth	13
	Talking self into it	Trying to talk self into being happy with the current situation	18
	Viewing this as a temporary situation	Emphasising that their situation is a temporary one	19

Category	Code Label	Description	Code Count
Avoidance	Alcohol use	Mention of self as drinking heavily	9
	Critiquing others	Critiquing other people's values, attitudes or behaviour	57
	Distraction through "keeping busy"	Participant describes trying to keep busy in general to avoid dwelling on problems	34
	Distraction through fantasy	Distracting self from problems with fantasy of another life	6
	Distraction through online activities	Spending unusually large amounts of time online rather than engaging with the physical world	9
	"Hoping for the best"	Participant is waiting to see what will happen to them as time passes, "hoping for the best"	67
	Projecting own unhappiness on to children	Speaks of children's unhappiness in current situation, but other statements suggest this may be a projection of their own unhappiness	11
	Refraining from discussing problems with spouse	Deliberately not discussing problems with their spouse in order to avoid tensions in the relationship	16
	Social withdrawal	Indication of participant withdrawing socially from friends and/or family	5

INTEREST BASED ASSESSMENTS

1

Stream 05 Human Resource Management

Delivered session

**Development of Interest Based Assessments for Effective Talent
Management**

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Stream 05 Human Resource Management

Delivered session

Development of Interest Based Assessments for Effective Talent Management

ABSTRACT

This study aims to develop an employability assessment based on vocational interests for selection of skilled human capital. The tool is developed on the premise of mapping individual interest to specific work environments and occupations within industries, thereby making individual interest congruent to skill development needs. A short assessment tool is developed using Holland's theory of work personalities. The subjects for the study were 1116 college students from engineering, management, arts and science majors. The results of factor analysis produced five interest types namely realistic, investigative, social, enterprising and information technology, with the results being partially consistent with Holland's theory. Reliability coefficients ranged between 0.73 to 0.86, while convergent and discriminant validity analysis indicate acceptable construct validity for the tool.

Keywords: talent management, training and development, choice behaviors, selection, quantitative

INTRODUCTION

In the universal war for trained human capital and manpower, India is aiming to become a leading skills and talent provider to the world. In many global economies, the baby boomer workers are retiring and developed countries are looking at tapping the huge supply of low cost labor available in developing nations. Courtesy of its youth demographic divide, India has the largest youth population in the world. Around 65% of India's population is below 35yrs. The Central government has launched initiatives such as "Make in India" inviting the world to make use of the large availability of talent in India. Providing highly skilled talent for its own requirements and to the world is a key driver for India's economic growth as it transitions into a knowledge-based economy. However, the employability and skills of the youth are not up to par as only 2.3% of the Indian workforce has undergone formal skills training. Recognizing this, the government has launched a massive skill development programme. The 12th National commission lays emphasis on training 400 million youths by 2020. NSDC (National Skill Development Corporation) has set up 13 SSC's (Skill Sector Councils) and works in tandem with industry and state governments to create a skilled and employable workforce.

Industry under Study: Indian Information Technology (IT) Industry

The Indian IT industry is one of the fastest growing Indian industries contributing to nearly 25% of India's exports and employing around 3 million people. It's also a preferred destination for IT outsourcing world over. The industry is poised to grow at \$225 billion in revenues and is expected to employ 7.5 million persons directly by 2020 (NASSCOM, Perspective 2020). The IT industry is a people intensive industry with skilled talent being the fulcrum of its existence and success (Agrawal, Khatri & Srinivasan, 2012; Bhatnagar, 2007). A top priority for the industry body NASSCOM (National Association of Software and Services Companies) is to create an effective pipeline of trained and sustainable human capital with high skill standards to meet the projected growth and vision. NASSCOM

along with the IT Skill Sector Council has rolled out initiatives such as the setting up of national occupational standards (NOS), qualification packs for job roles and creating an occupational structure for the industry. The entire IT industry has been segregated and structured under four core sub-sectors namely IT Services (ITS), Business Process Management (BPM), Software Products (SPS) and Engineering R&D (ER&D). These sub-sectors have been segregated based on parameters such as service lines, revenue generated and employment needs. Within each of the sub-sectors, occupations, tracks and unique job roles at the entry, mid and leadership level have been identified. Career paths and career guides for movement of human capital across sub-sectors both vertically and horizontally have also been defined. At the entry level, a total of 48 occupations and 67 job roles across the four sub-sectors have been identified (NASSCOM-SCC, 2015). Organizations are partnering with training vendors to train and certify students and young graduates with the necessary skillsets. The industry spends 5.5 man-days of average training per person per organization on training (Kumar, 2000). \$1 billion a year is spent by the industry in training entry level graduates to be fit for jobs.

Past research shows that the incongruence between an individual's interests and the perceived skill requirements leads to job dissatisfaction (Feij et al., 1999), with congruence between interests and perceived skill requirements increasing over time. Furthermore, individuals perceive person job fit when their interests are compatible to their jobs (Ehrhart & Makransky, 2007). The fit between individual interests and the job affects the job satisfaction, career development and well-being of young employees (Feij, Peiro, Whitely & Taris, 1995). Similarly, interests have been found to positively impact training performance, employee task performance, motivation, job persistence, organizational citizenship behaviors and turnover (Nye et al., 2012; Van Iddekinge et al., 2011). Consequently, the authors felt that any measures taken to build a sustainable, productive talent pool should focus not only on skilling them but also on the right selection of human capital. This inspired the authors to conceive of and develop an

assessment tool that will first ascertain the interest and preferences of students in joining the IT industry and then train them with respect to the industry's expectation in various occupations, thus streamlining the entire skill development process and talent pipeline. Alternatively, when large-scale skill development is done just to meet short term goals it can lead to unwanted behaviors such as early quitting from the industry, frequent job changing and a dis-satisfied work force.

REVIEW OF LITERATURE

The goal of interest measurement is to help predict individual differences in satisfaction with various occupational choices (Hogan & Blake, 1999). Interest assessments help individuals make evidence-based decisions about their career and educational choices. The most dominant and empirically studied framework in interest measurement is the theory of vocational types proposed by John Holland (1997). According to him, both people and work environments can be divided into six types as realistic (R), investigative (I), artistic (A), social (S), enterprising (E) and conventional (C). The 6 types together are known as Holland or RIASEC codes. Realistic types are interested in working with things, gadgets, or in the outdoors; investigative types are interested in science, including mathematics, physical and social sciences, and the biological and medical sciences; artistic types prefer creative expression, including writing and the visual and performing arts; social types enjoy helping people; enterprising types like working in leadership or persuasive roles directed toward achieving economic objectives; and conventional types are interested in working in well-structured environments, especially business settings. Both people and environments are represented as a combination of 1-3 RIASEC codes, for example RIA, indicating the primary, secondary and tertiary interest types. The first letter code is the strongest type and gives the maximum information. Holland arranged the six types to form a Hexagonal structure, wherein the proximity between the types shows the degree of similarity. Close relations are represented by short distances on the hexagon, while categories on opposite ends of the hexagon least

resemble each other (Tracey & Rounds, 1993). There is strong support for the hexagonal arrangement which was tested on large representative samples of college students and employed adults in the US (Armstrong et al., 2003). In a review study on applicability of Holland RIASEC codes in the 21st century and relevance in international context, Bullock et al. (2010) found that Holland's theory remains fully applicable even in the 21st century and the underlying hexagonal structure was supported in Hong Kong, Singapore, Korea, Croatia, India, Eastern China, Iceland and in Germany. Rounds & Tracy (1996) reviewed existing literature from 1970-1992 to examine the cross cultural validity of Holland's theory and structure. Examining ninety six samples across nineteen countries, they found that international data fit models derived from the original model better than the circular order model itself. A majority of interest inventories currently in use in applied and academic settings have been developed using Holland's RAISEC types. Examples of well-known inventories are Interest Profiler (Lewis & Rivkin, 1999), Self-Directed Search (Holland et al., 1994), Kuder Occupational Interest Survey (Kuder & Zytowski, 1991), Strong Inventory (Donnay, 2005), Jackson Vocational Interest Survey (Jackson, 2000) and Career Interest Profiler (Bakker & Macnab, 2004).

PRESENT STUDY

There is a need for developing indigenous employability assessments that is relevant to the Indian labor market and industry-specific measures that are aligned with the present skill development movement. Therefore, using Holland's theory of vocational personalities this article reports the development and initial evidence of validity of a new interest inventory for the IT industry. Including this new assessment along with the current battery of traditional employability assessments can add value to the selection and training process.

METHOD

Participants

The sample consisted of 1116 students (54% female, 46% male) from arts, management, sciences and technical majors from several Indian states. The mean age of the sample was 20.59 years. Of the students, 11% reported as being enrolled in arts (i.e. commerce, economics, English, statistics), 12% in management (i.e. business administration, human resources) and 10% in sciences (i.e. mathematics, physics, chemistry), with the remaining in the technical subgroup. The technical subgroup is further split into two as technical engineering (non-IT specializations) and technical IT (computer and IT specializations). 36% reported as being enrolled in technical engineering (i.e. engineering specializations such as civil, mechanical, chemical, electrical and electronics, electronics and communications, instrumentation, bioinformatics, biomedical, telecom) and 31% reported as being enrolled in technical IT (i.e. computer science and information technology specializations). 19% of the participants were enrolled for post-graduation and 81 % in under-graduation degrees.

Content Analysis of Existing Instruments

The technical manuals of existing interest inventories such the Interest Profiler (Lewis & Rivkin, 1999), Strong Inventory (Donnay, 2005), Career Interest Profiler (Bakker & Macnab, 2004) and Self-Directed Search (Holland et al., 1997) were initially reviewed to identify items relating to IT occupations and to check if they could be used in the proposed instrument. However, existing items could not be considered for inclusion because (1) the number of IT related items were quite less (2) item content consisted of very basic IT work activities (i.e. Diagnosing computer problems) and (3) under-representation of all work activities of IT. Therefore, it was decided to develop new items.

Item Creation

The item type for the new inventory consisted of work activities from diverse IT jobs as this provides a direct connection to the IT domain. A large pool of items was developed as it was felt that many of them would fail to pass the different stages of development. Each item was written to represent

one of the six RIASEC constructs. The numbers of items in each construct depends on the occupations in it. Adequate coverage of all occupations was ensured with a minimum of three items per occupation. While developing the items, care was taken to keep the items simple and not too technical, understandable to both IT & non- IT students and is gender neutral. An item checklist was developed to check for item wording issues such as ambiguity, wording clarity, double-barreled, negative wording, acronyms and jargons and wording redundancy (Ford & Scandura, 2007). All items were reviewed and examined as per the checklist with items that did not meet the standards being deleted.

Response Format and Scoring Method

A five-point Likert scale was used for the response format as it is easy to construct, administer and is also familiar to the respondents (Netemeyer et al., 2003). Respondents indicate the extent to which they like or dislike each activity. As the order of items can influence the item-response distribution, care was taken to present the items in a mixed order in the questionnaire. Respondent scores are calculated by adding up all the “like” responses (Lewis & Rivkins, 1999).

Procedure

A large study was conducted to finalize the items, identify the factor structure and examine the construct validity of the IT interest inventory. The form containing a pool of 94 items was administrated to pre-final and final year students of various educational institutions both online and in-person. All participants were full time students enrolled in undergraduate (bachelor) and postgraduate (masters) programmes. A combination of item endorsement rates, item means and item-to-total correlations was used to select the items.

RESULTS

This section begins with the results of exploratory and confirmatory factor analysis, followed by scale inter-correlations, validity analysis, analysis of variance (ANOVA), descriptive statistics and

internal-consistency. All the analyses were performed on the sample of 1116 students (54% female, 46% male) and are explained in the following paragraphs.

Exploratory Factor Analysis

Before analyzing the main study data, the total sample was randomly divided into two groups to perform factor analysis. Cognizant of the subject to item ratio of 5:1 for exploratory factor analysis (Costello & Osborne, 2005), the first group had 516 students, with the remaining 600 students forming the second group. Exploratory factor analysis (EFA) was conducted on the first group of 516 students using SPSS 20. Principal component factor with promax rotation was performed to extract the factors. In addition, any item with factor loadings less than 0.3, had cross loadings or was free standing was deleted (Hair, Black, Babin, & Anderson, 2010). After multiple iterations, a new factor structure with five factors was extracted using Kaiser Guttman criterion (Eigen value greater than one) and Cattell's scree plot (Williams et al., 2010). Four of the factors in the final five factor structure are realistic (R), investigative (I), social (S) and enterprising (E). Items in the artistic and conventional constructs split and merged with the other factors. Significantly, all computer programming and software related items converged onto a separate and distinct factor. This newly extracted fifth factor was named as *information technology (IT)* to reflect all the items that loaded on it. Each factor had a minimum of 5 items in order to maintain content validity. The five factors had eigenvalues of 22.92, 6.52, 4.23, 3.73 and 2.84 with the final 51 items explaining 40.29% of the variance. The factor loadings were R=.44-.76, I=.40-.67, S=.39-.60, E=.36-.70 and IT=.41-.70 respectively. Table 1 shows the factor correlation matrix. The entire factor loading estimates was statistically significant confirming that the five interest types fulfill the quality criteria requirements established by Hair et al. (2010). Thus, the new five factor structure is only partially consistent with Holland's theory of vocational types.

Insert Table 1 about here

Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) was performed with AMOS 22 on the second group of the randomly assigned sample (N=600). Factor loadings and inter-correlations (Tables 2-3) confirmed the factors extracted during exploratory factor analysis. The factor loadings were in the specified range with all items loading significantly on their corresponding factor. Assessment of the measurement model and fit indices showed them to be within acceptable limits (Hair et al., 2010). Besides, model fit is impacted by sample size, instrument and structure characteristics (Gaskin, 2013b; Tracey & Rounds, 1993). The chi-square (χ^2/df) was found to be 2.243, CFI was .824, SRMR .054 and RMSEA .039. The final factor structure had five factors with 8 items on the realistic scale, 7 on investigative, 10 on social, 13 on enterprising and 13 items on information technology respectively.

Insert Table 2 about here

Insert Table 3 about here

Validity Analysis

The ability or capacity of an instrument to measure what it is designed for is known as validity (Ghiselli, Campbell & Zedeck 1981). Exploratory and confirmatory factor analysis is used for verifying construct validity (Byrne, 2016; Gaskin, 2013; Straub, Gefen & Boudreau, 2004). Large factor loadings indicate strong evidence of convergent validity as factor loadings represent the relationship between an observed variable and the specific trait factor (Widaman, 1985). Since all the variables loaded highly on their respective factors with factor loadings above 0.3, there is evidence of convergent validity (Gaskin, 2013a; Hair et al., 2010). Similarly, low correlations among trait factors serve an indicator of discriminant validity (Byrne, 2016; Gaskin, 2013a). From the factor correlation matrix in table 1, we see that there are no correlations that are greater than 0.70 between the factors, indicating discriminant validity. Another approach used to demonstrate validity of an assessment is by examining the pattern of correlations

between scales (Donnay, 2005; Straub et al., 2004). The relationships between scales for the total group and subgroups is explained in the below section on scale inter-correlations. Both methods demonstrate that the new inventory has acceptable validity.

Scale Inter-Correlations

Correlation was performed to identify the associations amongst the five interest scales based on the strength of the correlations. Scales that are positively correlated have something in common, while values below ($r < .30$) denotes uniqueness (Bakker & Macnab, 2004; Garson, 2014). Conversely, highly correlated scales ($r \geq .85$) denote a lack of uniqueness between scales and should be rejected (Garson, 2014). Further, Holland's theory posits that the adjacent types correlations (R-I) should be greater than the alternate types correlations (R-A) and the opposite sides (R-S) (Tracey & Rounds, 1993). Tables 4-5 show correlations among the five interest types for the total group and subgroups. The correlation coefficients for the total group in table 4 indicated strong correlations between adjacent types S-E ($r = .62$), R-I ($r = .57$), moderate correlations for alternate types R-E ($r = .45$), I-S ($r = .44$) and weak correlations for the opposite types R-S ($r = .32$). The correlation ($r = .51$) between the opposite types I-E was not consistent with Holland's theory. The results indicated that only a few of the relationships as theorized by Holland was supported in this study. The new type information technology had a correlation coefficient of ($r = .59$) with realistic, ($r = .52$) with enterprising, ($r = .48$) with investigative and ($r = .48$) with social. Furthermore, the highest correlations for the total group ($r = .62$), as well as for the male ($r = .56$) and female ($r = .66$) subgroups were between social and enterprising scales.

Insert Table 4 about here

Reliability Analysis

Reliability measures the stability and consistency of an assessment instrument (Bakker & Macnab, 2004). Internal-consistency using Cronbach's alpha was estimated to establish reliability of the

scales. As seen in Table 4, Cronbach's coefficient alpha for the five scales ranged from 0.73 to 0.86 with a mean of 0.80. All values are above the suggested cut-off value of 0.70 (Cronbach, 1951).

Generalizability of Means

The mean scores across groups were examined to check if the scales have similar meaning across subgroups (Tracey, 2002). Analyses of variance (ANOVAs) were performed on the total sample to check for differences related to the five educational subgroups across the interest scales. The results indicated that there were no significant mean differences across the subgroups. Next, a t. test was performed to evaluate gender differences across the interest scales. The results indicated that there were no significant mean differences across gender. The means scores and standard deviations for gender and educational subgroups appear in Tables 4- 5. The educational subgroups mean scores showed that the highest score for each educational subgroup corresponded to its expected scale. The technical IT subgroup scored highest on the IT scale (3.80), science subgroup on investigative scale (3.66), management subgroup on social (3.87) and enterprising (3.75), and arts subgroup on the social scale (3.72). The exception is the technical engineering subgroup with highest mean scores on investigative (3.68), second on social (3.63), followed by IT (3.60), realistic (3.58) and enterprising (3.53) respectively. Both male (3.65) and female (3.69) subgroups had their highest means on the social scale. Thus, the results are generally consistent across the subgroups of education, while the results of the gender subgroup vary from existing studies (Päbler & Hell, 2012; Su et al., 2009).

Insert Table 5 about here

DISCUSSION

The present study described the construction of a new assessment for the IT industry and provided initial evidence of its psychometric properties and validity. This interest inventory consists of 51 items across five scales namely (1) Realistic (2) Investigative (3) Social (4) Enterprising and (5) Information

technology (IT). The results indicated that the inventory works similarly with college students from different educational majors with no significant gender differences. The sample used for the study was representative in terms of gender, age, geographical location and educational major. Likewise, the items developed for the IT interest inventory is fully representative of the information technology domain.

The results of factor analysis suggested the existence of five interest types in the present context. The new classification structure is in line with the work environment and occupational choices available in the Indian labor market. The information provided by these scales gives individuals an idea of what their occupational interests are and the matching jobs. This provides a focused list of career options that is congruent with their interests and college major. The occupational choices associated with each of the five interest types in the IT interest inventory consist of jobs that are available in IT organizations. Hence, people with all types of interests, whether mechanical, intellectual, technical or even enterprising and social types can find a matching job in the IT industry. Job alignment and training given in the area of one's interest can lead to excellence and training success as seen from the previous studies. Using the new IT interest inventory in determining the inclination of the incoming talent to different jobs and sub-sectors is likely to give organizations the advantage of selecting, training and developing a workforce that is interested and motivated in the work they will be doing. However, more work in establishing additional levels of reliability, validity and development of norm groups is required before the IT interest inventory can be effectively utilized in the present context.

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TABLES

Table 1: EFA results, factor correlation matrix

Component	1	2	3	4	5
1	1.00				
2	0.43	1.00			
3	0.40	0.29	1.00		
4	0.34	0.48	0.17	1.00	
5	0.42	0.35	0.30	0.31	1.00

N=516 Oblique rotation using Promax with Kaiser Normalization

Table 2: CFA results, factor loadings estimates*

Items	R	I	S	E	IT
R_31	0.71				
R_30	0.66				
R_56	0.57				
R_75	0.58				
R_70	0.60				
R_40	0.65				
R_67	0.52				
R_87	0.55				

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I_38		0.59			
I_46		0.51			
I_45		0.49			
I_44		0.55			
I_47		0.58			
I_26		0.49			
I_9		0.41			
S_19			0.60		
S_13			0.43		
S_27			0.53		
S_22			0.56		
S_20			0.57		
S_48			0.57		
S_5			0.34		
S_12			0.35		
S_1			0.48		
S_37			0.51		
E_85				0.60	
E_84				0.61	
E_94				0.60	
E_86				0.57	
E_81				0.59	
E_78				0.58	
E_93				0.56	
E_66				0.55	
E_91				0.52	
E_57				0.50	
E_92				0.51	
E_65				0.54	
E_74				0.59	
IT_34					0.62
IT_6					0.43
IT_33					0.44
IT_80					0.64
IT_23					0.44
IT_35					0.59
IT_63					0.62
IT_14					0.47
IT_18					0.51
IT_16					0.51
IT_28					0.53
IT_59					0.51
IT_50					0.52

*Standardized estimates. R= Realistic; I= Investigative; S= Social; E= Enterprising; IT= Information technology

Table 3: CFA results, correlation estimates

Scale	R	I	S	E	IT
R	1.00				
I	0.78	1.00			
S	0.38	0.60	1.00		
E	0.49	0.69	0.77	1.00	
IT	0.68	0.65	0.61	0.64	1.00

N=600. R= Realistic; I= Investigative; S= Social; E= Enterprising; IT= Information technology

Table 4: Mean scores, standard deviations, alphas and correlations for the total group

TOTAL SAMPLE (N=1116)	MEAN	SD	Cronbach's α	R	I	S	E	IT
R	3.42	0.76	0.82	-				
I	3.59	0.66	0.73	.57**	-			
S	3.68	0.62	0.76	.32**	.44**	-		
E	3.57	0.68	0.86	.45**	.51**	.62**	-	
IT	3.62	0.66	0.84	.59**	.48**	.48**	.52**	-
MALE SAMPLE (N= 510)	MEAN	SD	Cronbach's α	R	I	S	E	IT
R	3.45	0.74	0.79	-				
I	3.58	0.66	0.71	.55**	-			
S	3.65	0.61	0.74	.32**	.43**	-		
E	3.56	0.64	0.84	.40**	.52**	.56**	-	

IT	3.62	0.64	0.82	.54**	.46**	.37**	.42**	-
FEMALE SAMPLE (N= 602)	MEAN	SD	Cronbach's α	R	I	S	E	IT
R	3.40	0.79	0.84	-				
I	3.59	0.67	0.74	.59**	-			
S	3.69	0.63	0.78	.33**	.45**	-		
E	3.58	0.71	0.88	.48**	.51**	.66**	-	
IT	3.63	0.68	0.86	.62**	.49**	.56**	.59**	-

** . Correlation is significant at the 0.01 level (2-tailed). R= Realistic; I= Investigative; S= Social; E= Enterprising; IT= Information technology

Table 5: Mean scores, standard deviations, alphas and correlations for the educational subgroups

TECHNICAL IT SAMPLE (N= 342)	MEAN	SD	Cronbach's α	R	I	S	E	IT
R	3.34	0.74	0.81	-				
I	3.51	0.64	0.74	.55**	-			
S	3.68	0.61	0.77	.34**	.39**	-		
E	3.59	0.65	0.85	.47**	.53**	.64**	-	
IT	3.80	0.53	0.77	.49**	.46**	.42**	.44**	-
TECHNICAL ENGINEERING SAMPLE (N= 399)	MEAN	SD	Cronbach's α	R	I	S	E	IT
R	3.58	0.72	0.80	-				
I	3.68	0.63	0.71	.51**	-			

S	3.63	0.59	0.72	.26**	.37**	-		
E	3.53	0.63	0.84	.37**	.45**	.56**	-	
IT	3.60	0.64	0.83	.37**	.42**	.40**	.48**	-
SCIENCE SAMPLE (N= 116)	MEAN	SD	Cronbach's α	R	I	S	E	IT
R	3.50	0.77	0.82	-				
I	3.66	0.71	0.73	.55**	-			
S	3.56	0.73	0.83	.35**	.63**	-		
E	3.51	0.85	0.92	.51**	.60**	.60**	-	
IT	3.43	0.77	0.89	.67**	.49**	.59**	.61**	-
MANAGEMENT SAMPLE (N= 130)	MEAN	SD	Cronbach's α	R	I	S	E	IT
R	3.37	.79	0.83	-				
I	3.61	.65	0.71	.65**	-			
S	3.87	.58	0.74	.42**	.54**	-		
E	3.75	.65	0.86	.52**	.57**	.66**	-	
IT	3.61	.65	0.83	.72**	.58**	.60**	.61**	-
ARTS SAMPLE (N= 129)	MEAN	SD	Cronbach's α	R	I	S	E	IT
R	3.15	0.84	0.85	-				
I	3.44	0.75	0.76	.67**	-			
S	3.72	0.61	0.75	.51**	.57**	-		
E	3.54	0.71	0.86	.58**	.57**	.66**	-	
IT	3.44	0.80	0.89	.83**	.69**	.66**	.63**	-

INTEREST BASED ASSESSMENTS

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** . Correlation is significant at the 0.01 level (2-tailed). R= Realistic; I= Investigative; S= Social; E= Enterprising; IT= Information technology

04. Health Management and Organization Competitive session

"Managing nurses absenteeism in a context of budget cuts: an approach based on LMX relationships"

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04. Health Management and Organization Competitive session

"Managing nurses absenteeism in a context of budget cuts: an approach based on LMX relationships"

ABSTRACT

In this study, a closer look was taken at the management of absenteeism in public hospitals, in a context of budget cuts, one of different components of New Public Management (NPM). Here, the "Leader Member Exchange" (LMX) theory was used for two hierarchical levels: nurse/nurse managers (level 1) and nurse managers and nurse senior managers (level2).

Two qualitative studies were realized (30 semi-structured interviews and a netnography study).

We found budget cuts forced nurse managers to manage nurses' absenteeism with internal ways. In fact, high quality of LMX permits quick fixes. On a long term basis, it could lead to misuses and develop presenteeism. But, the second level of LMX relationships could avoid misuses and facilitate this management of absenteeism.

Keywords: Health leadership, Healthcare management, New public management

In April 2016, several articles were written in French national newspapers about the statement of absenteeism in French public hospitals. Headlines were quite negative and not comforting. Frequently, this classification is only based on hospitals' absenteeism rate. In the most cases, the in-depth information about their situation is not highlighted and no information about the management of absenteeism is given, the main subject of this study.

First of all, absenteeism is a phenomenon which can be defined as "a lack of physical presence at a behavior setting when and where one is expected to be" (Harrison & Price, 2003, p. 204) . Literature is very extensive about causes of absenteeism (that is why it is not the objective of this paper) but after all absenteeism keeps rising. In France, the health sector is the most affected by the number of sick leaves. Indeed, the way absenteeism is managing in fact and the consequences of this kind of management still are ignored. These points are not really emphasized by the literature (Devigne, Habib, Krohmer, & Laurent, 2014). In addition, hospitals' financial situation must be taken in account in this perspective. In practical terms, the last French Government has decided to control strictly salary mass and economize in this way around 860 million euro. In a restricted budget context, in 2014, French Federation for Hospitals stressed that the control of salary mass could permit a high degree of leverage in the sense that staff costs constitute 70% of hospital budget. These budget cuts are one of

the actions of New Public Management (NPM) (Gruening, 2001). It is an aspect we want to focus on. In theory, reforms related to NPM aimed at embedding more efficient and effective private sector management tools into the public sector (Brunetto, Farr-Wharton, & Shacklock, 2010). But, in practice, many of these reforms was to reduce per capita costs and reduce the number of nursing positions (Upenieks, 2003). Despite the fact NPM is a much studied subject; no study makes the link between budget cuts and, more specifically, the management of absenteeism. Besides, the management policies and practices could affect work-based relationships such as the supervisor-subordinate relationships (Brunetto et al., 2010). That is why the “Leader-Member Exchange” (LMX) theory has been chose for this study. This theory could be useful to understand how the management of absenteeism is managed through the relationship between leaders and subordinates. It also provides guidance on certain dimensions which could influence this kind of management.

The aim of this paper is to analyze the way absenteeism is managed in French public hospitals in a context of budget cuts. This study relies on LMX relationships at different levels: between nurses and nurse managers and between nurse managers and nurse senior managers. As far as we know, there is a lack of papers and doctoral thesis specifically about the management of absenteeism and its consequences (Devigne et al., 2014) both in national and international literature. Likewise, even if some studies are about LMX and absenteeism(van Dierendonck, Le Blanc, & van Breukelen, 2002), no study makes the link, precisely, between LMX and the management of absenteeism. In the same vein, the literature most often used to state positive effects of high quality of LMX. It is interesting to know if negative effect of high quality of LMX is possible or not. The strengths and weaknesses of this kind of management, the way the nurse manager proceeds to replace absent nurses remain unknown. The role played by the nurse senior managers in this management of absenteeism is also ignored. In literature, very few studies are about nurse senior managers in general; at least, none seems to be about management of absenteeism.

All these elements reveal some research questions: how do nurse managers proceed to replace an absent nurse in a context of budget cuts? How do LMX relationships help or disadvantage this management of absenteeism? Do LMX relationships have positive and/or negative effects on the management of absenteeism?

To respond to these issues, a theoretical background based on LMX theory has been chosen (Dansereau, Graen & Haga, 1975, Graen & Uhl-Bien, 1995). First of all, the literature review about management of absenteeism in public hospitals and LMX relationships will be presented. Second, the different methods used for this study will be stated. Lastly, the main results and a discussion will be presented. Thus, practical implications could be highlighted and limits of the study could be stressed also.

LITERATURE REVIEW

Managing absenteeism in French public hospitals

In general, the way to manage absenteeism is limited to an internal or external choice. In France, these ways for managing the phenomenon are highlighted by the project called “*Projet hospitalier absentéisme Recherche Efficience et organisation de santé*” (PHARES) (2012). In other words, it is a French project about absenteeism and the search for efficiency in the health sector. Certain ways for managing absenteeism depend on the nurse managers whereas others depend on hospitals’ policy. First, nurse managers can replace the absent nurse by the present workforce trying to re-organize the schedule. In fact, it is something very unofficial, a kind of deal between colleagues and nurse managers (Bourgeon, 2013). To face absenteeism, nurses managers can also decide to call nurses during their rest day. It corresponds above all to short-term absenteeism (Brami, Damart, & Kletz, 2012). These two ways of managing absenteeism need constant schedule changing and an appropriate conciliation between private and professional life. According to National Agency for the improvement of working conditions in France, schedule changes take 70% of the working time of nurse managers. It prevents them making other tasks (Brami et al., 2014). In most cases, they have to be reactive given that management of absenteeism is very ‘elastic’ (Brami et al., 2014). Depending on the hospitals’ policy, the floating pool could be requested or mobility between units could be planned. After all, if any of these solutions are not possible, nurse managers can ask their hierarchy for recruitment especially for a long-term absenteeism even if the leitmotiv in public sector is to do best or more with less (Noblet & Rodwell, 2009). As indicated before, NPM decreases the number of nurses’ positions for costs preoccupation. Besides, findings of Newman and Lawler (2009) show that hospital evolutions due to NPM increase a lot work of nurses and managers.

The management of absenteeism impacts not only nurses, nurse managers but also hospitals. From the point of view of nurses, the actual management of absenteeism tends to unsettle nurses' operation because they are often forced to improvise at work. This situation could cause conflicts between agents, really exhausted both physically and mentally (Brami et al., 2014). From the point of view of nurse managers, this management of absenteeism could create a feeling of unfairness, linked to salary systems. Nurse managers used to work with the win-win principle, especially for the management of absenteeism. Besides, the win-win principle is recommended by some authors in this context of scarcity of resources (Crozet, Kaaniche, & Lienard, 2008). On a long-term basis, nurses could feel neglected by the institution; that is the reason why they could refuse a replacement, for example (Brami et al., 2014). It could make the management of absenteeism more difficult for nurse managers then. Finally, for hospitals, the most important risk is to increase absenteeism (Brami et al., 2014) which is very costly.

LMX theory

Dansereau, Graen and colleagues introduced LMX theory during the 1970s. Based on role and social exchange theories (Blau, 1964), it suggests that through different types of exchanges, leaders differentiate in the way they treat their followers (Dansereau et al., 1975). In fact, different quality relationships are developed between the leader and each follower (Schriesheim, Castro & Cogliser, 1999). The success of this theory is attributed to numerous benefits of positive relationships between leaders and followers (Graen & Uhl-Bien, 1995). Martin, Epitropaki, Geoff & Topakas (2010) summarize positive impacts of high quality LMX relationships at different levels. First, concerning the employees, high quality LMX relationships could increase job satisfaction (Arye & Chen, 2006; Epitropaki & Martin, 2005; Martin, Thomas, Charles, Epitropaki & McNamara, 2005), wellbeing at work (Bernas & Major, 2000; Epitrotropaki & Martin, 2005; Martin et al., 2005), empowerment (Gomez & Rosen, 2001, Keller & Dansereau, 2001). In addition, it could decrease stress at work (Bernas & Major, 2000; Harris & Kacmar, 2006) and intentions to leave the company (Bauer, Erdogan, Liden & Wayne, 2006; Major, Kozlowski, Chao & Gardner, 1995, Vecchio & Gobdel, 1984). Then, at the dyad-level, high quality LMX relationships could maintain workplace friendships

(Tse, Dasborough & Ashkanasy, 2008), increase perceived lead support (Bauer & Green, 1996) and perceived leader delegation and consultation (Yukl & Fu, 1999). Lastly, for the organization, high quality LMX relationships could develop perceived justice (Andrews & Kacmar, 2001; Erdogan, 2002) and perceived transformational leadership (Howell & Hall-Merenda, 1999; Pillai, Schriesheim & Williams, 1999). In contrast, employees with low quality LMX relationships with their leader could have the feeling to be outside of the group. With this kind of feeling they won't accept new responsibilities, for example. They will describe the behavior of their leader as transactional or contractual (Graen & Uhl-Bien, 1995; Liden, Sparrowe, & Wayne, 1997). In such cases, the leader is forced to negotiate with the employee in order to obtain trust, respect and conduct effective labor (Dansereau et al., 1975; Graen & Uhl-Bien, 1995; Liden et al., 1997).

Four dimensions could be used for determining the quality of LMX relationships: affect, loyalty, contribution and professional respect (Liden & Maslyn, 1998). Liden and Maslyn (1998) define the affect as the mutual affection members of the dyad have for each other based primarily on interpersonal attraction, rather than work or professional values. Such affection may be manifested in the desire for and/or occurrence of a relationship which has personally rewarding components and outcomes. Then, loyalty matches the expression of public support for the goals and the personal character of the other member of the LMX dyad when the professional respect is regarded as the perception of the degree to which each member of the dyad has built a reputation, within and/or outside the organization, of excelling at his or her line of work (Liden & Maslyn, 1998). Finally, authors stressed that the contribution is the perception of the current level of work-oriented activity each member puts forth toward the mutual goals (explicit or implicit) of the dyad.

METHODS

The choice of qualitative methods

Overall, research about LMX theory is mainly quantitative and few qualitative studies have been conducted (Martin et al., 2010). According to Martin et al. (2010), interviews, diaries and observation of different levels could *“provide a rich data source to complement the questionnaire-*

based empirical studies that have thus far dominated the field". Two qualitative studies were realized. First, semi-structured interviews (primary data) were conducted with a multi-stakeholder approach. To complete this primary data, a netnography study based on online nurses' forums was realized. A French online forum called "Infirmiers.com" was selected because it is specialized in health sector and its members are mainly nurses and nurse managers. Here, 161 messages of four different subjects were studied.

Data collection and sample for semi-structured interviews

For the primary data, 30 agents were interviewed: 7 senior nurses managers, 15 nurses managers, 5 nurses, 2 trade unionists, 1 agent from human resources unit. The research took place in 5 different care institutions in France: 4 in the area of Languedoc-Roussillon (south of France) and 1 in Reunion Island (a French department out of sea). Interviewees worked all in the public sector and were selected according to their professional experience, their gender and their care services. For interviews, except the trade unionists one, an e-mail was written, explaining the aim of the research, to the chief nursing executive who gave us a list of people we can call. All the interviews were audio-recorded. The duration of the interviews varies according to the position of each interviewee. It ranges from 20 to 60 minutes for nurses managers whereas it ranges from 33 to 48 minutes for healthcare senior managers. The trade unionists' interview lasts 38 minutes and for nurses, the duration of interviews ranges from 15 to 25 minutes. All interviews took place in interviewees' office during their duty hours at their convenience. For the purpose of the paper, quotes of interviewees were translated into English. For interviews, a thematic content analysis was made thanks to the software QDA Miner Lite.

Data collection and sample for the netnography study

A netnography study was realized thanks to a non-participative observation on the online forum. The objective is to complete our primary data and have a kind of "free speech" from hospital agents on a sensitive subject. More specifically, netnography can be described as the combination of 'internet' and 'ethnography'. Such as ethnography (Hammersley & Atkinson, 1995), netnography is about a researcher observing and recording, for an extended period of time, the acts and discussions of a target population. This method is quite common for marketing studies but rare in the field of human

resources (Mercanti-Guérin, 2009). As highlighted above, a French specialized forum called “Infirmiers.com” was selected. Due to the large amount of information on the website, 4 subjects were selected by key words related to our thematic research. In total, 161 messages were studied. For the purpose of the paper, quotes from forum were translated and for a better understanding, some of them were changed into English less familiar. When a netnography study is conducted, some steps have to be respected. For example, the researcher has to indicate the research issue, the studied community, the duration, and explain how ethic rules have been respected. For the preparation of this netnography, academic research of Kozinets (2002) and Füller, Jawecki & Mühlbacher (2008) were used. More detail is given in the Table 1. For the netnography study, a thematic content analysis was made also thanks to the software QDA Miner Lite.

RESULTS AND DISCUSSION

Results of semi-structured interviews (primary data)

An internal and flexible management of absenteeism made by nurse managers: a reality of budget cuts

The primary data gives us some elements about the way nurses managers used to manage nurses’ absenteeism every day in a budget cuts context. In fact, for short term absenteeism (several days), the non-replacement of an agent is emphasized. But, contrary to Brami et al. (2012), findings from semi-structured interviews reveal the same for long term absenteeism (several months). There is a kind of pressure on healthcare managers and healthcare senior managers to restrict recruitments: “*In the current context with budget cuts, we are suffocating*” – *Health care senior manager 4*. That is why an internal management of absenteeism is made by nurse managers. In accordance to Devigne et al. (2014), different options are possible depending on the care institution or the nurse manager. Concerning the care institution, a floating pool could exist and can be used, with a minimum anticipation. Commonly, if it exists, it is still insufficient of all the needs; the staff has been reduced because of budget cuts: “*In this floating pool, there are only two nurses and two care assistants for a total of nine hospital units*”-*Healthcare manager 2*. Moreover, agents of the floating pool are often unavailable for short term absenteeism. They replace mainly long term absenteeism: “*Now, the replacement pool is used for long term absenteeism and there is less agents for short term one.*

Originally, it was created for that.” – Healthcare senior manager 4. For short term absenteeism, nurse managers used to call agents during their rest periods or ask agents, who are on duty, to change the schedule for the day. In some care institution, and when the floating pool does not exist, a kind of staff mobility between units is possible. For example an agent from unit A could work for a certain period (frequently, few hours) in unit B to replace the absent nurse. Semi-structured interviews indicate the most regular way of managing absenteeism is to call agents during their rest periods. That is why we decided to focus the following results on it (for interviews and netnography study).

Calling nurses during their rest day: a solution to manage absenteeism thanks to a high quality of LMX relationship

In a certain way, healthcare managers are at the mercy of agents’ goodwill when they want to manage absenteeism: *“we are just making a request; they are allowed to say “no” ”* (Healthcare manager 2). The results indicate that high quality of LMX relationships seems to have positive effects on the internal management of absenteeism especially for calling nurses during their rest day. Dimensions of LMX seem to be crucial for healthcare managers. As a reminder, literature suggests four dimensions of LMX relationships: professional respect, affect, loyalty and perceived contribution (Liden & Maslyn, 1998). About the professional respect, when healthcare managers have a rich and varied working experience and when they can take into consideration difficulties of nurses’ work, agents accept easily to be call during rest periods: *“Our healthcare manager is very kind, she always makes things simpler. She knows well the job of nurse because she was one during several years. She is really available and always tries to make herself available”* (Nurse 1). This professional respect also passes through the flexibility of the healthcare manager: *“We often come back to work during rest periods... so we are really flexible. We are also expecting a kind of flexibility from the healthcare manager”* (Nurse 5). The affective dimension seems to count towards nurses whereas healthcare managers seem to be quieter on this point: *“If the healthcare manager is a nice person, we will come back easily during rest periods. If it is a troublemaker...no way”* (Nurse 5). Then, loyalty seems to be an important dimension for nurses. Indeed, when the staff has lots of difficulties to replace colleagues, nurses used to expect that their healthcare manager supports them especially toward board members: *“Our healthcare manager did not hesitate to say to board members that we had a lot of difficulties for*

a while to replace absent agents” (Nurse 5). Finally, the perceived contribution seems to be the most decisive dimension for healthcare managers to manage absenteeism in internal way. A win-win principle seems to be established between healthcare managers and nurses. In fact, for nurse managers, it permits to manage absenteeism and by the way, ensure safety of care for patients (because they have the adequate number of nurses in the unit). For nurses, its permits to have, in general, some benefits concerning the schedule and rest periods. For example, they can have a longer week-end or a day especially for their child birthday: “When we are asking for a schedule change and we see the nurse manager doing his best...we will be ready to change our schedule in the future if the nurse manager asks for. It will be easier” (Nurse 2).

Calling nurses during their rest day: when high LMX relationships could have negative effect on occupational health and could develop nurses’ presenteeism on a long term basis

High quality of LMX relationships could be an issue for absenteeism management made by nurse managers. But sometimes, it could also leads to misuses from the leader. Literature does not emphasize a lot this point. Frequently, just the positive effects of LMX are shown by studies. Here, a negative effect of high quality of LMX relationship was found. This study points that nurse managers are so anxious about the management of absenteeism, which has to be done with less budget, and they seem to forget some legal rules about working time: *“We have seen some healthcare managers who were not careful to the respect of laws about work time. They forgot to give to their agent their rest periods every two weeks because they were not be able to” (Trade unionist 2).* Nurse managers have a real need for human resources in their unit and they know their agent, with whom they work, will come back even if they have their rest period: *“We used to come back to work for colleagues but also to help our healthcare manager” (Nurse 4).* Nurse managers are aware of their misuses when they are managing absenteeism but it looks like they are forced to do it because of the financial context of French public hospitals: *“For the staff, sometimes, I have the feeling that I’m abusing” (Healthcare manager 8).* This kind of behavior leads nurses to the phenomenon of presenteeism: *“In one pulmonology Department with an important absenteeism rate (work accident, burn out...), the staff was fed up. Agents were really involved but they were tired of the situations. Some of them who used to work half-time were obliged to work full-time, with the impossibility for them to have some rest*

periods.” (Trade unionist 2); “For a while, this situation has to stop...we could not have any rest period” (Nurse 5). Indeed, an excessive attendance at work exhausts nurses: “When you work continuously during five days...the fifth working day is really hard” (Nurse 3). Therefore, this study conflicts with Ferreira’s research (2015).

Results of the netnography study (secondary data)

Call nurses during their rest day: when managing absenteeism leads to inappropriate behaviors

Because of budget cuts and recruitment limitation, nurse managers seem to forget ethical considerations when they manage nurses’ absenteeism. This point is highlighted by the netnography study. Indeed, most often when they have to manage absenteeism, it is in the rush because the major goal is to ensure patients’ safety. If an agent refuses to come back to work in order to replace a colleague, some threats could be made. On discussion forums, members make reference to “*pathetic threatens*” (Member 2 – Forum 1). Usually, nurse managers point colleagues’ difficulties and patients’ care for blaming nurses who refuse to come back to work during their rest day: “*Continuity of care, patients’ care or the famous ‘you are my last hope’ ...it’s bullshit*” (Member 2- Forum 1). However, nurse managers can also threaten agents about their professional assessment: “*agents who come back to work on their rest periods are afraid to have a bad rating for their professional assessment*” (Member 5- Forum 2). In addition, in this management of absenteeism, nurse managers could also harass agents. Netnography study exposes specifically telephone harassment: “*During my rest period, my nurse manager harasses me leaving me a lot of messages on my phone. This has been going on for three years because of the reduction of the staff*” (Member 8 – Forum 1); “*Personally, once my healthcare manager phoned my then boyfriend who worked in a restaurant to ask me to come back to work to replace someone. I did not appreciate this invasion of privacy*” (Member 6- Forum 1); “*For me, it sounds like moral harassment. Everybody is on the defensive and sick leaves increase.*” (Member 8- Forum 1). This telephone harassment has an important impact on agents’ privacy. Agents seem to be continually linked with their professional life. Even during their rest period, nurses cannot relax or focus on other things than work. Verbatim reports from netnography study emphasize the mental fatigue of nurses and highlight the increasing of absenteeism, a phenomenon nurse managers

try to compensate. Likewise, with these inappropriate behaviors, nurses could develop withdrawal behaviors and could decide to avoid voice messages or to start a strike in some cases.

Results of semi-structured interviews (primary data)

LMX relationships between nurse managers and nurses senior managers: a solution to avoid these misuses?

In the literature, the LMX relationships between nurse managers and nurse senior managers are very few studied. But, it could be an interesting point to explore. As outlined above, nurse managers cannot face all difficulties of absenteeism management and can commit some misuses. Besides, the findings of this research indicate some dimensions of LMX which could facilitate everyday absenteeism management and limit abuses. In fact, the affective dimension is important: *“There is a kind of caring affect between us” (Healthcare senior manager 4)*. This dimension permits healthcare managers to work in good condition and to keep cool in stressful situation: *“I try to have cordial relationships with healthcare managers. I try to have a good atmosphere in the unit” (Healthcare senior manager 2)*. Professional respect plays an important role because this dimension permits a good communication about absenteeism, remains attentive about absenteeism issues: *“We have an attentive healthcare senior manager; that’s why I give to give her all information about absenteeism management in my unit” (Healthcare manager 4)*. Finally, the loyalty dimension seems to be crucial in this case. When healthcare managers are out of patience with absenteeism management, the healthcare senior manager can prevent both the nursing leadership and the human resources department of the care institution: *“When I am speaking to the board members, even if I am a healthcare senior manager, I speak as a caregiver, I know well difficulties of the job and I know when and why, I absolutely need a recruitment” (Healthcare senior manager 4)*. Due to absenteeism management issues, the nurse senior managers pass information to the board members and try to find solutions together. That is made possible by some regular work meetings with different stakeholders: *“Biweekly, we have a meeting with six healthcare senior managers, the director of nurse, the assistant of the head of human resources. Every healthcare senior manager exposes healthcare managers’ difficulties concerning their staff and the absenteeism management” (Nurse senior manager 3)*. Some regular meetings between nurse managers and their nurse senior manager could be an interesting issue

to avoid misuses. It could be a time to step back and take stock: *“Every week, we organize a meeting between nurse managers and the nurse senior manager in order to talk about our difficulties including our absenteeism management difficulties. Nurse senior manager used to give us all information about recruitment. It’s very helpful for us, we can step back.” (Healthcare manager 11).*

PRACTICAL IMPLICATIONS AND LIMITS OF THE STUDY

These two qualitative studies permit us to understand that it is important for nurse managers and their staff to be aware of consequences of the management of absenteeism. It seems crucial to limit them in order to protect nurses and also patients. As noted later, LMX relationships could make the management of absenteeism easier but nurse managers should be aware of misuses they committed with the schedule and be aware of the impacts of presenteeism. It could be interesting for them to have job training on this subject. Likewise, it is necessary to develop LMX relationships between nurse managers and nurse senior managers in a context of budget cuts. This kind of relationships permits to find collective solutions for the management of absenteeism and permits to consider nurses’ recruitment despite budget cuts.

Like all scientific research, this research carries certain limitations. Concerning methods, for the semi-structured interviews, a restricted sample of people was studied, each in different public hospitals. Likewise, for the netnography study, we have limited information about the members. Furthermore, these semi-structured interviews and this netnography are exploratory. For future studies, it will be interesting to realize multi case studies in order to understand at length the management of absenteeism and LMX relationships in this context of budget cuts. To have a representative sample, a quantitative study could be considered. Measurement scales exist for LMX relationships but the most difficulty is about the management of absenteeism. Measurement scales for management of absenteeism do not exist. A study could be planned to create these measurement scales. Finally, our study focuses only on French case, it would be interesting to understand the management of absenteeism in public hospitals in other countries as well and make a comparison between public hospitals and private companies.

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TABLES

Table 1 : Preparation of the netnography study based on academic research of Kozinets (2002) and Füller et al. (2007)

Research issue	<ul style="list-style-type: none"> • How do nurse managers to overcome nurses absenteeism in a context of budget cuts ? • Are there some misuses because of this management of absenteeism?
Studied community	<ul style="list-style-type: none"> • Nurses and healthcare managers who are working in public care institutions
Research object	<ul style="list-style-type: none"> • The management of absenteeism in French public hospitals and their consequences
Data collected	<ul style="list-style-type: none"> • Data collected on a French online forum called « Infirmiers.com » ; • Four subjects have been selected, linked with the management of absenteeism • In all, 161 messages have been studied • Non participant observation (reading of messages of community’s members)
Duration	<ul style="list-style-type: none"> • 5 months (July to November 2017)
Ethic rules	<ul style="list-style-type: none"> • The researcher reveals her identity and specifies her intentions • Researcher guarantees privacy of informants ; change of pseudonyms • Ask for agreement of all members of the four subjects in order to publish research works
Data analysis	<ul style="list-style-type: none"> • Thematic content analysis with the software called QDA Miner Lite

Stream 6: International Management
Interactive Session

**Moderating Role of Blame Attribution between the Relationship of Psychological
Contract Breach and Employee Outcomes in the South Asian Context**

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Moderating Role of Blame Attribution between the Relationship of Psychological Contract Breach and Employee Outcomes in the South Asian Context

ABSTRACT

The present study will examine the moderating role of blame attribution in the relationship between employees' psychological contract breach and employees' organisational citizenship behaviours, employees' job neglect and intention to leave the organisation in the non-Western emerging economies of South Asia. The study will also look at the relationship between psychological contract breach and employee outcomes. A survey questionnaire is developed based on the validated items used in the prior studies to measure employees' psychological contract breach, employee outcomes, and blame attribution. The data for this study will be collected from the full-time employees of several multinational corporations operating in South Asia. Hierarchical regression analyses will be conducted to analyse the collected data.

Key words: Blame attribution, citizenship behaviour, job neglect, intention to leave, South Asia

Psychological contract breach refers to an employee's cognitive perception that she or he has not received everything that was promised formally or informally by the organisation (Morrison & Robinson, 1997). Breach of psychological contract is related to a range of undesirable employee attitudes and behaviours (Peng, Jien & Lin, 2016). A number of prior studies have found that psychological contract breach is negatively related to employee's trust in management (Peng, Jien & Lin, 2016; Robinson, 1996; Robinson & Rousseau, 1994; Deery et al., 2006; Zhao et al., 2007), job satisfaction (Robinson & Rousseau, 1994; Raja et al., 2004; Zhao et al., 2007), intentions to remain with the organisation (Robinson, 1996; Robinson & Rousseau, 1994), employee performances (Suazo et al., 2005; Zhao et al., 2007), citizenship behaviours (Griep & Vantilborgh, 2018; Robinson & Morrison, 1995; Johnson & O'Leary-Kelly, 2003; Lo & Aryee, 2003; Suazo et al., 2005; Zhao et al., 2007) and employee commitment (Lester et al., 2002; Raja et al., 2004; Suazo et al., 2005; Zhao et al., 2007) and positively related to workplace deviant behaviours (Kickul, 2001), employees' neglect of job duties (Ning & Zhaoyi, 2017; Turnley & Feldman, 1998, 1999, 2000), employee's cynicism about their employer (Johnson & O'Leary-Kelly, 2003), higher

absenteeism (Johnson & O’Leary-Kelly, 2003; Deery et al., 2006) and revenge cognitions (Ahmed et al., 2007). While the direct outcomes of the psychological contract breach have been widely studied, relatively less attention has been paid to the attributions and sense making that accompanies a psychological contract breach (Restubog et al., 2006). In particular, organisational researchers have called for research on factors that can moderate the relationship between psychological contract breach and employee outcomes (Ning & Zhaoyi, 2017; Morrison & Robinson, 1997, Kickul & Lester, 2001, Rousseau, 1995, Suazo et al., 2005, Suazo et al., 2008). The main aim of the current research is to examine the influence of blame attribution as a moderator between the relationship of psychological contract breach and employee outcomes.

Morrison and Robinson (1997) proposed that immediately after a perception of contract breach, employees engage in a cognitive assessment of the situation. Employee’s cognitive assessment mainly focuses on why and under what circumstances the breach took place. This interpretation process is likely to moderate and determine the relationship between psychological contract breach and employee’s cognitive and behavioural responses. It is expected that individuals would initially perform cognitive evaluations of the situation to blame the organisation or other external factors for the psychological contract breach (Morrison & Robinson, 1997). Based on this evaluation, they would decide how much responsibility to attribute to the organisation versus external factors. The employees may examine whether the cause of the situation was controllable or uncontrollable by the attributor. This can be explained by the different dimensions of the Attribution Theory. The basis of attribution theory (Heider, 1958, Weiner, 1986) is explanation seeking process that individuals attempt to make sense of events in general, but especially when they are surprised or threatened by unexpected or negative events (Elangovan et al., 2007). In the context of psychological contract relationship, a feelings of contract breach may be unexpected and a negative event to the employees and they may initiate a search for information about the event. Employees may seek answers to a number of questions related to the event (contract breach), such as why did the event happen, who was responsible for it, was the event intentional, will the situation happen or worsen in future (Elangovan et. al., 2007). Reviews of the psychological

contract literature reveal that organisational researchers have been studying various factors which may influence and shape employee's perceptions of the contract breach, feelings of violation and employee outcomes. For instance, role of perceived organisational support (Coyle-Shapiro & Kessler, 2000) and trust (Jafri, 2012; Robinson & Rousseau, 1994) have been studied as factors influencing the relationship between the psychological contract breach and employee outcomes. There is a lack of research that explores the role of blame attribution on the relationship between psychological contract breach and employee outcomes.

This study contributes to the existing psychological contract literature in several ways. This study is unique as it examined the influence of the blame attribution in the relationship between psychological contract breach and employee outcomes. (i.e., organisational citizenship behaviors, employee job neglect and turnover intentions). An understanding of the behavioral and attitudinal outcomes as a result of a psychological contract breach will have significant theoretical and practical implications to the organisational researchers and practitioners respectively. The results of the study will also assist the organisational researchers to expand their understanding of the relationship between psychological contract breach and employee outcomes.

The present study will be based on the employees of several South Asian organisations. As the employment relationships differ significantly in different contexts (Lu, Shen & Zhao 2015; O' Donnell & Shields, 2002, Rousseau & Fried, 2001), studying the relationship in the emerging South Asian economies will be a significant contribution to the psychological contract literature. There has been an increasing keenness among organisational researchers to conduct more studies in non-Western contexts to gain a more comprehensive understanding of psychological contract and its related consequences on employee outcomes.

LITERATURE REVIEW

Organisational researchers have revealed that perception of psychological contract breach is directly related to the employee's performance, behaviours and attitudes towards the organisation. Psychological

contract breach is negatively related to employee's trust in management, job satisfaction and intentions to remain with the organisation (Peng, Jien & Lin, 2016; Ning & Zhaoyi, 2017; Robinson & Rousseau, 1994); employee performance (Robinson, 1996) and citizenship behaviours (Robinson and Morrison, 1995, Robinson, 1996). Kickul and her colleagues (Kickul & Lester, 2001, Kickul, 2001b, Kickul et al., 2001, Kickul, 2001a, Kickul et al., 2002, Kickul & Zaper, 2000) also revealed that psychological contract breach leads to decreasing employee commitment, increasing workplace deviant behaviours, decreasing organisational citizenship behaviours and increasing intentions to leave the *organisation*. The above discussion indicates that psychological contract breach is negatively related with three forms of employee contributions to the organisation: day-to-day performances, citizenship behaviours and intentions to remain with the organisation (Robinson, 1996). In the present study, organisational citizenship behaviours, intentions to leave the organisation and neglect of the jobs are proposed to be the outcomes of employee in the event of psychological contract breach.

Psychological Contract Breach on Employee's Citizenship Behaviour

Organisational citizenship behaviour (OCB) has been defined as *“individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system, and in aggregate promotes the efficient and effective functioning of the organisation”* (Organ, 1988, p. 4). Psychological contract breach is a form of perceived discrepancy to the employees (Morrison & Robinson, 1997). In order to “get even” with the organisation after psychological contract breach, employees tend to reduce their commitment to the organisation and contribute less to their citizenship behaviours (Turnley et al., 2003). In a series of studies, Robinson and colleagues (Robinson, 1996, Robinson & Morrison, 1995, Robinson & Rousseau, 1994) proposed several employee responses (in-role and extra-role performances, trust, satisfaction and intention to remain with the organisation) to the fulfilment of psychological contracts. Robinson and Morrison (1995) revealed a positive relationship between the fulfilment of psychological contract and civic virtue form of OCB. In another study, Turnley and Feldman (1999) empirically demonstrated that psychological contract breach has a negative effect on OCB. Thus, it is

likely that psychological contract breach will be negatively related to employees' organisational citizenship behaviours towards the organisation and individual employees. Therefore, the following hypothesis is proposed.

Hypothesis 1: Psychological contract breach is negatively related to employees' organisational citizenship behaviours.

Psychological Contract Breach on Employee's Intention to Leave the Organisation

Robinson and Rousseau (1994) found that perception of psychological contract breach is negatively related to the intention to remain with the organisation. Their study suggested that breach of psychological contract undermines the employees' trust in management that may lead them to look for jobs elsewhere. Robinson (1996) suggested that psychological contract breach is negatively related to employee's intention to remain with the organisation. Other researchers have also established the relationship between the psychological contract breach and intention to leave the organisation. In three studies conducted by Turnley and Feldman (1998, 1999 & 2000) revealed that psychological contract breach is positively related to exit and voice, and negatively related to employee loyalty. Prior studies have also suggested that psychological contract breach is negatively related to employee's affective commitment (Raja et al., 2004, Lester et al., 2002) and positively related to employee's intention to quit the job (Raja et al., 2004, Robinson & Rousseau, 1994). After a psychological contract breach, employees evaluate the situation and question themselves whether to remain in the employment relationship (Turnley & Feldman, 1999). If the employees perceive high imbalance in the relationship after psychological contract breach and perceive future mistreatments of the same kind, it is likely that they will be looking for employment elsewhere. Thus, psychological contract breach is likely to be positively related to employee's intention to leave the organisation. Therefore, we propose the following hypothesis.

Hypothesis 2: Psychological contract breach is positively related to employee's intent to leave the organisation.

Psychological Contract Breach on Employee's Neglect of the Job

Prior studies have suggested that psychological contract breach negatively influences employee's attitudes toward their organisations and jobs (Lester et al., 2002, Robinson, 1996, Robinson & Rousseau, 1994). It is also evident that psychological contract breach is positively related to employee's neglect of their in-role job duties (Turnley & Feldman, 1999, Robinson, 1996). According to social exchange theory (Blau, 1964), when employees perceive that their organisation has not fulfilled their promises, employees are motivated to restore balance to the employment relations in some ways. Employees may reduce their in-role job efforts to balance this relationship (Lester et al., 2002). Some of the examples of employee's neglect at work can be their half-hearted effort to complete a task, higher absenteeism from the workplace, not attending office or business meetings and not maintaining the office hours. Neglect as the response of psychological contract breach can also result in degrading employee job performances. Higher psychological contract breach will lead the employees to be more neglecting of their job (Turnley & Feldman, 1999). Thus, it is expected that psychological contract breach will be positively related to employees' neglect of job performances.

Hypothesis 3: Psychological contract breach is positively related to employee's neglect of job performances.

Moderating Role of Blame Attribution

Attribution Theory (Heider, 1958) suggests that individuals look for ways to explain occurrences, events which they perceive unexpected and unwanted. Attribution theory focuses on causal attributions- individual's perceptions of the causes of given outcome and their link to affective and behavioural outcomes (Hareli & Tzafir, 2006). Such as, the affective emotions that employees experience is the result of how they perceive about the situation and attaching causal attributions to the situation. Through the process of attribution perspective, employees try to understand the event (i.e. what factors lead the event, who was responsible, intentional etc.) and predict the future event (i.e. will the event happen again?). (Douglas & Martinko, 2001) explained that two forms of organisational deviant behaviours (i.e. passive

and aggressive) are related to attribution theory. According to them, passive deviance (for example, petty theft and tardiness) is related to internal and stable attributions for a negative outcome. The attributional interpretation of outcomes in the workplace plays a critical role in determining both the emotions and behaviours associated with many incidents of aggressions in organisations. Employee's workplace aggression is related to their stable, externally controllable and intentional attributions for negative outcomes (Martinko & Zellars, 1998). That is, when an employee makes an external attribution about a negative outcome and that outcome is also considered intentional then anger and aggression might result on the part of the employees. In another study on individual's goal setting and performances, (Donovan & Williams, 2003) demonstrated that individuals intend to revise goals if they face a large discrepancy between goals and performances while they attribute their performance to stable causes. Previous research also suggest that employee's attributions for workplace outcomes influence their job related attitudes and behaviours (Douglas & Martinko, 2001, Campbell & Martinko, 1998). In an injustice related aggression cognitive model, Beugré (2005) proposed that blame attributions influence the relationship between distributive injustice and employee's aggressive cognitions. The model also suggested that if the employees attribute a negative event/ injustice to the organisation and considered the event as intentional, employees are likely to experience affective emotion and aggression induced cognitions. Martinko and colleagues presented a causal model of counterproductive behaviours which proposes that individual's attributions about workplace events are primary factors which act as mediators between personality and counterproductive behaviours (Martinko et al., 2002).

After a psychological contract breach, employees may blame the organisation exclusively for the breach. In the psychological contract literature, organisational researchers have suggested that the employee's perception of attribution of psychological contract breach can influence and play an important role in forming their responses to the breach (Morrison & Robinson, 1997, Rousseau, 1995, Turnley & Feldman, 1999, Lester et al., 2002). Bradfield and Aquino (1999) demonstrated that employees' restoration of justice in the organisation through revenge seeking or forgiveness depends on their blame attribution and offender likableness. Lester and colleagues (Lester et. al., 2002) empirically tested the relationship

between employees' attribution of blame of psychological contract breach and their responses. The main focus of their study was to identify the differences between the attribution of subordinates and managers after psychological contract breach. Their study suggested that subordinates are more likely to blame their organisations for the contract breach. On the other hand, managers view psychological contract breach as a result of the situations which are beyond the control of the organisation. As proposed in the current study, after a psychological contract breach, employees demonstrate negative employee behaviours, attitudes and performances in response to restore balance in the relationship. However, whether the employees would respond to negative outcomes will largely depend on how the psychological contract breach is interpreted.

In view of the above discussion, it is argued in the present study that employee's perception of attribution of blame will act as a moderator to the employee's response of psychological contract breach. It is predicted that employees will tend to have higher OCB if they believe that the circumstances within which the breach occurred was beyond the control of the organisation. It is also argued that employee's job neglect and intention to leave the organisation are likely to be high if the employees hold the organisation responsible for the psychological contract breach. Based on the previous arguments, the following hypotheses are generated:

Hypothesis 4: Attribution of blame moderate the relationship between psychological contract breach and employee's OCB.

Hypothesis 5: Attribution of blame moderate the relationship between psychological contract breach and employee's job neglect.

Hypothesis 6: Attribution of blame moderate the relationship between psychological contract breach and employee's intention to leave the job.

The hypothesised relationships between the variables are presented in the following figure:

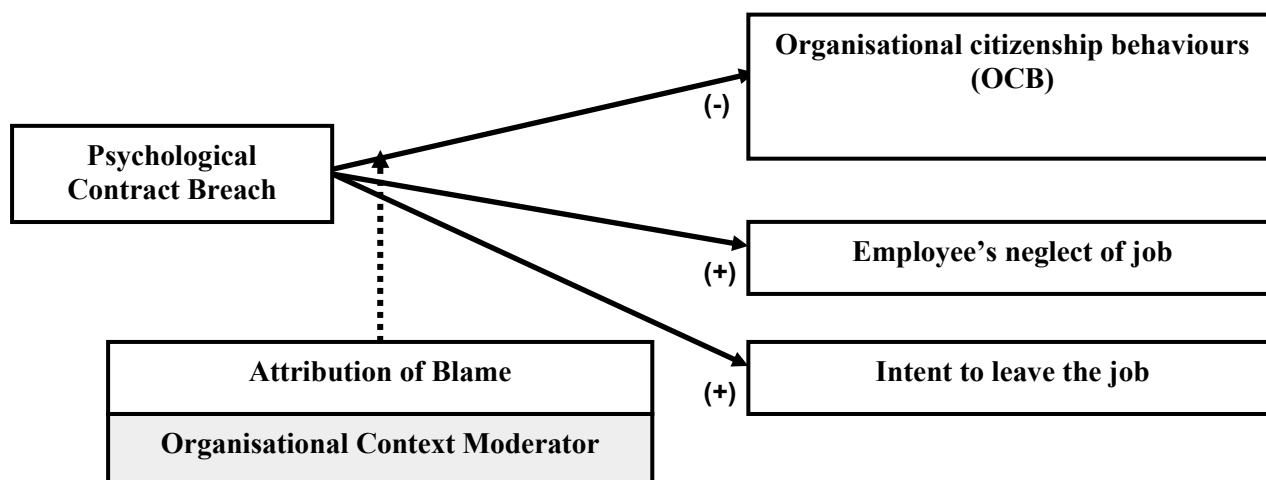


Figure 1: Proposed Model of Psychological Contract Breach
 (Bold and dotted lines specify the direct and indirect relationships among the variables respectively)

RESEARCH DESIGN

Data Collection

The data for this study will be collected from the full-time mid and low management level employees of several multinational corporations operating in South Asia (India, Pakistan, Bangladesh and Sri Lanka). Companies will be selected from various sector of the economy (i.e. food and beverages (Nestle, Coca Cola, PepsiCo), information technology (IBM, Microsoft), telecommunications (Airtel, Telenor), banking and finance (HSBC, Standard and Chartered), healthcare (Novartis, Pfizer), etc.). Once the University Human Ethics Committee endorses the research protocol, the researcher will contact the management of the selected MNCs with a letter of introduction. The letter will address the nature of the research, voluntary participation of the respondents, process of research (survey), confidentiality, storage of data, survey materials and other research issues guided by the University Human Ethics Committee. After obtaining approval from the MNCs management, the Human Resources Department of the selected MNCs

will introduce the research project to their employees through their internal mailing system. A survey pack will be distributed among MNCs employees. The survey pack will contain research information sheet, self-report questionnaire, self-addressed envelope. The participants will be requested to send the completed surveys anonymously in sealed envelope to the researcher. The self-report survey will be anonymous. The survey will measure psychological contract breach, organisational citizenship behaviours toward the organisation and individual employees, intention to leave the organisation, neglect of the jobs and attribution of blame.

Survey Questionnaire

Participants will respond to all the items in the questionnaire using a 7-point Likert type scale anchored by 1= strongly disagree and 7= strongly agree.

Psychological Contract Breach (PCB)

PCB will be measured in the survey by Robinson and Morrison's (2000) five item scale designed to globally assess the overall extent to which an organisation has lived up to its obligations and promises. The authors reported internal consistency of 0.92 for the scale. A recent study on psychological contract breach by (Suazo et al., 2005) reported Cronbach alpha reliability of 0.88 for this instrument. An example item is as follows: *“So far my employer has done an excellent job of fulfilling its promises to me.”*

Organisational Citizenship Behaviour (OCB)

Employee's OCB will be assessed by eight item scale adapted from Lee and Allen's (2002) self-report survey. The authors reported coefficient alpha reliabilities for the OCB was 0.83. A Sample item of OCB is *“Attend functions that are not required but help the organisation image”*.

Intention to leave the organisation

Employee's intention to leave the organisation will be measured by a five item scale developed by Becker (1992). Coefficient alpha reliability for this instrument was reported to be 0.76 (Suazo, et. al., 2005). One sample item from the scale is *“It is likely that I will actively look for a new job in the next year”*.

Job neglect

Employee's neglect of the job will be measured by six items used by Turnley and Feldman (1999). The authors reported Cronbach alpha reliability of 0.77 for the scale. The six items were originally taken from (Rusbult et al., 1988) and (Dyne et al., 1994)'s scales of employee job neglect. The scale assessed employee's intention to avoid their in-role job responsibilities and their avoidance of extra-role assignments. One sample item from the scale is *"I try to keep out of sight of my supervisor so I can talk to co-workers, take breaks, or take care of personal business"*.

Attribution of Blame

Employee's attribution of blame will be measured by four items from Wade's (1989) victimization subscale. The scale was used by Bradfield and Aquino (1999) and Aquino et al. (2001) to measure attributions of blame. Cronbach alpha reliability was reported to be 0.77 for the scale. One sample item of the scale is *"I blamed the organisation for not keeping up its promises to me"*.

Data Analysis

To evaluate the hypothesised relationships among the variables, several hierarchical regressions will be conducted. Hierarchical regression analyses will reveal the main effects and moderating effects among the studied variables. Moderated hierarchical regression analysis will be used to test the moderating role of blame attribution between psychological contract breach and employee outcomes. The procedure suggested by Aiken and West (1991) will be followed to test the moderating effects. To reduce multicollinearity problems resulting from the interaction terms, the independent and moderated variables will be centred at the mean before creating the product term. Control variables (gender, age, employment tenure) will be entered in the first step of the regression equation. In the second step, predictor variable will be entered in the equation to test the main effects. Finally, the product term (PCB X Blame attribution) will be entered into the equation to test the moderating effects. The product term should explain additional variance in the criterion variable and should have a significant beta weight for moderating effect to be present.

DISCUSSION AND CONCLUSION

This study will examine the moderating role of blame attribution in the relationship between employees' psychological contract breach and employees' organisational citizenship behaviours, employees' job neglect and intention to leave the organisation. The study will also look at the relationship between psychological contract breach and employee outcomes.

The study will be based on self-report survey and even though the participants will be the best reporters of their perceptions, experiences and opinions, this approach is commonly associated with response bias: common method variance. In future research, data from multiple sources (e.g., perceptions of employees' supervisors, co-workers) can be used to strengthen the results. Secondly, data collection for the study will be conducted at a point of time. Thus, cross-sectional data would make it difficult to establish the causal relationships among the studied variables. Ideally, a longitudinal study is preferable to determine causal effect among variables. Nevertheless, the findings of the current study will be still a valuable source of information for organisations and the psychological contract literature.

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01. Sustainable Work Competitive

Indigenous arts practice: promotes health and wellbeing, keeps culture alive, sustains cultural heritage and provides sustainable work

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01. Sustainable Work
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Indigenous arts practice: promotes health and wellbeing, keeps culture alive, sustains cultural heritage and provides sustainable work

ABSTRACT: *Indigenous arts practice and cultural heritage are integral to cultural strength. This paper is based on a qualitative research project that focused on the artistic collaboration of Central Queensland Indigenous artists and Aotearoa New Zealand Māori artists. The research explored the artists’ experiences and perceptions of the present, and future, pathways of Indigenous cultures, knowledges and arts practice. The study found the preservation and transferral of culture through the arts promotes sustainable work for artists, as well as the maintenance of cultural heritage and cultural sustainability. Promotion, exhibition and sharing of Australian Indigenous and Māori art and culture, while supporting health and wellbeing, cultural continuity and community cohesion, also has the potential to strengthen both nations’ cultural and national identities.*

Keywords: Future of work; healthy work; Māori and Indigenous knowledge; Māori and Indigenous organisational forms; sustainability

In many contemporary societies post-colonial processes have altered the transmission processes of Indigenous arts and culture (Calman, 2015; Hendry, 2005; Fredericks, 2010; McHenry, 2010; Nagam, 2006). While cultural exchanges can promote cultural cohesion and the transferral and sustainability of arts practice and culture (Ware, 2014), there remains a paucity of literature about Indigenous cross-cultural exchanges.

This paper is based on a qualitative research project with Indigenous Australian artists from Central Queensland, and Māori artists who travelled from Aotearoa New Zealand for a cross-cultural, collaborative artist’s event (Fredericks & Daniels 2018). The ten day residential event titled *Returning Cross Culture: Blending our Identities 2015* was held in the forest at Byfield, north of Yeppoon, Queensland. The research was requested by the artists via the event organiser. The artists gathering began with a moving re-enactment of Welcome to Country¹, carried out for the first time in 150 years in the Byfield region.

Insert Figure 1 about here

¹ The term ‘Country’ is used by Aboriginal and Torres Strait Islander peoples to describe their connection to specific areas of Australia and their family origins. It encompasses understandings of time, place and cultural relationships within that environment (Queensland Government 2008). For further information, see the following link: https://www.qcaa.qld.edu.au/downloads/approach2/indigenoures005_0803.pdf

Fifteen artists participated in the one-on-one interviews held on Country which explored how they work together for the present and the future of Indigenous culture, knowledges and arts practice. They camped on Country in tents and worked under a marquee set up in a cleared area.

Insert Figure 2 about here

The artists produced individual works as well as working in pairs on collaborative projects. Their painting, printing, sculpting, carving and clay works were presented at the end of the ten day collaborative event at a public exhibition in the Yeppoon Town Hall.

Insert Figure 3 about here

This paper begins with background information on the benefits of cultural practice, cross cultural exchanges, and of preserving and transferring culture through the arts for the maintenance of cultural heritage and sustainable work. The research methodology is then discussed followed by the findings. The discussion focuses on the findings about cultural and work sustainability from an arts practice perspective. The conclusion presents the theoretical and practical contribution of the research, and finally, the implications complete the paper.

Cultural practice

Visual images and the arts more broadly, offer physical symbols of culture (Smith, Burke & Ward, 2000). For Indigenous peoples, the knowledge and practice of culture and respect of that culture by the broader community is linked to wellbeing (Steering Committee for the Review of Government Service Provision [SCRGSP], 2014). Colonisation of Indigenous Australians and Māori caused the fragmentation of culture (Hendry, 2005), making the arts a crucial component in the preservation and transmission of culture. In Australia, as in New Zealand, cultural revival gained momentum in the 70s and 80s through repatriation of Indigenous languages, increased arts practice and maintenance of cultural beliefs and practices, recognised as a vital link in maintaining individual and cultural identity and wellbeing (Fisher, 2015; Hong 2014; Zubrick et al. 2014). Cultural knowledge can be exchanged through cross cultural artists interactions which provide opportunities to work together, support and promote indigenous artists, culture and artistic works.

Cross cultural exchanges

While there is a paucity of literature about Indigenous arts cross-cultural exchanges, what is known is that cultural exchanges can promote increased social cohesion (Ware, 2014). Closely related to cross-cultural exchanges are similar to study tours which provide opportunities for participants to increase their knowledge and skills base in a different environment (Miao & Harris, 2012). Cultural exchanges include the opportunity to experiment and receive cultural benefits including increased self-confidence, pride, social identity, self-discipline and future hope (Palmer, 2010). Indeed, cross-cultural exchanges have the potential to transform perspectives, and increase self-awareness and knowledge (Bennett, 2006; Greatrex-White, 2007; Palmer, 2010).

Participating in cross-cultural exchange programs can be empowering, (re)igniting pride in Indigenous knowledges, spirituality and traditions, effectively strengthening culture (Bennett, 2006). Recent research on the outcomes of a cultural and knowledge exchange program between two different Indigenous populations (Indigenous Australians and sub-continent Indian people), revealed that Indigenous Australian participants experienced an ongoing positive impact that remained after the tour participants completed the tour, both professionally and personally (Fredericks, Mann & Daniels, 2018, in press). Cultural exchanges can highlight the importance of transferring culture for the maintenance of cultural heritage and sustainability.

Sustainable work

The support and maintenance of cultural heritage and the transferral of culture is embedded in the arts, requiring sustainable work practices for Indigenous artists (Ware, 2014). Sustainable work can be defined as living and working conditions that encourage individuals to remain engaged in work across their working lives (Eurofound, 2018). The concept of sustainability was adopted from the field of ecology, which describes the ability of systems and processes to ‘develop and endure’ (Eurofound, 2015, p. 2). In the same way, sustainable work for individuals encompasses work processes and systems that promote job satisfaction, flexible workplaces and take into consideration individuals social environments (Eurofound, 2018). In order to achieve this, broader societal supports are required that enable individuals to access work, and while carrying out this work, to, maintain work/life balance. Policies, practice and legislation influence employment and funding arrangements which in turn impact Indigenous artist’s capacity to carry out sustainable work practices (Eurofound, 2015).

Transferring culture through the arts: policy and funding

While it is evident that maintaining culture and transferring arts practices and culture across generations is imperative, in contemporary societies, post-colonial processes have changed traditional transmission practices (Calman, 2015; Hendry, 2005; Fredericks, 2010; McHenry, 2010; Nagam 2006). Often, difficult social situations serve as barriers to arts production and the subsequent ability of Indigenous artists to provide for their families (Nagam 2006). Sustainable work in the arts is often self-funded or can be supported through individual and collective funding processes managed by National Arts Councils.

Australia Council for the Arts, also known as the Australia Council, is the Australian government's primary funding and advisory body for arts and culture (Australia Council, 2017; DoCA, 2017). The Council's objectives include a commitment to support the 'creation, presentation and appreciation of First Nations arts' (Australia Council, 2017, p. 21). Two activities that support this goal include: 1) the *Signature Works* program, comprised of intensive workshops which supports artists to advance concepts from production to distribution, and 2) the *Chosen* program designed to support the intergenerational transfer of arts practice and cultural knowledge (Australia Council, 2017). *Chosen* aims to address the deep-seated impact of intergenerational interruption of culture of First Nations Australians (Australia Council, 2018). Australia Council (2018, p. 27) acknowledge that '[t]he unmet demand for culturally abased programs is immense, as is their potential to address Indigenous disadvantage in a strengths-based approach recognising the centrality of Indigenous cultures'.

Creative New Zealand is the national arts development agency responsible for delivering government funding for the arts in New Zealand. The *Arts Council*, (the governing body of *Creative New Zealand*), is made up of 13 members, and manages related strategy, policy and funding arrangements (Creative New Zealand, 2016). A minimum of four *Arts Council* members must have knowledge of Ngā Toi Māori (Māori arts practices), Te Ao Māori (Māori worldview), and Tikanga Māori (Māori culture and protocols), to provide guidance to Council on matters concerning Māori (Arts Council of New Zealand, 2016). As well, two members of the *Arts Council* must have

knowledge of the arts, traditions and cultures of the Pacific Island peoples of New Zealand (Arts Council New Zealand, 2016).

The practice of art and culture has multiple intrinsic and extrinsic benefits, including improved health and wellbeing, and the reinstatement of lost identities, cultures, traditions and languages (Bennett, 2006; Hendry, 2005; McHenry, 2010; Ware, 2014). These concepts, from an Australian perspective, link to the Closing the Gap policy². Arts councils are aware of the importance of reviewing the appropriateness of existing policies and funding arrangements. They have the capacity to advance Indigenous arts and culture thereby promoting sustainable work for Indigenous artists.

METHODOLOGY

The research adopted an exploratory, qualitative lens in order to gain a deep, rich understanding of Indigenous Australian and Māori artists' perceptions of the future of Indigenous cultures, knowledges and arts practice. Additionally, the research aimed to benefit the broader community through increased understanding of how the arts and cultural practices are fundamental to Indigenous learning capacities and identity formation. Through better understanding the Indigenous artist's experiences, it is hoped the benefits of working together for cultural and arts development in the present and the future is established. In this way, recording the artist's experiences may become a signifier of the subjective and collective ways of knowing and of Indigenous culture and spirituality, for the benefit of artists, researchers and the broader community alike.

Participants were invited through emails and via researcher invitation on site to participate in a one-on-one interview to gather data, using a semi-structured interview guide for prompts. Interviews were digitally recorded and notes were taken. Through the qualitative interviews, participants had the opportunity to share their experiences through 'yarning'³. A total of fifteen interviews with seven Indigenous Australians, three women and four men, and eight Māori, six women and two men, were conducted on Country during January 2015. Each artist was offered a gift/koha⁴ in return for their

² The 'Closing the Gap' policy and target strategies are Australian Federal Government policies developed to address Indigenous disadvantage, including socio-economic, education, health and other outcomes for Indigenous peoples, which currently do not match those of non-Indigenous Australians.

³ Yarning is an informal discussion that requires the building of a relationship between researcher and participant; yarning provides a culturally safe conversational process for sharing stories and ideas (Bessarab & Ng'andu, 2010, p. 38).

⁴ The term koha in Māori is a gift or present, refer to link: <http://maoridictionary.co.nz/search?&keywords=koha>

contribution. An open-ended process of thematic coding and cross-referencing was employed for data analysis. Human Research Ethics approval for the research was received prior to the event. Consent to participate in the research was received from each participant, which included permission to publish the results and use photographs. Confidentiality was assured.

FINDINGS

The following sections provide a summary of the key themes emerging from the interviews. The participant's direct quotations are italicised in inverted commas and have been used wherever possible to foreground their voices. Some themes emerging from the data are presented from both Indigenous Australian and Māori perspectives, while other themes have been merged as appropriate.

Opening ceremony reflections

Almost all participants mentioned the personal impact of the gathering, illustrated through comments about the Welcome to Country Ceremony and the dancing. One of the Indigenous Australian artists explained that the opening ceremony '*captured my heart...words can't describe how I felt*'; another shared that '*the dancing yesterday is reviving and keeping [culture] alive*'. The Māori artists were equally impacted: '*I was in absolute awe of the dancing. I really felt it. It was emotive*'; '*[t]he dancing. I'm so glad I was here. The young men are in touch, they've reconnected with their culture*' and '*[t]he young artists of the future, the dancers - it is here.*'

Identity and belonging

The artists were asked what it was that their arts practice gave to them. Themes of identity and belonging emerged from the data: '*It gives me a sense of belonging, of being with my people. It gives me pride. It gives my children knowledge of culture*'; '*[i]t gives me identity and belonging and having something to offer, especially to your family. Nothing is as important to offer as my work*' and '*[i]t gives you an identity. It came through art, not language like we thought. My art is seen through two sets of eyes. One brings the past up. I work in two worlds*'. One participant explained the search for identity spans generations:

'I knew I had Māori background. My Grandparents were brought up in an era when it wasn't cool to be Māori ... for a long time we thought we were Spanish ... I wanted to know where I sat and fitted within our own history [My work] took me on a journey of self-discovery ... For me it was rebirth. My work is a metaphor of birthing

and rebirthing and renewal ... It's trying to find a happy balance between being Māori and being Pakeha ... There were loving relationships ... it's not all bad.'

Whether painting, print making, sculpting, carving or working with mixed media or clay, the artists identity, Indigeneity and Indigenous knowledges were expressed through 'the patterns I use' and '*through our [culture's] designs; every design has a meaning*'. At the beginning of a project, some artists worked through '*finding the back story first to build a knowledge base... To express myself effectively within my work is what my culture has taught me is not a myth but true*'. The artists expressed and exhibited culture in the present, from the past, and for the future.

Reflecting on the past: the present impacts the future

Reflecting on the past revealed the major theme of racism emerging from the interviews. One Indigenous Australian artist explained: '*My Grandfather kept a low profile. It was a protection measure. He didn't want us to suffer like he did ... My family had lost the majority of our culture ... [Art] was the beginning of me putting it back together*'. Another shared '*My Father was brought up by Granny. He didn't promote himself as Aboriginal. He was warned light skin kids would be taken*'. Another explained that non-Indigenous Australians '*say [racist remarks] in common speech and are offended if you call them on it*'. One artist felt that we should all '*be one here in Australia, but keep our [Aboriginal] culture. A treasure should be shared, not locked away in a box*'. Another explained that '*[w]e get refused as Indigenous artists [in art galleries]*'.

Māori artists likewise identified the racist history of Australia through its colonisation processes, the impacts of which reverberate as intergenerational trauma (Atkinson, 2002): '*How did your country handle having their children being taken away? We didn't have this*' and '*[w]e feel privileged compared to Indigenous people here*' and '*what Aboriginal people have gone through, and they're on their own. No one is listening*'.

Passing culture on to our children

When asked what they hoped to gain from the Gathering, one participant explained, '*Exactly what's happening here ... the young ones are working with our artists*'. Other comments followed the theme of passing culture on to the next generation: '*it's about culture, keeping culture alive, exchanging stories, heritage, history, family and passing it on to our children*'; '*[t]he biggest thing*

I've got so far is seeing young people have a space that's their own. We are in their space'; 'I want to gain more chances to be part of other Gatherings, for our children to keep on practicing the arts for their children' and '[a]s Māori we are always looking to the younger generation, that's where the health of the people [is]. Visual arts is an opportunity to keep the stories, and traditions...'

Cross cultural unity through connection

The theme of unity across cultures emerged when participants were asked what they hoped to gain from the Artists' Gathering. One artist explained that learnings from cross cultural exchanges revealed *'Native American and Māori stories are similar to ours. [It] backs up your beliefs... This is good on all levels ... it reinvigorates and reinforces what we know.'* Others explained that *'[t]his cross cultural stuff is amazing. ... It broadens everyone's perspectives of who they are';* and *'It's like a mirror, listening to their stories helps you to appreciate things... You gain energy from here and take it with you, that's a gift'*. The theme of strength in unity was explained by one artist: *'[w]e have a saying, "You have one Waka⁵, but many paddles", meaning, we have the same plight, but we can be stronger as a people [together], we are one people.'* Another felt *'it's time to connect with people, and open people's eyes, it's bigger than cultures'*.

Passing culture on to the broader population

Participants recounted their desire to pass culture on, to share their culture and stories with the broader population: *'I want the public to get a hunger for more Indigenous arts and culture'; 'I want to share our culture and stories ... I want to feed people culture, to show off traditional owners';* *'[in the future] I would like to see recognition by the general public that what they are viewing is unique from a cultural perspective. It has nothing to do with Western arts philosophies. We have a different perspective'* and *'[I'd like to share our] culture, who we are on a deeper level, with everybody'*. Many of the artists viewed their work as a medium for storytelling. Artists can be *'gifted with insights'* to tell *'stories through the medium'* coming from *'ancestors looking over your shoulder'*. One artist said, *'the public will say "What is the story behind the artwork?"'* Another felt *'artwork [is] the pretty face in front of the story'*. One artist explained *'as artists...we are birthing Spirit, formulating it as a*

⁵ A 'Waka' is a canoe. The wide-girthed trees in New Zealand meant that Māori could build a variety of canoes from elaborately carved waka taua for war parties, to useful rafts for fishing: <https://teara.govt.nz/en/waka-canoes>

construct, birthing it into the world as a physical thing. We are the eyes for the people who can't see anymore'.

Language retrieval

Language was another theme that emerged from the data: *'My language, there is minimum stuff there. If you research you can find it, but the Māori, they speak fluently... I did a six week program for kindergarten. There was enough language for me to do a little program'.* One Indigenous Australian artist shared: *'[o]ur lost culture is like a giant jigsaw puzzle ... I love to pass on culture. I know only a few words of language, but that's enough ... I'm constantly restructuring my six letters into a story. Māori have twenty-six letters, I can learn from them'.* Another explained *'Mum is where I get my Māori from. She would tell us stories...'*

Health and wellbeing

When asked what their arts practice gave to them, many of the artists connected their work to their health and wellbeing. One artist shared that their arts practice *'[gives me] grounding ... It's almost like meditation. It allows me to stop; I need to do it for my own health and wellbeing'.* Another said it *'makes me feel calm'.* Others *'found it a great way to relieve stress'* and that it was *'therapeutic ... It's therapeutic for a lot of artists. I've worked a lot in jails and even the wildest ones get very calm when they paint'.* Another said *'[i]t's a healing thing I feel. Both our cultures have been impacted by colonisation. We are a strong culture, we're still finding it, and that's why I try to keep it alive. It is healing for us to be proud and it gives a sense of belonging.'*

DISCUSSION

The artists in this project are engaged in cultural revival, identified by Fisher (2015), Hong (2014) and Zubrick et al. (2014) as the repatriation of Indigenous languages, continuing arts practice, and promotion of cultural beliefs, all of which are pivotal to maintaining personal and collective cultural identity and wellbeing. A key theme that emerged from the research was the significance of the artists' work in the transmission of culture to their children and to the younger generation more broadly. Bennett's (2006) work with 'at-risk' Canadian Indigenous youth in a cultural exchange program may have a different focus from the research outlined in this paper, but the findings are transferrable, providing guidelines for initiating mentoring workshops and their possible outcomes.

Brennett (2006) found that, with guidance from Elders when establishing international connections, pride in Indigenous knowledges, spirituality and traditions can be strengthened amongst young people. Moreover, Bennet (2006) explains that ‘youth may, thereby, reclaim a collective role in healing their families, their communities, and their traditions and assist other youth to become leaders in movements of international change, healing, and renewal of Indigenous values and Earth bases knowledge/practice’ (p.97). Mentoring and guidance can build, progress and embed culture and the arts, thus assisting cultural continuity. In line with this concept, several participants in the project suggested that future cross-cultural artists’ exchange programs could host workshops for Indigenous young people.

Many Indigenous people have experienced loss within their identity. For some of the artists in this project, journeys ‘*of self-discovery*’ were enabled through their arts practice, allowing the retrieval of aspects of their identity. Many of the artists explained that their arts practice increased their sense of ‘*identity*’, ‘*belonging*’ and ‘*pride*’. Moreover, the research affirms the importance of cultural exchanges for promoting social cohesion (Ware, 2014), increased pride, identity and hope (Palmer, 2010), and the transformative impact of the experience on participants (Bennett, 2006; Greatrex-White, 2007; Palmer, 2010).

Artists explained their arts practice provides opportunities to ‘*pass on culture*’ through the telling of stories, and for ‘*self-discovery*’ and ‘*cultural expression*’. The artists pointed out the importance of sharing and educating the ‘*public*’ about Indigenous culture. Findings from the research suggest that sharing culture with the broader community (or the ‘*public*’) can work towards combatting racism.

Sustainable work supports cultural continuity

Findings revealed the future of Indigenous cultures, knowledges and arts practice is linked to cultural revival, rebuilding and continuation, achieved through: continuing arts practice; dancing; music songs and other cultural expression; retrieval of identity; development of belonging; retelling of stories; passing on of culture to the younger generation; re-instating Indigenous languages; combating racism – through passing on of culture to the broader community; unity through connection;

maintaining Indigenous spirituality; maintaining cross cultural connection; and working creatively in arts practice (which is also linked to positive health and wellbeing).

Implicit throughout the data, and in line with Ware's (2014) assertions that the transferal of culture, and maintenance and sustainability of cultural heritage is embedded in the arts, is the need for sustainable work practices for Indigenous artists. Moreover, cultural sustainability is dependent on the intergenerational transmission of the arts, underpinned by sustainable work practices that promote cultural continuity. Integral to sustainable work (and the transmission, maintenance and sustainability of Indigenous culture and the arts) is the availability and accessibility of funding for culturally based arts programs for individual and collective groups of Indigenous artists (Australia Council, 2018).

CONCLUSION

The search for Indigenous identity and the importance of regaining, rebuilding and transmission of culture to the next generation (and to the broader community) were key themes emerging from the research. Related to the quest to discover, develop and revitalise Indigenous identity and rebuild culture is the vital role that arts practice can play in sustaining artists' health and wellbeing. Indeed, the artist's health and wellbeing is intrinsically linked to their work. These concepts are interconnected and central to securing the future for cultural continuity arts practice, identities, health and wellbeing, spirituality and the sharing of culture.

The artists have deep pride in their cultures; they are purveyors of culture for the now and for the future. This is a role that they welcome, and undertake with pride. Central to this is their involvement in the transmission of culture to their children and to the younger generation more broadly. The artists recognise that the '*public*' is critical in cultural continuance. The artists revealed a deep longing for the '*public*' to understand their cultures. It is the lack of understanding demonstrated by the '*public*' that impedes progress in culture, knowledges and arts. And it is the dominance of that '*public*' in the governance of both Aotearoa New Zealand and Australia that maintains the imbalance. Enlightening the '*public*' by taking them on a pathway of discovery and cultural recognition and illumination, provides a potent avenue for securing the future of Indigenous cultures, knowledges and arts practice.

The research project revealed that Indigenous Australian and Māori arts practice is deeply spiritual and multidimensional. Theoretical integration and interpretation of the data produced a snapshot of how Indigenous artists maintain cultural heritage, transmission of Indigenous knowledges and culture for the now and the future:

Indigenous Australian and Māori artists reach into the past to paint in the present, to retain culture for the future. Inspiration for their work comes from Spirit, passes through their mind, and is enabled through their hands, in order to let those who can no longer see, see again (Fredericks & Daniels, 2018, p. 49).

The process of revitalising and re-affirming contemporary Indigenous cultures, knowledges and arts practice is advanced through the collaboration and encouragement experienced at cross-cultural exchange arts events. It is evident that cross-cultural artists' exchanges are an important link in regenerating and rebuilding Indigenous cultures, knowledges and arts practice. Furthermore, the datum suggest that the future of Indigenous cultures, knowledges and arts practice depends on cultural revival, rebuilding and continuance facilitated in part by artists engaged in sustainable work practices.

Findings from this research have policy implications for both Australia and New Zealand's culture and arts policies. The promotion, exhibition and sharing of Indigenous Australian and Māori art and cultures, while benefitting individual and community health and wellbeing, facilitating cultural continuity and community cohesion, also has the potential to contribute, in an holistic way, to Australia and New Zealand's cultural and national identity. Linked to policy implications is the need for sustainable work for Indigenous artists, which is integral to health and wellbeing, cultural continuance and community cohesion and, for Indigenous Australians, to Closing the Gap more broadly. Funding processes that promote the transmission of culture, intergenerational transmission of the arts and culture, and mentoring of young people would benefit both groups.

While the findings of this study are context and situation specific, (Collis & Hussey 2009), and the small number of participants may be viewed as a limitation, future research could focus on interviewing artists from other Indigenous groups, as well as Indigenous arts administrators and art gallery management staff. The findings of this project highlight the importance of supporting, promoting and funding Indigenous artists work for the now and the future of Indigenous cultures, knowledges and arts practice.

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FIGURES

Figure 1 Welcome to Country re-enactment held in Byfield for the first time in 150 years



Welcome to Country re-enactment, Byfield Forest, Queensland. Photo: Carolyn Daniels.

Figure 2 Marquees provided a work space for the artists



Artists worked in marquees in the middle of the clearing, Byfield Forest, Queensland. Photo: Sue Kratz.

Figure 3 Selection of Indigenous Australian and Maori collaborative art works



Artist's collaborative work, Byfield Artists' Retreat, Queensland. Theresa Reihana & Patricia Coleman (Left); Victor Tepaa & Joe Butler (Centre); Kaylene Butler & Theresa Reihana (Right) Photos: Sue Kratz photo 1; Carolyn Daniels photos 2 & 3.

03. Gender, Diversity and Indigeneity Competitive

Australian women's career transitions: leveraging time for sustainable work

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Competitive

Australian women's career transitions: leveraging time for sustainable work

ABSTRACT: *Complex factors impact women's lives during career transitions. Despite changes in social and cultural expectations influencing women's career pathways, career transitions remain difficult for many Australian women. This paper draws on a constructivist grounded theory project that aimed to identify factors impacting Australian women's lives as they navigate career transitions. Managing work, care, study, domestic responsibilities, and at times, a business, some participants experienced an up to fivefold burden of time. The study found work/life balance, flexible workplaces and the capacity to leverage time influenced women's ability to attain long-term workforce participation. Leveraging time for sustainable work requires changes to workplace policies and practices to transform the social, cultural and time deficits inhibiting Australian women's short and long-term workforce participation.*

Keywords: Equal employment opportunity; gender in organisations; women and work; work and family; work/life balance; workforce diversity

Women experience multiple transitions across the life course including moving into, and out of, the workforce, and as they begin or resume study and/or have children. Australian women often shoulder a quadruple burden of time as they carry out study, paid work, unpaid care responsibilities and household tasks (Daniels, Radel & Hillman 2016; Elloy 2001; HREOC 2005; Pocock 2005; Qu 2008; Sayer et al. 2009). The stress and strain caused by multiple role overloads is exacerbated by inflexible workplaces, impacting health and wellbeing (Bishop 2002; Elloy & Smith 2003; HREOC 2005; Pocock 2005; Sayer et al. 2009). Despite progress in the area of work/life balance; legal, social and policy barriers continue to dictate the paid and unpaid work arrangements of Australian families and individuals (HREOC 2005). The stresses, strains and barriers variously experienced by women as they navigate career transitions can hinder their pathway to gaining sustainable work across their lifecourse. This paper is based on a larger research project that aimed to identify factors that impact women's lives during career transitions, whether these factors carry over to their study and workplaces and whether the transition periods have differing factors influencing health and wellbeing. The project employed a constructivist grounded theory approach.

Life course transitions

Life course transitions are always an element of the social trajectories of family, education, work, behaviour and development, and the life choices made for these transitions are dependent on opportunities and constraints within the prevailing social structure and culture (Elder, 1998).

Transitions are changes in social roles or responsibilities; some transitions are unexpected and stressful, other transitions such as job promotions are positive (Wethington, 2005). Everyday transition events, for example, childbirth, women re-entering the workforce and the subsequent impact on the household, ageing parents and marriage breakdowns affect many people across their lifespans (Stone, 2013). These events have a direct impact on the life course of individuals and families at the point they are encountered, and continue to indirectly impact the entire life course over time (Hareven, 1994).

Career transitions

The term *career*, traditionally applied to professional roles such as general practitioners and lawyers, evolved to encompass other work and life roles (Louis, 1980). Super (1979, p. 169) defined the term career as:

The sequence of major positions occupied by a person throughout his [sic] preoccupational, occupational, and post-occupational life; includes work related roles such as those of student, employee, and pensioner, together with complimentary avocational, familial and civic roles. A career exists only as a person pursues it; careers are person centred.

Within the domain of career development, the term transition relates to all life roles, viewed as a lifetime process beginning from birth (Super, 1990). The term ‘role’ relates to the tasks and behaviours connected with positions in organisations or social systems (Louis 1980, p. 330). It is the key concept in the definition of ‘career’ as well as the primary concept in the term ‘*career transition*’ (Louis 1980, p. 330, emphasis in original). Louis (1980, p. 330) defined the term career transition as ‘the period during which an individual is either changing roles (taking on a different objective role) or changing orientation to a role already held (altering a subjective state)’. Figure 1 illustrates these two primary categories of career transitions as inter-role, where a new and different role commences, and intra-role, where a new and different orientation to an old role is taken on (Louis, 1980).

Insert Figure 1 about here

The research presented in this paper focuses on the entry/re-entry category of career transitions, specifically the transitions to higher education and the workforce. In this instance the term ‘transition’ describes both the change and the length of time over which the change is occurring (Louis, 1980, p. 330).

Time relative to women’s career transitions

Many women juggle multiple roles and responsibilities on a daily basis, triggering time deprivation pressures, which in turn affects their health and wellbeing (AHRC, 2014; Bishop, 2002; Elloy & Smith, 2003; Stone, 2013; von Doussa, 2007a). In fact, women who begin/return to study for career purposes commonly shoulder a quadruple burden of time as study is added to paid work, unpaid care and household tasks (Daniels, Radel & Hillman, 2016). The negative impact of multiple roles and responsibilities and ensuing time deficits on women’s health and wellbeing is unquestionable (Daniels et al., 2016; Strazdins et al., 2015). The management of time, particularly for women to achieve sustainable work ability over their life course, is crucial for women whose career pathway includes the transition to study and the workplace.

Managing and leveraging time

Adopting time management principles promotes proficient time management practices (Carlopio, Andrewartha & Armstrong, 2005). From an organisational perspective, efficient time management requires; a) clearly distinguishing and prioritising both important and urgent matters; b) focusing on results as opposed to methods; and c) the ability to say ‘no’ if necessary (Carlopio et al., 2005, p. 177). At the practical level, time management strategies include regular list-making, ranking essential and urgent matters to prioritise a work schedule, and recognising an individual’s most productive daily time cycle to facilitate the completion of work (Robbins et al., 2008). Leveraging time involves the least amount of activity to return the greatest results; it is allocating time to projects and activities that deliver the most return (Perman, 2010). Although efficient management of time is a key practice to leveraging time (Perman, 2010), many Australian women are not able to delegate tasks to relieve time pressures because of their multiple roles and responsibilities and the lack of support, whether financial, governmental or accessibility of suitable help (ABS, 2009; Daniels, Radel & Hillman, 2016; HREOC, 2007; Stone & O’Shea, 2012).

Sustainable work requires effective workplace policies and practices

Sustainable work is conceived as living and working environments that enable individuals to engage with, and remain in work throughout (and beyond) their working lives (Eurofound, 2015). In Australia, many women work part-time, frequently in positions lower than their skill levels, as they strive to balance paid and unpaid workloads (ABS, 2009; von Doussa, 2007a). Often these positions are casual with restricted career and training pathways, limiting opportunities for development or promotion (von Doussa, 2007b). Part-time work equates to low levels of retirement savings and superannuation benefits for retirement (HREOC, 2007). The long term cost for the high numbers of women who work part-time is not only economic, it also impacts on their health and wellbeing (Bishop, 2002; HREOC, 2005). The seemingly ‘private’ decisions individuals make about work and care arrangements are actually influenced by the ‘public’ domain of government policies, accessibility of child and/or aged care, employment opportunities and/or the taxation implications of (re)entering the workforce (HREOC, 2007, p. 99).

Factors that hinder individuals from entering and/or remaining in the workforce require changes in policies and practices, both in the workplace and outside of the workplace (Eurofound, 2015). Broad social supports are required which allow individuals to access appropriate work, have a degree of flexibility and provide work/life balance, all of which are particularly important for women’s ongoing participation in the workforce (Eurofound, 2018). Sustainable work for women requires effective work/life balance practices, however, increased working hours, inflexible workplaces and the blurred line between work and personal life, particularly over the last three decades, impacts many women’s lives as they struggle to balance multiple roles and responsibilities (Bishop, 2002; Elloy & Smith, 2003; Fereday & Oster, 2010; HREOC, 2005; Pocock, 2005; Sayer et al., 2009). In Australia, many organisations and institutions do not adequately address women’s needs particularly around work/life balance, childcare arrangements and paid parental leave (AHRC, 2014b; Bishop, 2002; Elloy & Smith, 2003; HREOC, 2005; Pocock, 2005; Sayer et al., 2009; von Doussa, 2007a). These gaps are the very areas where women struggle to maintain career momentum, positive health and wellbeing and sustainable work ability (Hägglund, Helsing, & Sandmark, 2011).

METHODOLOGY

The research adopted a qualitative approach underpinned by constructivist grounded theory, deemed appropriate for exploring women's career transitions. Constructivist grounded theory assumes social reality is not separate from people's actions; it recognises that data collection and analysis is interactive; and that the data collected about participants lived experiences is recorded from their point of view (Charmaz, 2000). Constructivist grounded theory clearly situates the researcher as author and re-creator of experience and meaning (Charmaz, 2000). The benefits of using constructivist grounded theory for this research relate to the strategies it offers; that of clear analytic guidelines, ways of seeing the data and control over the research process (Charmaz, 2012). In order to illuminate factors that impact on women's choices about workforce participation, constructivist grounded theory offers analytical processes that consider time, place and situation.

Fifteen participants self-selected through purposive, convenience sampling, a process where participants are known through friendship and workplace networks (Saunders, Lewis & Thornhill, 2009). Purposive sampling, which is more well-defined than convenience sampling, was considered most appropriate to target suitable participants (Neuman, 2000; Parasuraman, Grewal & Krishnan, 2004). Therefore, the research participants for the project were Australian women who had undertaken a university degree and transitioned to the workforce (Veal, 2005). The research sought to develop deep insights into the lived experiences of Australian women who have studied at university and transitioned to the workforce as part of their career pathways. Semi-structured interviews were conducted to gather the qualitative data.

Human Research Ethics Approval was gained. Participants consented to participating in the research which included permission to publish the results. Participant anonymity and that of their organisations and their location was assured.

FINDINGS

Theoretical integration merged findings from the coding and analysis processes, ultimately producing a grounded theory of Australia women's career transitions. The following sections present the findings. Participant's responses are italicised in inverted commas.

Emergence of two groups of women

As mentioned, this paper and the findings presented are part of a larger research project that explored career transitions, specifically, the transitions to higher education and the workforce which form the pathway to many Australian women's career journeys. An unexpected finding in the research was the emergence of two distinct groups of women; ten women who transitioned to study as mature age students (Group 1) and five who transitioned straight from high school to university (Group 2). The findings in this paper are presented within the two groups, firstly to provide the comparative experience of each group, and secondly to cohesively present relevant findings from the larger project.

The Group 2 women who had transitioned from high school to university were not married at nor did they have children at the time that they transitioned. However, after gaining their undergraduate degrees, some of the women continued their higher educational journeys. The data includes reflections of the first transition to university as well as later transitions to study when they may have had partners and/or children. Figure 2 provides demographic information about the participants and includes their pseudonyms, age bracket, general field of work, whether they were married and/or had children while studying and their occupational field and education level.

[Insert Figure 2 about here](#)

The study included women from New South Wales, Victoria and Queensland. For confidentiality purposes, participants are not identified within their state affiliation, the number of children is not recorded, and neither is the age of the women which instead is presented between the standard descriptive of 30-34, 35-39 and so forth. The participants in both groups had differing care responsibilities. Merging the two groups to maintain anonymity, four of the women cared for aged parents, one cared for a family member with a disability, two are Indigenous Australians, four manage chronic health conditions and four shared that they have suffered the impact of domestic violence.

Factors associated with time deprivation

Most Group 1 women shared that they have to '*organise*' their time to fit in all their roles and responsibilities. Their 'to do' lists become overloaded as they organise their study, work and care responsibilities. The women '*organise*' their time because they have little support, and often inadequate finances, and many felt they had few choices. Most of the Group 1 women's partners did not help with household or care responsibilities as the women followed their educational and work

goals. Group 1 women's partners' did not want them to change. Incredibly, some of the Group 1 women juggled study, work, care, domestic responsibilities, and for three of the participants, a husband/wife business partnership, shouldering an up to fivefold burden of time (Daniels, Radel & Hillman, 2017). The Group 2 women managed their time. Although their 'to do' list expanded, for example, when they were studying, supportive family members and partners took on extra tasks to help with the women's work loads. Group 2 women's 'to do' lists had many strikes through their various domestic and care duties to free up their time. Nonetheless, both groups of women experienced a reduction in their leisure time, with some having little time at all for leisure activities.

Factors associated with work/life balance and sustainable work

The Group 1 women in the study (those who had transitioned to university as mature age students), felt that *'flexible'* workplaces, supportive managers and supportive families are required to realise work/life balance. However, Group 1 women's collective experiences revealed that inflexible workplaces, unsupportive managers, domestic conflict and lack of access to quality, affordable, accessible childcare hindered work/life balance. Group 1 women reported that work/life balance *'is a myth'*; *'is a balancing act'*; *'is tricky'* and that *'there isn't any real balance'*.

Conversely, most of the Group 2 women (those who transitioned to university from high school) did not generally experience excessive work/life conflict. They attributed this to *'supportive'* workplaces, *'supportive'* husbands and *'supportive'* families. The Group 2 women set *'goals'* and *'prioritise[d]'*. They acknowledged that they were not able to *'do it all'*, that trying to be *'Superwoman'* was pointless because *'something has to give'*. One woman explained that you cannot *'keep all the balls in the air'* because the juggle becomes unmanageable. The Group 2 women accepted that attaining work/life balance was challenging. One participant shared that work/life balance is *'hard'* and *'a constant juggle'* because it is superimposed with feeling *'guilty'* at home and *'guilty'* at work as the juggle of multiple roles and responsibilities including childcare, work and home duties, compete for attention. This participant felt that the lack of work/life balance for women was *'a hangover from our past patriarchal society; we haven't quite caught up with women's place in society today'*.

Having *'a supportive family'* was voiced by both groups of women as beneficial to work/life balance. The Group 1 women recognised *'supportive family'* as being beneficial to work life balance, however this was generally not their experience. University support networks proved crucial for the Group 1 women who were not supported by their families. Moreover, many of the Group 1 participants, especially those who carried four or five burdens of time, experienced changed and broken relationships and stress that negatively impacted their health. Conversely, for Group 2, having a *'supportive family'* was their lived experience, which they recognised as beneficial to their successful navigation of career transitions.

Many of the Group 1 women experienced stress in the workplace through the inflexibility of their managers. For the Group 1 women, *'inflexible'* managers and workplaces magnified the impact of work/life conflict. On the other hand, Group 2 women explained that *'supportive'* workplaces helped alleviate work/life conflict. Nevertheless, both groups felt that work/life balance for women ranged from *'a constant juggle'* to *'a myth'*.

DISCUSSION

The constructivist grounded theory analysis processes employed in the project provided insight into the women's perspectives (Charmaz, 2000; 2011) about the workplace, work/life balance and their experience of time pressures. The differing experiences of Group 1 and Group 2 women revealed that time is managed differently by each group, that work/life balance is a *'myth'* and that support from families, managers and appropriate policies and practices facilitates sustainable work ability.

Leveraging time reduces women's time pressures

The time pressures experienced by the two groups of women increased with the more roles and responsibilities they shouldered. The potential busyness of both groups of women was evidenced by the up to five burdens of time listed as studies, care responsibilities, home duties, business partnerships and paid work. Group 1 had to *'organise'* their time as they juggled multiple roles and responsibilities, trying to fit everything in. Group 2 *'managed'* their time through delegating tasks and accepting offers of assistance from family and partners. The more time and financial deprivations experienced by the women, the greater was their need for increased support.

Successful workforce participation for Australian women requires appropriate support to leverage time. Figure 3 illustrates the concept of successful workplace participation and sustainable work ability for women where ‘managing’ and ‘*organis[ing]*’ time is transformed to the leveraging of time.

Insert Figure 3 about here

Leveraging time facilitates women’s sustainable work ability, achieved through appropriate social support systems, flexible workplaces, and applicable policies and work/life balance practices. In Australia, women’s successful management of time is not only dependent on their choices, it is also affected by the level of support available within families and communities, government and workplace policies and practices as well as social attitudes (HREOC, 2007). Appropriate, supportive university and workplace policies, supportive families, partners and managers, and social, cultural and structural changes and work/life balance predicate women’s successful navigation of career transitions and sustainable work ability.

Work/life balance influences women’s sustainable work ability

Flexible workplaces and work/life balance were the call of the women in this study as they navigated career transitions, as was the desire for considerate employers, managers and workplace policies that deliver equity and support. While flexible workplace policies have a bearing on organisational culture, effective work/life balance policies can potentially appeal to, and attract, valuable, motivated employees, providing organisations with competitive advantage into the future (De Cieri et al., 2005). Organisations that lack effective work/life balance strategies can negatively impact their employees innovation and creativity, whereas pre-emptive work/life balance strategies, enacted by senior managers and carried throughout the staff portfolio, are the key to staff retention and satisfaction (Robbins et al. 2008). Furthermore, effective social support, which includes positive relations with workplace colleagues and managers, has been found to reduce the negative impact of stress (Robbins et al. 2008). Unfortunately, work/life balance for many of the women in the research project was a ‘*myth*’; it was non-existent in their lived experience, resulting in stressful lifestyles for many of the participants.

Sustainable work requires flexible workplaces and effective work/life balance practices

For the women in this study, work/life balance, flexible workplaces and the capacity to leverage time influenced their ability to attain sustainable work processes. The findings of the study add to the literature that sustainable work for women requires effective work/life balance practices, and that longer working hours, inflexible workplaces and the merged line between work and personal life negatively impacts many women's future lives as they juggle multiple roles and responsibilities (Bishop, 2002; Daniels, Radel & Hillman, 2017; Elloy & Smith, 2003; Fereday & Oster, 2010; HREOC, 2005; Pocock, 2005; Sayer et al., 2009). Moreover, the findings of the study indicate that not much has changed for Australian women in the workplace. The discussion around sustainable work for Australian women needs to include the development of appropriate social and political policies and practices to initiate changes that address identified workplace and social deficits inhibiting women's workplace participation.

Model of Australian women's sustainable work ability

The iterative processes of coding and analysis of the women's voices revealed the essence of the women's words, ultimately providing the foundations of the grounded theory model illustrated in Figure 4, Australian women's sustainable work ability. The model depicted in Figure 4 illustrates the relationship between the busyness of the women and the potential burdens of time they carry. For those who assumed four or five of the burdens of time identified in Figure 4 as studies, unpaid care, home duties, business partnerships and paid work, their health was impacted by stress. Notwithstanding, attaining a university degree, developing a career pathway and transitioning to the workforce assured future security. Leisure time was not included in the model depicted in Figure 4. For many of the women, leisure time was put aside during periods of study and other activities causing time pressures.

[Insert Figure 4 about here](#)

The research found that supportive managers, work/life balance, appropriate policies and social, cultural and structural change would deliver the support required to navigate career transitions for Australian women, ultimately delivering a pathway to sustainable work. The findings indicate that Australia's social and political systems require change where equity could then be commonplace. Only then can sustainable work for many Australian women can be realised.

CONCLUSION

The analytic and interpretive power of constructivist grounded theory and the methodological control over the research processes delivered a multifaceted perspective of the data (Charmaz 2000). Coding, analysis and interpretation of the data revealed factors that influence women's career transitions. Theoretical integration of the data produced a constructivist grounded theory model illustrating the multiple, complex spaces Australian women experience and navigate in their personal and work lives. The women's social location, marital status, care responsibilities, time commitments, support systems and social and workplace policies and practices impact their ability to successfully participate in the workforce over the long term.

The capacity for Australian women to achieve sustainable work over the life course is influenced by their ability to leverage time, attained through appropriate social support systems, flexible workplaces, effective work/life balance practices and applicable policies and practices. Leveraging time for sustainable work requires appropriate social and political legislation to initiate changes in workplace policies and practices to address identified workplace and social deficits that inhibit women's workplace participation.

While the findings of this study are context and situation specific (Collis & Hussey 2009), limitations can be considered the small number of participants. Future study could involve inter-continental comparisons (between Australia and New Zealand for example) of how women navigate and experience career transitions, the likelihood of sustainable work ability.

The results of this study suggest that appropriate changes to Australia's political and social policies and practices would benefit Australian women's sustainable work ability. The implications of the findings from this study indicate systemic change is required; changes that bring about equality as a matter-of-course.

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FIGURES

Figure 1: Categories of Career Transitions

<p>INTER-ROLE TRANSITIONS <i>New and different role commences</i></p>	<p>INTRA-ROLE TRANSITIONS <i>New and different orientation to an old role</i></p>
<ol style="list-style-type: none"> 1. Entry/Re-entry: entering/re-entering the labour market indicates an entry transition; there is a change of roles e.g. a university student transitioning to work or a woman returning to work after a break for child care responsibilities. Entry/re-entry to higher education to develop or further career opportunities can be included in this list. 2. Intra-company: individuals take on a different role within the same organisation. 3. Inter-company: individuals transfer from one organisation to another 4. Inter-professional: individuals change professions e.g. from dentist to lawyer. 5. Exit: individuals retire, are made redundant, experience involuntary unemployment or take a leave of absence. 	<ol style="list-style-type: none"> 1. Intra-role Adjustment: Individual’s adjustment to a role in response to experiences over time; the transition is an internal change in the individual’s orientation to the role. 2. Extra-role Adjustment: affected by the potential interaction and interdependence of an individual’s multiple life roles, (e.g. birth of a child), leads to an adjustment in orientation to another role e.g. work role. These role changes reflect differences in the relative importance of one role in relation to other roles. 3. Role/Career-stage Transition: Different issues, personal needs and organisational opportunities are associated with different career stages where roles, responsibilities and tasks may change. 4. Life-stage Transition: Relates to passage through normal stages in human development. Similar to models of career stages, different concerns prevail at different stages; these concerns indirectly guide individual’s orientation to their life-space and tasks.

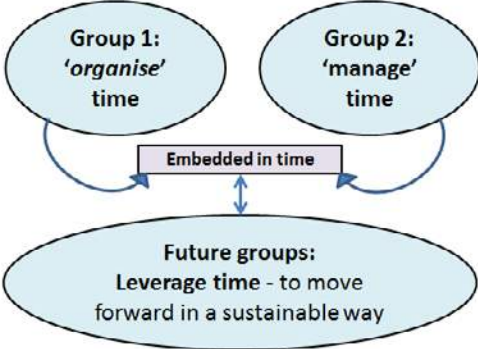
Source: In Daniels, Radel & Hillman, 2017, p. 2 adapted from Louis 1980, pp. 332-335

Figure 2: Participant's demographics, occupation and educational level

N	Pseudonym	Age	Occupation	Education level	Married	Children
GROUP 1 – MATURE AGE (transition to study)						
1.	Marion	50-54	Health Education	PhD	Yes	Yes
2.	Marlene	50-54	Health Education	PhD	Yes	Yes
3.	Mary	40-44	HE Teacher	PhD	No	No
4.	Meghan	50-54	RHD Student	RHD student	Yes	Yes
5.	Maria	35-39	Professional Service	Undergrad	Yes	No
6.	Monica	35-39	Professional Service	Undergrad	Yes	Yes
7.	Margaret	50-54	Counsellor	Masters	Yes	Yes
8.	Melisa	55-59	RHD student	RHD student	Yes	Yes
9.	Matilda	60-64	Research Related	Undergrad	Yes	Yes
10.	Millicent	50-54	Admin/Counsellor	Incomplete	Yes	Yes
GROUP 2 – HIGH SCHOOL (transition to study)						
1.	Haley	45-49	Professional Assistant	Masters	Yes	Yes
2.	Hilary	45-49	HE Teacher	PhD	Yes	No
3.	Hanna	30-34	Research Related	PhD	Yes	Yes
4.	Heather	55-59	Education	Undergrad & diplomas	No	No
5.	Helen	45-49	Education	Masters	Yes	No

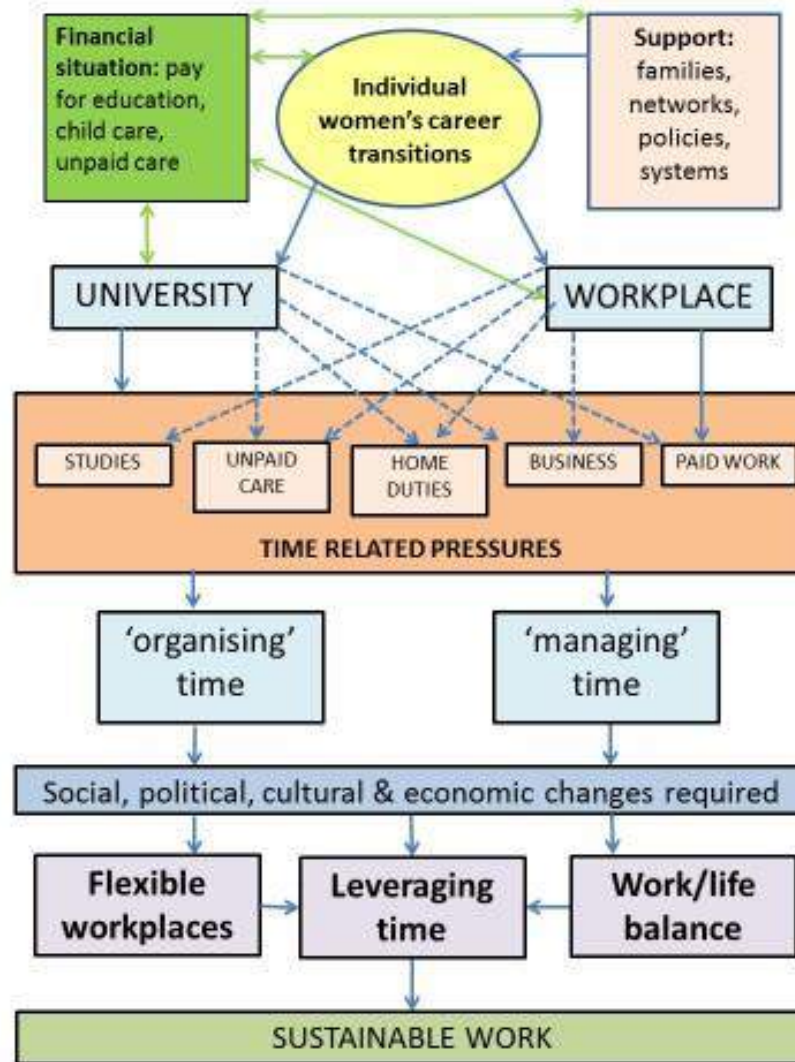
Source: Developed from the research

Figure 3: Leveraging time for sustainable work ability and work/life balance



Source: Developed by the research

Figure 4: Australian women's sustainable work ability



Source: Developed from the research

07. Leadership and Governance
Refereed Interactive Paper

**Sustaining the Nursing Workforce through Transformational Leadership: A
Tasmanian Perspective**

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Sustaining the Nursing Workforce through Transformational Leadership: A Tasmanian Perspective

ABSTRACT:

Objective: To identify strengths and opportunities for transformational leadership (TL) development in the Tasmanian Health Service (THS) nurse and midwife managers (NMMs). Background: Healthcare organisations face a dwindling nursing workforce by high turnover and ageing. TL is a developmental relationship-focused leadership style and offers ways to surmount such challenges based on positive empirical outcomes. Methods: TL was measured using the Multifactor Leadership Questionnaire (MLQ-6S). Responses were analysed with the one-way ANOVA to identify any statistically significant associations. Overall MLQ scores from this study were compared with previous studies undertaken in similar contexts. Result: THS NMMs reported TL as their primary leadership style. Statistical significance was found between specific TL elements and NMMs' education, age and gender. The comparison of MLQ scores revealed strengths and development opportunities in the NMMs. Conclusion: Health organisations may benefit from the practise of TL, informed by empirical measurements of TL using the MLQ, to overcome nursing workforce shortage.

Keywords: transformational leadership; nursing workforce; organisational resilience

Nursing shortage in Australia is a serious concern and is projected to deepen in the near future (Health Workforce Australia, 2014). Globally, an increasing shortage appears to persist (International Council of Nurses, 2013). A shrinking nursing workforce appears to be further challenged by high turnover. A study showed that nursing turnover in Australia is approximately 15% per annum, similar to other industrialised countries such as New Zealand, Canada and USA (Roche, Duffield, Homer, Buchan & Dimitrelis, 2015). A survey on Australian nurses revealed that 15% of respondents intended to leave their profession entirely in the next 12 months (Holland, Allen & Cooper, 2012). This high number could further impede nursing labour force.

High nursing turnover in Australia seems to be caused largely by job dissatisfaction. The survey by Holland et al. (2012) reported that less than half of participants (40%) responded that they felt content with their work environment and job characteristics. Another study identified key factors of nurses' job dissatisfaction, including high job stress caused by lack of managerial support, empowerment and recognition, which was compounded by increasing workload due to escalating patient health complexity (Dawson, Stasa, Roche, Homer & Duffield, 2014). Early career nurses,

those aged under 35 years in particular, appear to be more susceptible to such stress as the group was the second largest to those who exited nursing workforce with retirement (Health Workforce Australia, 2012).

Retirement is another key factor to increasing nurse turnover. Baby boomers in Australia's nursing workforce are reaching, or have reached, their age of retirement. This cohort significantly outnumbers the entrants to the profession (Graham & Duffield, 2010). An international review of nursing workforce policy in the Western countries, including Australia, the United Kingdom and USA, highlighted that despite the variances across the countries an ageing workforce was the major factor in accelerating a nurse shortage (Buchan, Twigg, Dussault, Duffield & Stone, 2015).

In 2015, the average age of Australian nurses and midwives in the workforce was 44.4 years, and those aged 50 years and over accounted for 39% (Australian Institute of Health and Welfare, 2016b). This national figure is not dissimilar to that of USA where, in the same period, nurses aged 50 years and over comprised half of the workforce (National Council of State Boards of Nursing, n.d.). Locally, workforce sustainability data indicated that Tasmania, an island state of Australia, had the largest group of nurses aged 50 years and over in the nation (Productivity Commission, 2017). Nationally and locally, a significant portion of the nursing workforce appears to exit the workforce in the immediate future by retirement.

Ageing nursing workforce reflects the demographic change and its complexity. A study revealed that in Australia population ageing is rapidly progressing with a higher life expectancy among developed countries (Buchan et al., 2015). An ageing population challenges healthcare system with increasingly complex and chronic health service needs (Health Workforce Australia, 2014). In fact, the service cost is estimated to be approximately \$155 billion, higher than other advanced countries (Australian Institute of Health and Welfare, 2016a). In Tasmania, a larger population, than other jurisdictions, with older age, disability and chronic health complexity is driving health demands (Tasmanian Department of Health and Human Services, 2013). The simultaneous aging of nurses and nursing consumers is projected to impact on healthcare delivery.

In particular, a nurse shortage combined with increasing care demands can place significant clinical and fiscal burdens on healthcare organisations. A high nurse turnover has shown negative

impacts on patient care, associated with hospital-acquired infections, clinical errors and consumer dissatisfaction (Dawson et al., 2014). Moreover, although turnover rate in Australia was similar to those in New Zealand, Canada and USA, turnover cost was found to be twice as high, estimated approximately at US\$50,000 per full-time equivalent (Roche et al., 2015). The cost was mostly driven by temporary replacement and termination, which comprised 68% of all turnover costs (Roche et al., 2015).

Therefore, to effectively and efficiently fulfil service objectives, it is essential for healthcare providers to create and maintain a sustainable working environment. Sustainable work is referred to as a work environment in which workers are supported to engage in their profession across the extended lifespan (Eurofound, 2018). The Tasmanian Health Service (THS) is a major public health service provider in the state of Tasmania. As a government healthcare organisation, the THS holds a legal and public responsibility to provide a quality health care service within pre-determined resources (Tasmanian Department of Health and Human Services, 2016; n.d.). Therefore, there is a compelling case for the THS to reinforce measures to challenge the mounting nurse shortage and lower health outcomes in order to successfully meet public duties.

Transformational leadership (TL) offers ways to address such challenges. TL has evolved with an emphasis on a leader's ability to build a developmental relationship with followers and mobilise their motivations towards an improved future (Bass, 1985; Bass & Avolio, 1994). This approach has been extensively studied across industries. Measured benefits include heightened staff effort, effectiveness and satisfaction (Bass & Avolio, 2011). In healthcare, TL is evaluated as one of the most influential leadership styles to enhance organisational outcomes in workforce and patient outcomes (West et al., 2015). A growing body of literature in management and public administration has also identified TL as an effective leadership style, particularly in organisational change (Bish, 2015; Deschamps, Rinfret, Lagace, & Prive, 2016; Van der Voet, 2016).

However, TL in the Tasmanian nursing context has not been fully explored. Identifying strengths and gaps in TL could lead to identifying opportunities for Tasmanian healthcare organisations, including the THS, to improve nursing workforce outcomes. Below, TL is examined from a theoretical perspective, followed by details of a survey conducted on THS Nurse and Midwife

Managers (NMMs) to measure TL. The data from the survey was then compared to previous studies from similar contexts. A discussion on how the result could inform nursing workforce sustainability follows.

FULL RANGE LEADERSHIP

TL was originally conceptualised by Burns (1978) in his TL-Transactional Leadership (TAL) framework. This was later expanded by Bass and Avolio (1985; 1994) to a broader leadership model, called Full Range Leadership (FRL). Burns (1978) initially defined TL as a relationship between a leader and a follower, in which the both actors collectively strive towards a higher level of motivation and morality; whereas, in TAL, rewards or reinforcements are exchanged upon the follower’s task accomplishment or failure. On the other hand, in FRL, TL is placed within a spectrum of leadership styles where a leader exercises leadership styles including TAL and Passive/Avoidant Leadership (PAL) (Bass, 1985; Bass & Avolio, 1994). While Burns (1978) juxtaposed TL against TAL, Bass and Avolio (1994; 2011) incorporated TL at the top of a hierarchical continuum of leadership styles, where TL is built upon TAL, which in combination augments leadership outcomes beyond expectations – namely Extra effort, Effectiveness and Satisfaction.

Situated at the top of the FRL framework, Bass and Avolio’s (2011) TL consists of five components: *Idealised Influence* (Attributed and Behavioural), *Inspirational Motivation*, *Intellectual Stimulation*, *Individualised Consideration*. A transformational leader, according to Bass and Avolio (1994; 2011), builds trust beyond self-interest to achieve collective good (*Idealised Influence*); creates a shared vision and a cooperative culture to achieve it (*Inspirational Motivation*); challenges the status quo and encourages creativity to improve as an individual and a group (*Intellectual Stimulation*); and recognises differences in each individual (*Individualised Consideration*). Table 1 provides the elements of Full Range Leadership model.

Table 1: Elements of the Full Range Leadership theory

While the original concept of TAL was maintained, PAL later evolved into different forms. Bass and Avolio (2011) maintained the fundamental concept of TAL (*Contingent Reward*), which Burns (1978) called a ‘carrot and stick’ approach. However, Bass and Avolio (2011) refined

Management-By-Exception, a form of PAL elaborated by Burns (1978) as a ‘If it *ain't* broke, don't fix it’ philosophy. In Active and Passive forms, Bass and Avolio (2011) defined *Management-By-Exception* as a leadership style in which a leader reacts to task failure. The Active form of *Management-By-Exception* aims to minimise task failure by monitoring for mistakes prior to the event, whereas the Passive form maintains inaction until the event occurs (Bass & Avolio, 1994). Bass and Avolio (2011) categorised the Active form into TAL, and the Passive form into PAL. A leader who exhibits PAL – the Passive form of *Management-By-Exception* and *Laissez-Faire* – avoids decision-making or involvement and is absent in supporting their staff (Bass & Avolio, 2011).

PRACTICAL IMPACT

In practice, TL has extensively demonstrated its positive impact on staff satisfaction, psychological wellbeing and development in the nursing context. Studies on nurses in Saudi Arabia (Abualrub & Alghamdi, 2012), USA (Bormann & Abrahamson, 2014), Malaysia (Choi, Goh, Adam, & Tan, 2016) and Italy (Morsiani, Bagnasco & Sasso, 2017) showed a positive association between perceived TL from their manager with nurses’ job satisfaction. Consistently, a systematic review reported that relational leadership styles, such as TL, demonstrated superior nurse satisfaction compared to task-based leadership styles, including TAL (Cummings et al., 2010). This may have been contributed to TL’s effect on nurses’ psychological wellbeing. Nurses who recognise more TL from their manager reported less burnout caused by emotional exhaustion (Garcia-Rivera, Mendoza-Martinez & Ramirez-Baron, 2013); better job-related mental health, work motivation (Fernet, Trépanier, Austin, Gagné & Forest, 2015); and less work-life conflict (Munir, Nielsen, Garde, Albertsen & Carneiro, 2012). Moreover, nurses who identified more TL styles at work demonstrated higher learning behaviours, especially in a group setting (Carter, 2016; Raes et al., 2013).

From an organisational perspective, such impact from TL on nurses has revealed positive effects on staff retention, organisational change and culture. Based on perceived TL, higher organisational commitment (Brewer et al., 2016; Mennella, 2016) and work engagement (Hayati, Charkhabi & Naami, 2014; Manning, 2017) was observed which resulted in an improved rate of intention to stay (Abualrub & Alghamdi, 2012). Moreover, TL was reported to play a crucial role in

change implementation. Clinicians who were facilitated by TL responded more adoptively to change (Aarons, Ehrhart & Farahnak, 2014; Aarons & Sommerfeld, 2012; Von Treuer et al., 2018). The superior learning behaviours linked to TL also contributed to successful change facilitation and implementation (Raes et al., 2013). Furthermore, TL demonstrated a longer-term effect on nursing staff's change adaptiveness, compared to TAL (Holten & Brenner, 2015). Lastly, a study found a positive association between TL and nursing practice culture that strives for safety, while PAL was found to contribute to a blame culture (Merrill, 2015).

PROBLEM STATEMENT

Despite the expanding evidence in the benefits of TL style, no study has been conducted in Tasmania to capture prevalent leadership style of senior nurses and midwives. Information of current leadership status of senior THS nurses and midwives could critically inform the THS in identifying strengths and development opportunities to improve TL in THS NMMs. In turn, improved TL could potentially assist the THS to develop and/or maintain a sustainable nursing workforce.

METHODOLOGY

To identify dominant leadership style of THS NMMs, a cross-sectional survey method was adopted using a questionnaire. The survey questionnaire comprised of a validated questionnaire—the Multifactor Leadership Questionnaire (MLQ-6S) to measure TL, in conjunction with seven demographic questions to identify characteristics of the participants. Collated survey responses were analysed with the one-way ANOVA to identify any significant associations. Lastly, the overall MLQ scores of the THS was compared to those of similar contexts.

Multifactor Leadership Questionnaire Form 6S (MLQ-6S)

The MLQ-6S was adopted to measure TL (Bass & Avolio, 1992). MLQ was developed by Bass and Avolio (2011), based on extensive research across industries, including public administration and business, which informed the refinement of the MLQ in numerous forms. The validity and reliability of MLQ has been widely demonstrated (Antonakis, 2018; Tejada, Scandura, & Pillai, 2001). Bass and Avolio (2011) confirmed that all forms remain true to the FRL framework. Consistently high

Cronbach's alpha (above 0.70) in MLQ-6S (Elenkov, Judge & Wright, 2005) and the latest version (5X) (Tejeda et al., 2001) supports the reliability of the various versions of MLQ. The MLQ6S comprises 21 items which are sub-grouped under seven elements of TL. Each item asks to rate leadership style on a 0 (Not at all)-to-4 (Frequently, if not always) scale. Additionally, seven demographic questions were included, such as age, education and gender. These questions were used as independent variables, to describe characteristics of THS NMMs and to establish a relationship with leadership styles of the participants within the FRL framework (Siniscalco & Auriat, 2005). The MLQ-6S was chosen as it holds acceptable validity and reliability.

Participants

Based on a purposive sampling, THS NMMs (n=183) at four THS major hospitals, ranging from a community hospital to the tertiary referral centre in the state, were invited to participate in the survey. The invitees held a mid- to high-level managerial role within THS facilities, varying from Nurse (Unit) Managers to Executive Nursing Directors. THS NMMs were considered suitable to preliminarily capture the leadership style within the THS for this study. This is because, as middle and senior managers, they are responsible and accountable to manage and lead THS nurses and midwives.

Procedure

Identified NMMs (n=183) were sent an invitation via their work email to self-complete the MLQ-6S on a survey website, LimeSurvey. The email included survey information, a hyperlink to the online survey website and a survey information sheet as a printable attachment. The information provided purpose, context and use of survey responses and ensured the anonymous and voluntary nature of the survey. The link led invitees to an introductory page of the survey, which explained the information sought and required participants to indicate their consent, prior to commencing the survey. The survey commenced with seven demographic questions followed by the MLQ-6S. The survey was open for four weeks during January and February 2018. De-identified responses were collated and stored on LimeSurvey, with password protection.

Ethics approval

This survey was approved by the Tasmanian and Medical Human Research Ethics Committee [reference number: H0016980]. No funding was received.

Analysis

Survey responses were combined and exported to an Excel spreadsheet for statistical analysis. Firstly, scores of MLQ-6S items from each response were calculated as directed in the questionnaire. Secondly, mean scores of each leadership style were obtained. Thirdly, the mean scores in different groups were analysed using the one-way ANOVA test to identify statistical significance between groups. The statistical analysis was assisted by a data analyst from the University of Tasmania using a statistical software, *R* program (R Core Team, 2018). Lastly, to identify strengths and development opportunities of the THS in TL, a comparison of MLQ scores was conducted with previous studies available from similar contexts. (Alshammari, 2018; Hayati et al., 2014; Jordan, Werner & Venter, 2015; Von Treuer et al. 2018; Wendling, 2012). During the comparison, adjustments in measurement were required to allow a feature-for-feature comparison. For instance, some of the studies (Hayati et al., 2014; Jordan, Werner & Venter, 2015; Von Treuer et al., 2018; Wendling, 2012) used another form of the MLQ (5X). Unlike the MLQ-6S, the MLQ-5X calculates only mean scores of each item instead of summing them. To enable a feature-for-feature comparison, only the mean scores were compared. The scores were also adjusted to a 0-to-4 scale.

RESULT

A total of 78 invitees completed the survey, 86% of which were female. An ageing workforce was apparent within THS NMMs, as the largest age group was age 56-60 years (27%), followed by 51-55 years (22%). These two groups comprise half (49%) of the participants. The majority of participants were Nurse (Unit) Managers (73%). It was notable that more than eight in ten NMLs (86%) possessed a post-registration qualification up to a master's degree. Table 2 details the characteristics of the participants.

Table 2: Demographic description of THS NMLs

Overall, THS NMMs rated their leadership more towards TL, than TAL and PAL. Statistical analysis showed significant associations of TL with differences in education, age and gender. On

average, TL scored the highest (9.0) followed by TAL (7.2) and PAL (6.3). The higher scores in *Idealised Influence* (9.2) and *Individualised Consideration* (9.5) led the stronger TL, whereas scores of *Inspirational Motivation* (8.6) and *Intellectual Stimulation* (8.6) lagged. Differences in THS NMMs' education level indicated a stronger association with *Intellectual Stimulation* ($p=0.02$) in which higher education indicated higher *Intellectual Stimulation* scores, except for the Post-graduate Certificate qualification. A similar trend arose in *Individualised Consideration* with age ($p=0.03$). *Individualised Consideration* scores increased with older age, and peaked at the group aged 51-55 years, before a slight decline thereafter. Meanwhile, *Management-By-Exception* showed a strong association with gender ($p=0.04$) and a weak link to age ($p=0.06$). Female NMMs indicated higher tendency in *Management-By-Exception* than their male colleagues. The relationship between *Management-By-Exception* and age fluctuated where the youngest group, aged 31-35 years, showed the highest score followed by the lowest score by those aged 36-40. The score increased steadily towards the second highest score by NMMs aged 56-60, followed by a considerable drop by the oldest group. Details of the result from the statistical analysis are shown in Table 3.

Table 3 The one-way ANOVA analysis of THS NMLs' MLQ scores

Higher TL from THS NMMs however, marked medium when compared with previous studies. THS NMMs' overall adjusted TL score was higher (3.0) than nurses at an Iranian government hospital (2.4) and Intensive Care Unit nurses in South Africa (2.9); however, the score fell short of those in the Health Ministry Nurse Directors in Saudi Arabia (3.1), managerial staff at an aged care facility in Australia, (3.2) and Nurse Managers of the Respiratory Units in USA (3.4). The comparison results are shown at Table 4.

Table 4: Comparison of the THS NMLs MLQ scores with previous study result

DISCUSSION

The survey result demonstrated that, firstly, the majority of THS NMMs identify themselves more towards a transformational leader; secondly, THS NMMs' education, age and gender difference indicated statistically significant associations of TL components; and thirdly, the comparison of the THS NMMs' MLQ scores revealed development opportunities. Based on the findings, a number of

measures could be considered to develop TL within the THS, including education, proactive workforce design, with an emphasis on the ageing workforce, and ensuring basic TAL leadership competency.

THS NMMs reported TL as their primary leadership style. This can be positively interpreted as the evidence demonstrated that TL benefits health organisations by strengthening nursing workforce. Overall, a higher TL score, than TAL and PAL, was led by high scores in *Idealised Influence* and *Individualised Consideration*. However, lower scores in *Inspirational Motivation* and *Intellectual Stimulation* left opportunities for improvement.

The identified strengths and development opportunities could be leveraged to increase TL. The highest statistical significance ($p=0.02$) was found in the differences between the NMMs' education and *Intellectual Stimulation*, in which the scores generally increased with higher education. This suggests that supporting NMMs to further their formal education may benefit them to develop *Intellectual Stimulation*. Meanwhile, NMMs' age indicated a strong statistical significance ($p=0.03$) in score differences of *Individualised Consideration*. Overall, older NMMs reported superior *Individualised Consideration*. This could mean that older NMMs may have their unique value in TL. In conjunction with the fact that the youngest NMMs, aged 31-35 years, scored the highest in *Management-By-Exception* score, a potential in leadership values from older staff is further supported, although statistical significance was weak ($p=0.06$).

The age-related result in TL provides the THS with an opportunity to address the ageing workforce in NMM. Older NMMs, aged 51 and over, comprised 59% in this survey. This figure is significantly higher than the national average of 39% (aged 50 and over) in the general nursing workforce. The progressed ageing in THS NMMs suggests that a large-scale turnover led by retirement will be more significant and immediate. Therefore, it would be beneficial for the THS to capture and engender transferrable TL values, such as *Individualised Consideration* skills, from older to younger staff. A study reported that mentoring and coaching, which are common *Individualised Consideration* methods, were effective in adopting new practice among mental health care workers (Aarons & Sommerfeld, 2012). Moreover, a Canadian study presented that a differentiated job design is essential to retain the older workforce and may delay retirement (Kwok, Bates & Ng, 2016). A

proactive organisational review to utilise the older workforce, as preceptors for instance, may help to prevent a retirement shock.

Female THS NMMs reported higher *Management-By-Exception*, than their male counterparts, with strong statistical significance ($p=0.04$). The evidence in gender differences in leadership styles is inconsistent. A meta-analysis revealed that female leaders were more likely to exhibit TL and TAL, whereas male leaders primarily manifested TAL and PAL styles (Eagly, Johannesen-Schmidt & Van Engen, 2003). On the other hand, a German study indicated that some of the TL elements (*Idealised Influence* and *Inspirational Motivation*) and PAL were gender neutral although TL was typically found in females (Stempel, Rigotti & Mohr, 2015). Gender differences in TL within the THS may need a further investigation.

The comparison of TAL scores in previous studies conducted in similar contexts indicated that a competency in basic leadership skills could springboard leaders towards improved TL. Bass and Avolio (2011) highlight that, although TL demonstrates more potent outcomes, it does not replace the fundamental role of TAL. In FRL, a transactional leader actively sets and clarifies performance standards, and proactively monitors and corrects task failure (Bass & Avolio, 1994). THS NMMs showed the lowest TAL scores compared to the other studies, which consistently showed higher TL scores. It is unclear whether there is a significant proportional relationship between TAL and TL. However, ensuring a basic leadership framework may benefit and facilitate the development of TL.

It is notable that the score comparison provided a benchmark upon which leadership can be evaluated and developed. The comparison offered the THS with potential short- and longer-term benchmarks of TL, or TAL. Considering cultural and/or operational similarity, the THS may wish to work towards a TL comparable to those of higher-income countries, such as USA.

Limitation

Although the best effort was attempted, this survey holds a number of limitations. Firstly, the quantitative method, underpinned by a positivist view, limits potential opportunities to further explore contextual factors (Liamputtong, 2013) within the THS which could have influenced leadership performance of NMMs. Secondly, self-administration of the questionnaire may have induced a

response bias, which often occurs in self-reporting (Rosenman, Tennekoon & Hill, 2011). Thirdly, the relationship between *Management-By-Exception* and the combined demographic variables (i.e. gender and age) could not be established due to the small sample size. Fourthly, the statistical significance discussed above may not be translated into practice (Webb & Bain, 2011). Lastly, this survey does not confirm the hierarchical structure of the FRL theory as no organisational outcomes, such as nurse satisfaction and intention to stay, were measured.

Future research

This research could inform further studies. Firstly, studies using a different methodology, such as qualitative approach, could be beneficial in identifying unique leadership development enablers and barriers in the local context within the THS. Secondly, nursing outcomes, including staff satisfaction, could be incorporated to determine the impact of TL as outlined in the theory. Thirdly, conducting regular MLQ surveys could inform further development needs towards enhanced TL within the THS. Lastly, the survey could be extended to other professional in different contexts to address TL from an organisational perspective.

CONCLUSION

This study has provided a unique opportunity to identify current status of TL among THS NMMs, as well as mapping specific strengths and development opportunities for TL improvement within the THS context. Using the MLQ-6S, a verified and reliable survey instrument to measure TL, this study empirically demonstrated that THS NMMs identified themselves more towards transformational leaders. Based on the findings combined with current literature, this study also provided a direction which the THS may consider prioritising in order to improve TL, including educational support, flexible job arrangement for older workforce and ensuring basic leadership competencies. The comparison of the MLQ scores across similar contexts identified potential benchmarks in TL to guide the THS with leadership development. Ongoing evaluation of TL utilising the MLQ combined with nursing outcomes may further support the internalisation of TL across the THS to ensure sustainable nursing workforce. As mounting evidence of TL in improving workforce sustainability suggests, the

THS may be able to effectively navigate escalating demographic and labour force challenges by incorporating TL.

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TABLES AND FIGURES

Table 1: Elements of the Full Range Leadership theory

Transformational Leadership (TL)	Idealised Inspiration (Attributed and Behavioural)
	Inspirational Motivation
	Intellectual Stimulation
	Individualised Consideration
Transactional Leadership (TAL)	Contingent Reward
	Management-By-Exception, Active
Passive/Avoidant Behaviours (PAL)	Management-By-Exception, Passive
	Laissez-Faire

Table 2: Demographic description of THS NMLs (n=78)

Category	Description	Response (n*) (%)
Gender	Female	67 (86)
	Male	11 (14)
	Other	0
Age	31 - 35 years	4 (5)
	36 - 40 years	7 (9)
	41 - 45 years	6 (7)
	46 -50 years	15 (19)
	51 -55 years	17 (22)
	56 - 60 years	21 (27)
	61 or older	8 (10)
Region	North	27 (35)
	North West	19 (24)
	South	32 (41)
Role	Nurse (Unit) Manager	57 (73)
	Assistant Director of Nursing	12 (15)
	(Co-) Director or Executive Director of Nursing	9 (12)
	Hospital/training Certificate	6 (8)
Highest Education	Bachelor's Degree	11 (14)
	Post-Graduate Certificate	12 (15)
	Post-Graduate Diploma	22 (28)
	Master's Degree	27 (35)
	Less than 1 year	1 (1)
Work length with the THS	1 - 5 years	7 (9)
	6 -10 years	12 (15)
	11 -15 years	8 (10)
	16 -20 years	8 (10)
	21 years plus	42 (54)
	Community/Primary care	4 (5)
Work setting	Hospital/Acute care	66 (85)
	Non-hospital inpatient facility (sub-acute care)	3 (4)
	Other	5 (6)

Table 3 The one-way ANOVA analysis of THS NMLs' MLQ scores (n=78)

MLQ Factors		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Corresponding element in the Full Range Leadership model		Transformational Leadership				Transactional Leadership		Passive/avoidant leadership
MLQ Score - mean (SD)		9.2 (1.4)	8.6 (1.4)	8.6 (1.7)	9.5 (1.5)	7.2 (2.2)	8.4 (1.6)	4.1 (2.1)
Demographic variable		Idealised Influence (mean (SD*))	Inspirational Motivation (mean (SD))	Intellectual Stimulation (mean (SD))	Individualised Consideration (mean (SD))	Contingent Reward (mean (SD))	Management-By-Exception (mean (SD))	Laissez-Faire (mean (SD))
Gender	Female	9.2 (1.4)	8.6 (1.5)	8.6 (1.7)	9.5 (1.5)	7.2 (2.3)	8.6 (1.5)	4.3 (2.1)
	Male	9.1 (1.6)	8.8 (1.1)	8.7 (1.4)	9.1 (1.3)	7.0 (2.0)	7.5 (2.1)	3.1 (1.8)
p-value [^]		0.79	0.66	0.88	0.37	0.74	0.04**	0.07
Age	31 - 35 years	9.5 (0.6)	8.8 (1.3)	9.3 (2.5)	8.5 (1.3)	5.8 (1.3)	9.3 (1.7)	4.5 (2.1)
	36 - 40 years	9.0 (1.5)	9.4 (1.0)	8.9 (1.6)	8.6 (1.5)	7.7 (1.9)	7.1 (0.9)	3.6 (2.2)
	41 - 45 years	10.0 (1.4)	7.8 (1.6)	7.5 (0.8)	8.8 (1.4)	6.7 (2.1)	7.7 (1.0)	2.8 (2.4)
	46 -50 years	9.2 (1.5)	8.9 (1.4)	8.8 (1.7)	8.9 (1.2)	7.1 (2.6)	8.3 (1.2)	4.1 (1.8)
	51 -55 years	9.5 (1.5)	9.1 (1.4)	9.2 (1.4)	10.2 (1.7)	7.9 (2.3)	8.4 (2.2)	4.2 (2.3)
	56 - 60 years	8.8 (1.3)	8.2 (1.5)	8.4 (1.7)	9.8 (1.2)	7.1 (1.9)	9.1 (1.5)	4.8 (2.0)
	61 or older	9.0 (1.2)	8.0 (1.1)	8.1 (2.1)	9.8 (1.2)	7.0 (2.8)	7.9 (1.6)	3.6 (1.6)
p-value [^]		0.48	0.13	0.34	0.03**	0.66	0.06	0.46
Region	North	9.4 (1.4)	8.3 (1.1)	8.6 (1.7)	9.3 (1.5)	6.8 (2.3)	8.3 (1.7)	3.6 (2.1)
	North West	9.3 (1.2)	8.5 (1.7)	8.5 (1.4)	9.2 (1.4)	7.6 (2.1)	8.7 (1.6)	4.7 (1.8)
	South	8.9 (1.5)	8.9 (1.5)	8.8 (1.8)	9.7 (1.4)	7.3 (2.2)	8.3 (1.6)	4.3 (2.1)
p-value [^]		0.37	0.22	0.77	0.52	0.49	0.59	0.19
Role	Nurse Manager with no clinical responsibilities	9.5 (1.1)	8.0 (1.1)	8.0 (1.3)	8.8 (1.3)	6.8 (1.9)	8.3 (1.5)	3.9 (1.2)
	Nurse (Unit) Manager	9.1 (1.4)	8.7 (1.5)	8.7 (1.7)	9.5 (1.4)	7.1 (2.3)	8.5 (1.6)	4.2 (2.2)
	Assistant Director of Nursing	9.3 (1.8)	9.3 (1.2)	9.3 (1.5)	9.5 (2.1)	7.4 (2.4)	8.2 (2.2)	3.8 (2.5)
	(Co) Director or Executive Director of Nursing	9.0 (0.7)	8.0 (1.6)	8.5 (1.9)	10.0 (1.0)	7.8 (2.1)	8.4 (1.3)	4.2 (1.2)
p-value [^]		0.83	0.08	0.38	0.35	0.78	0.95	0.92

(Continued) 19

Education	Hospital/training Certificate	8.8 (1.2)	7.2 (1.3)	8.0 (1.41)	9.2 (1.2)	7.2 (1.8)	9.3 (1.6)	4.7 (0.8)
	Bachelor's Degree	9.1 (0.9)	8.9 (0.9)	8.6 (1.21)	9.0 (1.5)	7.3 (2.3)	8.2 (1.0)	4.6 (1.5)
	Post-graduate Certificate	9.0 (1.3)	8.4 (1.2)	7.4 (1.44)	9.5 (1.3)	6.6 (2.4)	8.3 (1.5)	4.3 (1.6)
	Post-graduate Diploma	9.6 (1.4)	8.7 (1.6)	8.7 (1.64)	9.7 (1.6)	7.4 (2.3)	8.6 (1.75)	4.3 (2.4)
	Master's Degree	9.1 (1.6)	8.9 (1.5)	9.3 (1.73)	9.5 (1.5)	7.3 (2.2)	8.2 (1.9)	3.6 (2.3)
p-value [^]		0.70	0.08	0.02**	0.73	0.89	0.51	0.62
Work length with the THS	Less than 1 year	9.0 (0.0)	10.0 (0.0)	10.0 (0.0)	12.0 (0.0)	4.0 (0.0)	6.0 (0.0)	2.0 (0.0)
	1 - 5 years	9.1 (1.6)	8.9 (2.0)	8.4 (1.72)	9.3 (1.8)	8.1 (2.6)	7.9 (2.5)	3.4 (2.0)
	11 -15 years	9.1 (1.3)	7.8 (1.5)	7.8 (1.49)	9.0 (1.1)	6.8 (1.8)	8.4 (1.6)	3.5 (2.5)
	16 -20 years	9.4 (0.5)	8.6 (1.4)	8.1 (1.36)	9.5 (2.1)	7.6 (2.5)	8.2 (1.2)	4.6 (1.3)
	21 years plus	9.3 (1.45)	8.6 (1.4)	8.8 (1.69)	9.8 (1.2)	7.2 (2.4)	8.7 (1.6)	4.4 (2.2)
	6 -10 years	8.7 (1.5)	9.1 (0.9)	9.2 (1.80)	8.5 (1.51)	7.0 (1.5)	8.1 (1.5)	3.7 (1.8)
p-value [^]		0.80	0.36	0.33	0.07	0.75	0.67	0.46
Work setting	Community/Primary care	9.2 (0.5)	9.0 (1.8)	9.3 (2.06)	9.0 (2.2)	6.3 (3.00)	9.0 (1.4)	5.5 (2.7)
	Hospital/Acute care	9.2 (1.4)	8.5 (1.4)	8.6 (1.65)	9.6 (1.3)	7.3 (2.1)	8.3 (1.6)	4.1 (2.0)
	Non-hospital inpatient	9.3 (0.6)	9.0 (0.0)	8.7 (2.89)	9.0 (1.7)	7.0 (1.0)	8.7 (2.3)	3.7 (2.9)
	Other	9.0 (2.1)	9.8 (1.3)	9.2 (1.10)	9.0 (2.7)	7.4 (3.4)	9.0 (1.6)	4.0 (2.4)
p-value [^]		0.98	0.24	0.76	0.71	0.85	0.68	0.58

*SD: standard deviation; ^p-value is significant at 0.05; **consider a significant association

Table 4: Comparison of the THS NMLs MLQ scores with previous study results

Studies	THS	Von Treuer, Karantzas, McCabe, Mellor, Konis, Davison, O'Connor (2018)	Wendling (2012)	Jordan, Werner, Venter (2015)	Alshammari (2018)	Hayati, Charkhabi, Naami (2014)
Context	Acute care, Australia	Residential aged care, Australia	Magnet® hospitals, USA	Intensive Care Unit, South Africa	Ministry of Health, Saudi Arabia	Government hospital, Iran
Participants (n=)	NMLs (78)	Nursing, managerial staff (255)	Respiratory Ward Nurse Managers (56)	Nursing staff (130)	Nursing Directors (22)	Nursing staff (240)
Transformational Leadership [^]	3.0**	3.2	3.4	2.9*	3.1	2.4
Transactional Leadership [^]	2.4**	2.9	2.7		3.3	
Passive/Avoidant Leadership [^]	2.1**				2.4	

*score adjusted to enable comparison between the 1-5 Likert Scale with the 0-4 Scale

**scores averaged by dividing the sum of averages (the MLQ scores) by 3 to enable comparison between the MLQ Form 5X and 6S

[^] average score

Stream 10: Organisational Behavior
Competitive Session

**“You need to sell the university”: International-branch campus lecturers’
orientations toward supporting marketing activities**

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Stream 10: Organisational Behavior
Competitive Session

“You need to sell the university”: International-branch campus lecturers’ orientations toward supporting marketing activities

ABSTRACT: In recent decades several Australian universities have opened international branch campuses (IBCs) overseas (C-BERT, 2017). IBCs export international education to students in their home countries, offering an attractive alternative to studying abroad (Wilkins & Huisman, 2011).

IBCs depend upon student enrollments for viability, making effective marketing crucial (Lipka, 2012). IBC lecturers are often engaged to support marketing efforts. However, lecturers’ perspectives on their marketing involvement is largely unknown.

This paper presents extracts from interviews with six IBC lecturers about their roles in IBC marketing activities. Our research found that IBC lecturers are generally willing to support IBC marketing activities, but may be more comfortable doing so if they can retain their academic identity and limit their “selling” behavior during this process.

Keywords: Attitudes, motivation, perception, socialisation, values.

BACKGROUND

Higher Education’s Global Consumerist Turn

Higher education scholars often point to a 20th-century “academic revolution” that sparked dramatic changes in the sector (Valimma, 2014, p. 45). The decades following World War II introduced the *massification* of universities, as broad populations began to enjoy this opportunity that had previously been reserved for elites (Altbach et al., 2017, xii). Financial changes soon followed, with many countries tying financial aid to individual student enrolments, forcing universities to compete against each other for students (Naidoo et al., 2011). Naidoo et al. (2011) called this phenomenon the “consumerist turn” of higher education—a trend Slaughter and Leslie (1999) associate with “academic capitalism”: higher education’s focal shift from a “public good” orientation toward one that emphasized profit.

In the two decades since the first critiques of academic capitalism, the phenomenon has spread throughout the globe (Kauppinen & Cantwell, 2014). In addition to universities adopting more consumerist orientations, there has also been an increase in what Kauppinen and Cantwell (2014) call

“transnational academic capitalism”: universities’ “activities, practices, networks and processes that cross nation-state borders and contribute to a transnational flow of ideas, innovations, capital, goods and people,” (p. 148). A key mechanism for this is transnational education (TNE): foreign educational offerings that students complete while remaining in their home country (McBurnie & Ziguras, 2007). Globalization has expanded TNE avenues, providing the context for international universities to forge efficient supply chains for mass-delivered, locally-customizable educational products—similar to practices of multinational enterprises (Kauppinen & Cantwell, 2014).

The Rise of the International Branch Campus (IBC)

Several mechanisms exist for delivering higher education across borders. Online education is a popular approach, as are partnership agreements in which local and international universities promote co-branded educational offerings. However, the model that most fully imports the home-campus experience to local students is that of the international university branch campus (IBC): a brick-and-mortar outpost of a larger university located in a separate country. The Cross-Border Educational Research Team (2017) distinguishes IBCs as entities that...

...[are] owned, at least in part, by a foreign higher education provider; operated in the name of the foreign education provider; and provide an entire academic program, substantially on site, leading to a degree awarded by the foreign education provider (p. 1).

Monash University in Malaysia, New York University Shanghai in China, and RMIT University in Vietnam are examples of this model. A full list of IBCs operating around the world can be accessed at www.cbirt.org.

The opportunity to earn what is often a prestigious foreign degree without leaving one’s home country is an attractive value proposition for international students. In recent years the IBC model has proven increasingly popular. In 2002, there were 18 IBCs in existence worldwide, (C-BERT, 2011). By 2009, this number had grown to 162 (Tierney & Lanford, 2014), and today it is 253—more than ten-fold growth in 15 years (C-BERT, 2017).

Launching an IBC has obvious benefits for the parent university. High-fee-paying international students are a major income source for universities (Levent, 2016), and TNE allows universities to recruit more of them by accessing the market of international students who are unable to move overseas to study. IBCs also provide affordances for international collaboration and cross-country research (Tierney & Lanford, 2014), and generate prestige for their parent campuses, underscoring their global outlook (Tayar & Jack, 2013, p. 153). For host countries, IBCs offer capacity-expanding opportunities: meeting a gap in in-country offerings, internationalizing the academic community, and increasing education levels to build a knowledge-based economy (Wilkins & Huisman, 2012; Lim & Shah, 2017).

The Key to IBC Success: “Marketing, Marketing, Marketing”

Launching and successfully managing IBCs is not an easy undertaking. The 253 IBCs currently in existence do not represent the full number that have been established: others have started and closed—often due to financial problems. The University of New South Wales’s short-lived “UNSW Asia” campus in Singapore is a one such example. After less than a semester of operation, UNSW announced that it would close the campus—largely due to low student enrolment (Observatory on Borderless Higher Education, 2007). Other common factors in IBC closure are quality challenges and disputes with local partners (Healey, 2016).

While some of these challenges mirror those of any higher-education institution, the IBC status as a kind of startup venture makes this model particularly vulnerable. As Sara Lipka (2012) notes in a *Chronicle of Higher Education* article on IBC viability, for IBCs “[t]o be solvent requires the steady revenue of tuition, but building a brand and recruiting students are formidable tasks,” (p. 1). The title of Lipka’s (2012) article contains what she sees as the key to IBC success: “marketing, marketing, marketing.” Lipka (2012) cites as successful the University of Wollongong’s IBC in Dubai, which raised its enrollment numbers by 39% in a single year by “chas[ing] students” via a metrics-driven, corporate-style sales team (p. 3).

Since a key value proposition of IBCs is their ties to their home universities, marketing messages to potential students stress this connection, and IBCs need to deliver on these expectations. Salt and Wood (2014) claim that “transmitting [IBC operators’] home-based ‘institutional DNA’ abroad... is universally regarded as the key to [IBC] success,” (p. 94). This is a cultural undertaking as well as an academic one. IBC leaders must transport not only the educational offerings and standards of the home institution, but the cultural signifiers that contribute to its brand identity. They must, as Wilkins and Huisman (2013) argue, “perform the complex task of managing multiple interrelated images simultaneously,” ensuring that campus facilities and academic offerings fulfill students’ expectations of a legitimate parent-campus extension (p. 618).

IBC Lecturers’ Roles in Promoting Their Universities

IBC lecturers play a crucial role in embodying this crucial “image” of the home campus and promoting their universities to stakeholders. As Hughes (2011) notes, “an IBC is the home of a collection of staff who represent the ‘brand’ of the home institution,” (p. 23). Typically IBCs source staff through a combination of local and international means (Healey, 2016, p. 66), and regardless of their home country, these lecturers become avatars for the home campus and its culture. Not meeting this expectation can have dire consequences: Hughes (2011) warns that “[i]f the distance between what students expect from

the ‘brand’ of an institution and the teaching and learning experience they receive is too great, they will find a different institution to attend,” (p. 27). IBC students want their experiences to “reflect the fundamental ethos that exists on the main campus,” (Howman Wood, 2011, p. 30). Representing the university to current and potential students is therefore a unique responsibility of lecturers working in international branch-campus settings.

Whether IBC lecturers themselves see university promotion as part of their role is a question unexplored in literature to date. The limited research on IBC settings has focused primarily on IBC management decision making (see, for example, Healey, 2016) and students’ expectations and enrolment decisions (see, for example, Wilkins & Huisman, 2013). Recent research by Wilkins et al. (2017) has shed some light on employee satisfaction in IBC contexts, noting lower satisfaction for IBC versus onshore university employees. The question of IBC lecturers’ willingness to support university marketing efforts is not addressed in this research.

Lecturers as Marketers: Potential for Identity Conflict

The roles of university lecturer and marketer are arguably quite diverse. Academia retains a strong connection to its public good roots, with many academics viewing this work as a calling, not just a profession (Rhoades, 2014). University marketing, conversely, is associated with the rise of academic capitalism, viewing academic experiences as more of a private commodity that can be promoted and sold (Slaughter & Leslie, 1999). Asking university lecturers to assume the role of marketer has implications for their identity: their conscious and unconscious self-concept which informs their views and actions (Jenkins, 2014).

Identity research spans fields ranging from sociology to psychology to spirituality, among others. A core understanding throughout these perspectives is that identity is multiple and changeable, shifting with roles people play, contexts they occupy and experiences that shape their perspectives (Jenkins, 2014). In sociology, identity is thought to be collaboratively socially constructed by individuals and their surround, suggesting that outside influences can affect the way people see themselves and as a result impact their actions (Benwell & Stokoe, 2006). Yet identity is also seen as somewhat durable, with deeply-ingrained allegiances to present or past groups pervading in individuals’ self-concepts and behaviors (Bourdieu, 1990).

Applying these theories to the question of university branch-campus lecturers’ identity challenges in promoting their universities, multiple scenarios are possible. On one hand, these lecturers’ self-concept as academics may drive a personal investment in historical ideas about the commercially agnostic “life of the mind” associated with the public-good era. Lecturers’ allegiances to these historical ideals may impede their willingness to perform behaviors they see as contradicting them. On the other hand,

lecturers' exposure to new influences in their context may override these allegiances, prompting them to adopt a marketing-positive identity and engage in brand-supportive behaviors. Since perspectives of IBC lecturers on the topic of university promotion are underexplored in current literature, their orientations to this possibility are unclear.

Research on University Lecturers as Brand Supporters

An emerging vein of general higher-education literature indicates growing sector-wide interest in how university lecturers support their brands. In a summary of related corporate-sector research, Sujchaphong et al. (2015) suggest that transformational leadership and internal brand-building can prompt university employees to act in brand-supportive ways. Interestingly, they draw a distinction between academic and professional staff, suggesting that while university employees “other than professors might be influenced by some top-down marketing approaches,” the independent nature of academic staff raises doubts about whether “anyone could hope to influence them to act ‘according to brand,’” (Sujchaphong et al, 2015, p. 231).

Sujchaphong et al's (2015) stance may represent well the situation of years past, but the consumerist turn in higher education is changing expectations of what it means to be a university lecturer. Lecturers' brand alignment and potential for ambassadorship may now be open to influence. Yu et al (2016) found that academic staff at a British university were likely to display brand-supportive behavior in contexts in which they were treated like customers, with active communication that responded to their needs and celebrated their achievements (Yu et al, 2016, p. 4). Interestingly, Yu et al (2016) found that orientations and behaviors diversified across demographic lines, with newer lecturers more likely to action their brand alignment into brand-supportive behavior, and more mature—particularly male—lecturers less likely to do so.

As academic capitalism continues to influence university management practices, representing the university brand may become more of a job expectation for lecturers. Cambra-Fierra and Cambra-Berdun (2008) suggest that university lecturers perform the role of “part-time marketers” of their institutions, and should be trained and engaged this way by their institutions. Pluta-Olearnik (2017) agrees, arguing that for universities, the classic “4Ps” marketing mix of “Price,” “Product,” “Promotion” and “Place” should be extended to “5Ps,” with the fifth “P” referencing “Personnel” and recognising employee's role in promoting their institution. This trend toward thinking of university lecturers as marketers is likely to continue in the transnational space, where marketing and student recruitment are crucial for IBC viability, and university lecturers are seen as playing a critical role in representing their institutions to the public.

METHODS

This paper shares insights from research on lecturers working at international university branch campuses, highlighting their orientations toward representing their universities at marketing events. The data presented is part of an ongoing project examining the professional experiences and perspectives of approximately 40 lecturers working at universities based in Southeast Asia.

Data for this paper and the larger research project were collected following the practices of Constructivist Grounded Theory, which adopts a wide, emic lens to chronicle the perspectives of in-situ participants, identifying patterns and building theory “from the ground up,” (Charmaz, 2014, p. 36). Constructivist Grounded Theory is a second-generation adaptation of the original Grounded Theory Method developed by Anselm Strauss and Barney Glaser (1967); the constructivist version differs from the original in its view of reality as socially constructed through events and discourse. Findings are not assumed to be universally generalisable, and should be considered within their source data’s context—in this case, two universities in Singapore and Malaysia, in January and February 2018.

Participants in this research were recruited through an open call for volunteers. Following informed-consent procedures, they engaged one-on-one with the researcher in semi-structured interviews of roughly one hour each. In response to an open question about their official and unofficial duties at their university, several participants mentioned their involvement in supporting university marketing activities. Extracts from their responses and researcher-guided elaborations are presented below. These are analyzed using applicable concepts from literature on identity theory and organisational identification, with consideration throughout for the implications and practical take-aways relevant to transnational higher-education management and related multinational industries.

FINDINGS

Overview of marketing activity types and participation expectations

While several research participants described marketing activity participation as a component of their roles, the types of activities and participation expectations varied. The most common type of university marketing activity lecturers said they participated in was university open days, in which potential students toured the campus to meet with faculty, administrators and possibly current students, often accompanied by their parents. At open days, lecturers promoted their institutions in a range of ways, including delivering sample lessons, giving presentations, and engaging with visitors informally.

Other marketing activity formats participants mentioned included local, regional and international recruitment fairs, where lecturers hosted university-branded booths to talk to potential students and

parents; recruitment-oriented presentations, where lecturers spoke to groups of potential students and parents about the merits of their university program and disciplinary area; and soft-marketing activities where lecturers presented talks related to their disciplines with the secondary goal of promoting their program and university.

Participants who described marketing activity participation described a range of related expectations. Some said the opportunity was presented to them as an optional way they could fulfill the service aspects of their roles, while others said participation in these activities was mandatory or expected. Some took pride and enjoyment in their participation; others resented it; and others described mixed feelings—understanding the need for student recruitment efforts but feeling conflicted about directly supporting them.

This study's major findings about participants' orientations toward university marketing activities are noted below, with examples using salient interview extracts related to participants' understanding of the purpose of these activities, conceptualisation of their role in them, and willingness to participate. Data presented in this paper are from six research participants: Will, Gina, Jess and Thuy, who are lecturers at an Australian university branch campus in Singapore, and Martin and Suresh, who are lecturers at an Australian university branch campus in Malaysia (all names are pseudonyms). Participants' nationalities are noted in the text below.

Recognising the need for IBC marketing activities

In discussing the topic of IBC marketing, most participants communicated an understanding that IBCs typically operate with more tenuous fiscal security than their parent campuses, requiring them to be marketing-driven. They demonstrated awareness of their IBC's need to continuously recruit students, as noted below:

WILL (American): *“The model [of IBCs] is about profitability. And it's about monetary or fiscal maintenance. I mean you have to maintain. In order for us to offer education, it has to be economically viable, because we're not getting any funding from the government.”*

GINA (British): *“They [the university] have to survive... They wouldn't exist if they weren't making money.”*

For many participants, this focus on recruitment was concentrated locally, at the level of their program and its viability:

MARTIN (Malaysian): *“Because [our department] is so small, we have to really go all out and spend more time... in terms of recruiting, and marketing, and things like that.”*

SURESH (Malaysian): *“If we have no students coming in, the faculty, the department will be disbanded and we have to go.”*

IBC lecturers’ apparent understanding of the need for student recruitment activities sets the stage for their willingness to participate in them—the focus discussed below.

Willingness to participate in marketing activities

Research participants who reported joining in IBC marketing activities generally described their involvement as voluntary, provided as part of the “service” expectation within the standard academic requirement triad of teaching, service and research. However, the enthusiasm of their volunteerism varied. Some, such as Will, below, were clearly comfortable with participating in direct marketing activities, even as they acknowledged that others may not be:

WILL (American): *“I think many professors would probably balk at the suggestion that you need to be part of a marketing campaign, that you need to sell the university. They would say well you know... that's not my role. But it is something that's very much expected of you at [IBC] campuses because it's so much a part the model. ... That's part of your job. ... I like recruiting students. And it's fun for me, to get out there and to pitch them--on their future because that's what it is.”*

Other participants shared a more subdued willingness to support these marketing events:

GINA (British): *“I think it's okay. I've never resented it, I've never... I've possibly joked about doing it, but I've never been you know morally against the idea of doing it. ... I guess I do see the need for it.”*

THUY (Vietnamese): *“I think if my colleagues can do that so I can do that. So I mean it's a duty where everyone have to do so I have no problem with doing that.”*

SURESH (Malaysian): *“Whenever we have open day, whenever we have marketing trip, all of us have to participate. No choice. So that is not to say compulsory but it's just based on our--our how do you say our conscience or whatever?”*

This framing of marketing-event involvement as a necessary “duty” or “conscience”-driven obligation was echoed in some participants’ body language, with them rolling their eyes or using other nonverbal means to communicate a mild reluctance or reservation about their involvement in IBC marketing activities. At times, they expressed this verbally, such as in the case of Suresh, whose complaint about the expectation was quickly followed with acknowledgement of its goal:

SURESH (Malaysian): *“Honestly speaking, deep down honestly, I dislike the idea of the lecturer have to participate in those things. ... I dislike the idea, okay, but since time back to my initial explanation, we are small. So we have to do anything that we can to make our department grow.”*

As these examples show, lecturers generally expressed a willingness to support university marketing activities, despite some hesitations. Interestingly, however, they demonstrated significant agency in framing the terms of their involvement, conceptualizing their role in these activities in a specific way that aligns with their academic roles. This finding is discussed below.

Conceptualising their role in marketing activities

Research participants who discussed lecturer participation in university marketing activities often explained—at times unbidden—the reasons that their support was needed. While a few participants described the need as one of manpower—needing to bolster a small marketing team with additional support—many framed their involvement as complementary to that of the official university marketing staff, providing expert knowledge about the programs that these professional staff lacked:

JESS (Australian): *“It's coming from a different angle from marketing. You're coming from a information sharing and trying to inspire [potential students] about a particular topic. So for me it's about come and do my subject area. But for [marketing staff] it would be more about just come to our university. But I can bring content and a bit more real world inspiration that they don't know. They don't know the subject, they can't do that. So together, it's good.”*

THUY (Vietnamese): *“I think the aim for the lecturer involved in this activity is to try to attract students to come to our discipline, come to our university. Because sometimes the marketing people they don't know about they don't know much about the academic activities... so that's why they need one of us to be there, maybe sometimes just to answer these kinds of questions.”*

SURESH (Malaysian): *“I don't think of myself as a traditional marketing behavior trying to sell the product. Cause I feel, personally I feel like it's not ethical. I'm a teacher here. I'm not trying to sell you stuff. It contradicted what I'm I'm doing here and... I'm just helping out. Explain what the course does. I'm not trying to sell you... hard sell you, you know?”*

DISCUSSION

Rationale sharing through an IBC community of practice

IBC lecturer participants' repeated references to the need for robust marketing suggest that the challenge of ensuring IBC viability is a shared reality, understood by multiple staff at these campuses. A unique IBC community of practice is likely in place, with core members helping newcomers orient to the specific needs of this context, and community knowledge about these challenges and requirements being reinforced and maintained through dialogue (Lave & Wenger, 1995).

A key indicator that a community of practice is reinforcing lecturers understanding of marketing needs is the shared stance of Martin and Suresh, who work in the same department. Their similar orientation to the need for departmental promotion suggests that it has been developed through dialogue—with each other and perhaps others in their department. While some participants displayed some resistance to participating, they generally expressed a willingness to do so and an awareness of the reasons that such participation was necessary in the unique IBC context.

Identity formation and maintenance

Participants' self-positioning in these extracts can be interpreted through the lens of identity theory, which views personal identity as a socially-determined construct, explaining “who people are to each other” (Benwell & Stokoe, 2006, p. 6). Contemporary identity theorists see identity as multiple, malleable and constantly in flux, negotiated intrapersonally and interpersonally through the subtle machinations of social interaction (Jenkins, 2014). For example, an individual might perform a claimed identity—presenting herself in a particular way through “dramatic realization” of a role (Goffman, 1959), and this candidate identity may be reinforced or undermined by her interlocutors (Jenkins, 2014). One might also be placed in a “subject position” of their interlocutors' choosing—labeled by a perceived role or attribute—forcing the individual to either accept or resist this positioning (Davies & Harre, 1990). The mirror of others' perspectives interacts with each individual's personal sense of self, creating what Jenkins (2014) calls an “internal/external dialectic”—a synthesis of how people define themselves and

how they perceive others' definitions of them (p. 42--43). Individuals are always co-constructing identity with interlocutors: negotiating an agreed-upon way of being.

The claims that each participant makes about their unique role in marketing activities are part of the process of identity maintenance. Jess frames her role in marketing events as sharing information that marketing staff would not know—inspiring students in a way they cannot. Thuy asserts something similar, saying that academic staff can answer questions that marketers cannot. Suresh goes furthest in his identity claim, drawing a sharp contrast between himself and marketing staff, suggesting that it is “not ethical” for a teacher to engage in “traditional marketing behavior.” As with Jess and Thuy, he focuses his role narrowly on information sharing about his discipline area.

All of these examples showcase lecturers maintaining an academic identity even as they support marketing activities and partner with marketing staff, who they frame as playing a different role and (in Suresh's case) abiding by different ethical rules. They resist the subject position of ‘marketer,’ which could be reasonably attributed to an IBC staff member participating in marketing activities, and through their rationales they negotiate a way of participating in these activities and contributing to their IBC without compromising their identity and values.

CONCLUSION

This research is the first to explore international branch campus lecturers' perspectives on their roles in supporting their university's marketing activities. As demonstrated by extracts from interview data, these IBC lecturers recognise the need for marketing and student-recruitment activities and are generally willing to participate in them. They are, however, clear about the boundaries of the roles they are willing to play in these activities. They see themselves as sources of academic information and inspiration—not “hard sell” salespeople.

Transnational education forms a growing part of the Australian higher-education sector—a major revenue source for that country's national economy (Davis, 2017). IBC viability depends on strong marketing, and understanding how to engage academic staff as marketing supporters will be important for university leaders interested in growing their brands abroad. This research suggests that academics are willing to provide this support if they are made aware of the reasons it is needed. It also shows that academics prefer to maintain an academic identity while participating in marketing activities. Respecting these boundaries and framing marketing-activity participation as one of information-sharing about their disciplines may be helpful for ensuring academic support of marketing activities at international university branch campuses.

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4. Health Management and Organisation Refereed Interactive Session

How to promote brilliant renal care

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4. Health Management and Organisation Refereed Interactive Session

How to promote brilliant renal care

ABSTRACT: *This article reports preliminary findings from a collaborative study between academics and healthcare practitioners to explore brilliant renal care. The methodology, guided by positive organisational scholarship in healthcare, used the world café method. There were 18 patients and 10 carers engaged in group conversations to explore their experiences of the Regional Dialysis Centre Blacktown (RDC-B). Preliminary findings reveal the Centre was completely patient and relationally centred with dedicated and competent staff members providing complete, responsive and personalised service. Practical and scholarly implications of this research reveal brilliance occurs in complex health care services and pragmatic research between healthcare practitioners and academics offers a dynamic space for collaborative scholarship to examine, understand and promote positive health care experiences of patients and carers.*

Keywords: Positive organisational scholarship in healthcare, Health leadership; health management innovation; practice, climate, culture, environment

Given the rise of chronic disease (AIHW, 2015a; AIHW, 2017; Primary Health Care Advisory Group, 2016), the need for renal care has never been so great. However, renal care is costly (AIHW, 2015b; AIHW, 2016) with Australian estimates to be \$4.1 billion – furthermore, the cost of treating end-stage kidney disease from 2009-20 is likely to be approximately \$12 billion to the Australian government (Cass et al., 2010; Wyld et al., 2014). Given the costs associated with renal care, there is increasing government interest in community-based healthcare (DHA, 2011) – including dialysis centres and home dialysis.

Renal care, or nephrology, is a specialty that encompasses: the treatment of conditions that effect the kidneys and urinary tract, as well as the support required by patients and carers who are (or at risk of) living with these conditions (NSW Ministry of Health, nd). Although this speciality might only seem relevant to a minority of patients and carers, the rise of cardiovascular disease and type 2 diabetes mellitus suggests the need for renal care has never been so great, particularly among Indigenous peoples (ABS, 2016; GBD 2015 Healthcare Access and Quality Collaborators, 2017). For instance, following their systematic review, Liyanage and colleagues (2015) reported that, in 2010, approximately 2,618 million people received renal replacement therapy, worldwide. Furthermore, they conservatively estimated that approximately 4,902 million people required this ‘life-sustaining treatment’ (p. 1980) – this suggests premature mortality among the 2,284 million people who were unable to access timely renal care. And the prevalence of kidney disease is expected to rise (Hoerger et al., 2015), with rates in

some nations forecasted to double. Given these challenges, it is perhaps extraordinary when healthcare meets, if not exceeds the expectations of patients and carers in renal care.

‘Extraordinary’ or ‘brilliant’ is a term that aptly describes the Regional Dialysis Centre-Blacktown (RDC-B), which is part of the Western Renal Service (hereafter, the Service) in New South Wales, Australia. This service is an integrated network service catering for the health needs of 1.5 million people from Auburn to the Blue Mountains, supporting people from the Western Sydney and Nepean Blue Mountains Local Health Districts. As a cutting-edge, networked service, it has received multiple awards in recognition of its innovative and excellent healthcare. In addition to these are other indications that the service is extraordinary – like its relatively low staff attrition (NSW Health, 2016).

To better understand the brilliance within the Service, this article focus is the RDC-B as a microcosm of the Service. The article aims to clarify some of the reasons for the brilliance epitomised by the Centre, according to the experiences of those who use it – namely, patients and carers. Towards this aim, the article commences with a description of the impetus for this study. It then describes the methodology that guided this part of the study, and how it was conducted using an experiential approach. Following this, it describes the findings and concludes by explicating the key implications for scholars and practitioners as well as describing further research being undertaken with the RDC-B.

The Impetus

Chronicling an experience or a journey does not necessarily do justice to non-linearity or messiness (Bruner, 1990). Narratives can falsely imply coherence, with a start and an end. This study began with a conversation between one of the authors and a senior manager within the Service, both of whom had previously collaborated over a number of years on a health management program. During a chance meeting, the author mentioned a project she and her colleagues were undertaking on positive organisational scholarship in healthcare [POSH; citations withheld for blind review] and brilliance in a health service within Queensland Health. While the POSH approach is described later, suffice to say, it is ‘the study of that which is positive, flourishing, and life-giving in [healthcare] organizations’ (Cameron & Caza, 2004, p. 731). The senior manager’s response to this, ‘alternative approach to studying [healthcare] organizations’ (Barker Caza & Caza, 2008, p. 21) was immediate excitement and enthusiasm about having the RDC-B included in a study that looked at brilliance in health service

delivery. Although the RDC-B regularly attracted praise from patients, carers and staff – both internal and external – as well as the reviewers of award applications, she and her colleagues from within the RDC-B had limited resources or knowledge to explore how its brilliance could be captured and shared with others. Together, these colleagues explored how diverse perceptions of, and experiences with, the RDC-B might be gathered and interpreted to understand its brilliance. This serendipitous conversation triggered the scholarship presented in this article.

Following this conversation, the author and senior manager discussed the quandary with their academic and clinical colleagues, respectively. Each group was similarly intrigued and rose to the challenge of trying to capture brilliance within the RDC-B. They convened on several occasions at the RDC-B, with each meeting building on the last. Resembling pragmatic fieldwork (Huffman, 2013a, 2013b), the group pursued their agenda of pragmatic positivity by: meeting regularly; asking questions of each other; viewing the artefacts and artwork that adorned the Centre; sharing stories; as well as envisioning ways to push methodological boundaries to capture and examine brilliance, while ensuring the approach was practical. Through positive pragmatic fieldwork, the group familiarised itself with each other's life-worlds (Nicolini, Gherardi, & Yanow, 2003) – how each other worked, and why; how they preferred to work, and why; the logics that underpinned the different worlds of healthcare and academe, and the accompanying discourses; their interests, aspirations, and frustrations; opportunities they were privy to; as well as the resources they could access. Like two dance partners coming together for the first time, the academics and clinicians occasionally stepped on each other's toes. This was demonstrated when one group used language that was not shared, or misunderstood the other's organisational politics and resource constraints. Yet, with each discussion, they became better acquainted and better attuned to each other, demonstrating 'flexibility, emergence and opportunism' (Bate & Robert, 2007, p. 50). They also engaged in 'funology' – they were 'exploratory, improvisatory, creative, iterative... and low-tech' and suitably light-hearted (p. 52).

The serendipitous conversation that started this scholarship followed another propitious moment and highlights the importance of opportunism within pragmatic fieldwork. Two of the authors were eligible to secure a small institutional grant to further this newfound partnership. Accordingly, this stimulated team activity, as members developed applications to the institution and, following a

successful outcome, the four relevant human research ethics committees that spanned the worlds of healthcare and academe became involved. As artefacts of this partnership, these applications demonstrated a synergistic and at times challenging relationship between the practitioners and scholars who collectively epitomised complexity. More specifically, they crafted prose to articulate and substantiate the overarching question – namely, what made the RDC-B and exemplar of brilliant health care -and developed an innovative methodology to address this question.

METHODOLOGY

Positive Organisational Scholarship in Healthcare

POSH was the methodology used to guide this study and sustain a focus on brilliance, in its varied manifestations. POSH is ‘concerned primarily with the study of especially positive outcomes, processes, and attributes of [healthcare] organizations and their members (Cameron, Dutton, & Quinn, 2003, p. 3). It ‘[has] an explicit interest in understanding and explaining flourishing in [healthcare] organizational contexts (including individuals, groups, units and whole organizations)’ (Dutton & Sonenshein, 2007, p. 737). It therefore sensitises scholarship to forms of positivity that collectively enable aspirational and socially-worthy goals to flourish. POSH encourages scholars to recognise: what enlivens people; what encourages creativity and positive deviance (Rose & McCullough, 2017); and what amplifies collaboration and inclusive approaches. Challenging the tendency to concentrate on all that is negative, POSH seeks to study triumphs and achievements because of their inherent appeal and allure; furthermore, triumphs and achievements help to reveal opportunities for capacity-building. POSH is thus, ‘distinguished from traditional [healthcare] organizational studies in that it seeks to understand what represents and approaches the best of the human condition’ (Cameron et al., 2003, p. 3).

POSH accommodates diverse research methods to explore experiences with and within health services. It was therefore germane to this study for (at least) two key reasons. First, it can help to recognise the brilliance that the RDC-B is known for; and second, it has the flexibility to accommodate the different methods that are likely to be appropriate to examine patient and carer experiences.

World Café Method

POSH was used via the world café method – a creative format for hosting group dialogue (Carson, 2011). It is designed to promote conversations in which people: creatively explore complex issues; listen deeply (Oliveros, 2005); and suspend personal views and judgement. It aims to foster engagement, openness, and idea-generation by seeking to engage and energise participants around questions that matter. The world café method is well-established and has been used to facilitate empowerment, workplace innovation, and interactive learning environments within health services (Anderson, 2011; Burke & Sheldon, 2011; Caron, 2011). It was suitable for use within the RDC-B because staff members regularly hosted gatherings for patients and carers in the form of seminars and support groups – they were therefore accustomed to a casual, respectful, and conversational context. As such, during these routine gatherings, the clinicians invited patients and carers to contribute to this study, providing detailed information to inform their decision.

Conducted within a meeting room at the Centre, 28 patients and carers participated in the two-hour world café method (18 patients: 10 females: 8 males: 10 carers: 6 females; 2 males). This room was transformed into a café, complete with tables adorned with flowers, refreshments, and colourful forms of stationery, to invite participants to gather in small groups within a ‘hospitable space’ (Brown & Isaacs, 2005, p. 40, see Figure 1).

INSERT FIGURE 1

The café commenced with an overview, which was presented by one author, to: clarify and justify the study focus; set a positive ambiance; and stimulate ‘full participation and mutual giving’. Following this, an author facilitated two thirty-minute conversations at each table. The first focused on participants’ favourite stories about the RDC-B and recent experiences they deemed to be brilliant. The second focused on the ingredients that enabled the Centre to be brilliant. The authors’ role was to: ensure the conversations were focussed, respectful, and inclusive; and record participant contributions on large sheets of paper, laid on the table for all to view. The authors were aided by a guide, prompting them to: promote dialogue – not only about what participants observed, or thought about the RDC-B, but also how they felt, and what they sensed in relation to it; invite participants to explicate their descriptions and ideas; use probing questions to seek clarification; request (and remind) participants to codify their

thoughts by noting these on the colourful notepaper provided; and encourage participants to ‘listen together for patterns, insights, and deeper questions... [to] nurture coherence of thought without losing individual contributions’ (Brown & Isaacs, 2005, p. 40).

To generate diverse conversations, and following protocol, participants were invited to move to different tables. More specifically, following the initial thirty-minute conversation with one group, half of the participants at each table were invited to move to a different table, which was hosted by a different author.

After each conversation, participants were invited to harvest their yield. They were asked to: adhere all notes recorded during the conversation to the walls; peruse each other’s contributions; identify statements or themes that resonated with them; consider why they might have selected these; and share these with everyone. This process served to encourage participants to ‘share collective discoveries [and] make collective knowledge and insight visible and actionable’ (Brown & Isaacs, 2005, p. 40). After the second harvest, one author facilitated a collective discussion to invite all participants to identify one or two terms that: epitomised what the RDC-B meant to them; and captured why it was brilliant. The meaning of brilliance emerged from the conversations.

A constant comparative method was used to analyse all notes recorded during the conversations (Glaser, 1965). This involved two stages. First, each author: reviewed the data recorded at their respective tables; constructed and described themes that typified patient and carer perspectives; and coded the data accordingly. Second, one author: collated these codes; identified similarities and differences; and constructed and described a more inclusive coding system, which was then discussed and critiqued with the remaining authors. Following this process, the coding system was comprised of one primary theme, connected to nine secondary themes (see Figure 2). For reasons of space, only three are explicated – namely, the primary theme of: staff care – ‘completely’ patient-relational centred; and two secondary themes – namely: dedicated and competent staff; and complete, responsive, and personalised service. Each is addressed in turn.

INSERT FIGURE 2

RESULTS

Staff Care – ‘Completely’ Patient-Relationally Centred

Attending the RDC-B several times a week for treatment and/or training regarding home dialysis, patients and carers had opportunity to develop strong connections through trusting and caring relationships with the staff members, as they progressed through different stages of kidney disease and renal care. The participants told us that they cherished these relationships because they were assured of completely personalised and excellent care:

Totally caring.

Each individual is treated as special.

They have a human touch.

The difference is the connection you form with staff.

Many described how helpful it was to know they could obtain different types of support at different times. It was also about being there for patients and carers 24/7:

When we need help – help is always available.

There is never a question that your call is not important.

As people they are empathetic, caring and they are able to fix problems.

Not alone.

Always available.

You don’t feel like you are forgotten about.

Participants indicated they always felt welcome at the RDC-B. During their long careers as a patient or carer, they had had many experiences with many different health services. These experiences offered comparative value, helping the participants to recognise the Centre as unconventional or atypical. Its practices were not myopically clinical – but rather, the RDC-B and the staff members therein, warmly received patients and carers as people. Participants indicated they were acknowledged and respected, which was not always the case in other health services:

You don’t feel like you’re forgotten about.

It’s how we get treated.

You are a person –not a number.

They're not condescending.

They're interested in us – we matter.

Participants recognised a culture of mutual respect within the RDC-B. They never felt judged by the staff members, irrespective of seniority, as well as by fellow patients and carers. According to the participants, this was important for (at least) two reasons. First, it created an empathic ethos – this was particularly helpful during times of distress and grief. Second, it democratised care, reinforcing that it was a practice that everyone could embody and enact, not only those with clinical responsibilities:

Your first diagnosis is a very negative experience. [The RDC-B] gives you peace of mind, vitalises you and gives you willingness to live.

Respectful staff – they know everyone – even the cleaner – there is mutual respect. The cleaner helps you out.

Show care and respect straight away- soon as you come through the door.

Dedicated and Competent Staff

Participants described the brilliant care they received from staff members who went well beyond the remit of their role. According to the participants, the staff members were sympathetic to the long-term and challenging nature of kidney disease and renal care. Recognising these difficulties, the staff members demonstrated a strong commitment to, not only what patients needed, clinically, but also what they and their carers preferred. Their thoughtful actions often exceeded the expectations of patients and carers, observing the staff members were unfailingly compassionate, and continually strive to do more than what they were required to do:

They go above and beyond all the time.

Nurses are very compassionate about the work that they put into their care of patients.

It is not just a patient/nurse thing – it is a 'constant partnership in pursuit of excellence'.

Complete, Responsive, and Personalised Service

Participants recognised the RDC-B as comprehensive, with the capacity to accommodate their diverse range of changing needs and preferences. Given their varied experiences with different health services to date, they had grown accustomed to ‘single organ medicine’ (Hillman & Bishop, 2004, p. 2), whereby a health service or clinician solely attended to the matter of primary interest to *them*, rather than to that which was of primary interest to the patient or carer. However, the RDC-B was different – it was a cross-functional service. It offered different types of care in different forms at different times, pending what a patient or carer needed or preferred. Rather than naively delivering standardised or formulaic care to optimise organisational efficiencies, the RDC-B tailored its offerings. This in turn demonstrated a different form of efficiency, offering what people required, when they required it:

This is a complete, coordinated and professional service.

They find out about you and what is happening even if you do not contact them.

Participants appreciated this flexibility, for it offered reassurance. Akin to a safety net, they had faith that their changing circumstances could always be accommodated, and they would never be mistreated or aggrieved by the RDC-B or the staff members therein – be they clinical or non-clinical:

Home delivery driver [of the home dialysis supplies] is lovely – brings things straight out.

The service has developed good systems to monitor – they are not frustrating systems, things work, and are easy to update.

When nudged for evidence of brilliance, some participants compared the RDC-B with other services they had accessed. These were described as rigid, delivering (rather than offering) tests and treatments in fixed ways at fixed times. Other participants suggested that the evidence the Centre was brilliant, was simply verified by their wellbeing and their quality of life:

It just works – I am still here.

DISCUSSION

There is international interest in, and a *bona fide* need to understand and promote exceptional healthcare (Fotaki, 2015; Greaves, Ramirez-Cano, Millett, Darzi, & Donaldson, 2015). Following a

serendipitous collaboration between academics and practitioners, this article presented empirical findings to exemplify such healthcare, as experienced by the patients and carers who accessed the health service – namely, the RDC-B. Building on Huffman (2013a, 2013b), this followed what might be described as positive pragmatic fieldwork, whereby the academics and practitioners forged a way to feasibly engage patients and carers to capture, examine, and understand the reasons that contributed to the brilliance of the Centre. Although the practitioners had recognised the brilliance, thereby demonstrating ‘collective effervescence or collective contagion’ (Bate & Robert, 2007, p. 193), they were hitherto unable to move beyond this point.

Choosing the world café method, with its focus on service brilliance, was ideal for our study given the RDC-B’s culture of inclusiveness, socialising, celebrating and support for users. Of their experiences of the world café, patients and carers said they ‘enjoyed it, were relaxed, felt good, had fun and felt cared for and often referred to feeling empowered’ (Feedback to RDC-B). The energy, enthusiasm and good feelings created by the world café lasted for days afterwards (Feedback to RDC-B) and attests to the importance of getting the best possible ‘fit for purpose’ method. As the lead of the world café commented, ‘patients and carers had no problem remaining in the positive space’, which in her considerable experience, is a rare occurrence.

In considering our preliminary findings, a useful starting point is comparing what we found with Bate and Robert’s (2007, p. 25) user experience honeycomb, which identifies seven key elements that a health service would need to embrace to be designed around user experience. At the core of the honeycomb was *value*, i.e., delivering value to all, especially patients. The six other elements were being: *useful* (have practical value and serve a useful purpose); *usable* (ease and convenience of use, including access); *desirable* (emotionally attractive, appealing or satisfying); *findable* (easy to find and navigate); *accessible* (to all kinds of people and provide aides for all forms of disability and impairment); *credible* (a service and provider that can be trusted – clinically and managerially – and in whom ‘we’ can believe). Components of a brilliant renal service, as experienced by patients and carers at RDC-B, is shown in Figure 2. It both complements and differs from Bate and Robert’s honeycomb, a significant difference arising from the use of positivity to explore the experiences of users in extrapolating a ‘picture’ of a brilliant renal care.

Delivering value is important but in our findings, staff being completely patient and relationally centred is the most frequently valued brilliant experience of users in the RDC-B. Having dedicated and competent staff does provide credibility for the service and goes to the heart of trusting and believing in the care users experience in the RDC-B. Having a complete, responsive and personalised service is much more than just having a useful and usable service – it is about exceeding the expectations of users and creating a truly flexible and total service. Other elements of the honeycomb are mirrored in our findings and merit further exploration and understanding. In this endeavour, the POHS literature provides many individual and collective constructs that can be harnessed to expand on our three main findings on brilliance in the RDC-B including amplifying the role of compassion (Lilius, Kanov, Dutton, Worline, & Maitlis, 2012), hope (Carlsen, Landsverk Hagen, & Mortensen, 2012), high quality connections (Stephen, Heapy, & Dutton, 2012); relational coordination (Hofer Gittell, 2012) and civility (Porath, 2012) in health care settings.

CONCLUSION

Despite the value of our findings, two methodological limitations warrant mention. First, given the methodology and the research method, there is no claim the findings reflect the sentiments of all patients and carers supported by the Centre. The small scale nature of the study meant that some areas of the service were over-represented in the world café because of the recruitment method, whereby patients and carers were selected on specific criteria (e.g. type of dialysis) to participate in a study to understand the reasons that contributed to its brilliance. Second, those who accepted the invitation to participate might well be a self-selected group of happy patient and carers. Selection of participants was left to the practitioners and this could have led to the potential for social desirability bias found in more conventional forms of qualitative research such as surveys.

Notwithstanding the aforesaid limitations, the findings associated with this study have (at least) two important implications for practitioners and scholars, alike. First, the findings verify that brilliance happens. Within complex settings, like health services, which are challenged by local, national, and international trends, it remains possible to forge a path that optimises the experiences of those who access (if not rely on) these services.

Second, bridging the different worlds of healthcare and academe, this study provides fertile ground for collaborative scholarship. Rather than simply include a customary call for more research, what is specifically required is clarity on three areas. First, it would be helpful to clarify whether and how the identified themes manifest in other contexts. Second, it would be helpful to identify alternative methodologies and research methods that help to capture, examine, understand, and promote brilliant healthcare. And third, and perhaps most importantly, it would be useful to determine whether brilliant healthcare matters, regarding clinical outcomes, quality of life (for both patients and carers), and the use of the (limited) public purse. To these ends, our research has extended to conducting a world café with staff in the RDC-B as well undertaking discovery interviews (Bate & Robert, 2007, pp. 86-88) with selected stakeholders. We are pioneering the methodology for doing DIs outside the patient journey to ensure that an experiential component is shared and inclusive of our practitioner colleagues.

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FIGURES

Figure 1: World Café Method

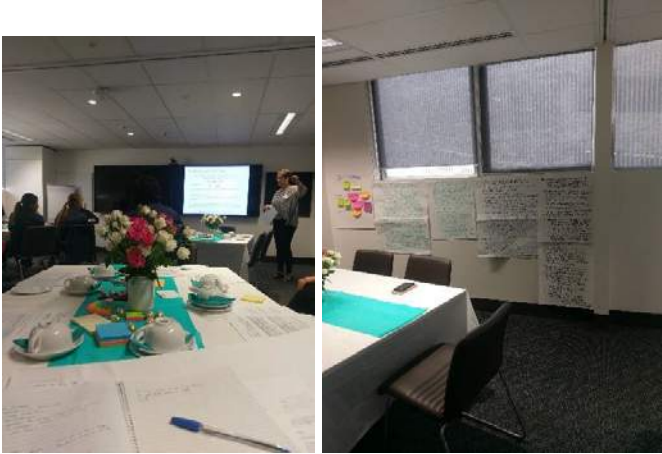


Figure 2: Patient and Carer Perceptions of, and Experiences with Brilliant Renal Care



08 / Management Education and Development

Interactive Session

The good leader: Exploring students' learning experiences of an arts-based experiential activity for ethical leadership development

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The good leader: Exploring students' learning experiences of an arts-based experiential activity for ethical leadership development

ABSTRACT: This paper is based on an inductive study of field observations and undergraduate students' reflection essays on their experiences of an arts-based experiential activity aimed at developing their proto-ethical moral sensitivities. We found that the art museum, the facilitation and scaffolding embedded within the activity created a safe aesthetic workspace, which afforded inner knowing, an increased appreciation for differences and tolerance for ambiguity through intimate social sharing, and the development of new understandings of good leadership for future practice. The findings build on and extend Sutherland's (2013) theoretical model of experiential learning processes of arts-based methods, by looking more closely at the learning processes and how they shape specific developmental outcomes.

Keywords: leadership development, critical pedagogy, experiential/student-centred learning.

Disenchantment with traditional methods of learning (Kupers, 2016; Freeman, 2015; Sutherland, 2013, 2015), which leave student ill-equipped to respond to the challenges of increasingly complex, dynamic and ambiguous organizational environments, has prompted calls for new, more embodied ways of learning that are part of a morally informed and integral form of management education. We are seeing increased experimentation with arts-based methods as one potent means to improve students' abilities to navigate responsibly the complexities of today's organisational contexts (Sutherland, 2013, 2015; Freeman, 2015), as "the arts, and art-based practices, provide different ways of both describing and relating to that complexity, thereby offering novel ways of responding" (Ladkin & Taylor, 2010, p. 235).

Educators have employed a variety of artistic media in their efforts to de-routinize traditional learning environments and effectively leverage the claimed value of arts in their classes, including literary analysis and creative writing (Freeman et al. 2015), choral conducting (Sutherland), theatre performances (Freeman et al., 2015; Taylor, 2009), poetry galleries (Van Buskirk et al. 2017), drawing (Garavan et al. 2015) and personal artistic practices (Adler, 2006), just to give a few examples. Those methods aim to "wake up our capacities for intuitive thinking, implicit knowledge, emotional engagement, cultural sensitivity, creative problem solving, and a knack for envisioning new possibilities" (Garavan et al., 2015). Art encounters can foster students' "negative capability" – their

ability to resist conceptual closure, to stay open and receptive, to experience the emotions of the self and others, and ultimately to come to the beautiful truth of an object or situation through an imaginative, intuitive, aesthetic form of knowing (Saggurthi & Thakur, 2016). Engagement with arts contribute to developing “nonrational, non-logical capabilities and self-knowledge that constitutes and cultivate experiential knowing, aesthetic awareness and in general the so called soft issues of managing and leading” (Sutherland, 2013, p. 2).

Both anecdotal evidence and recent empirical studies seem to support the effectiveness of arts-based methods in facilitating embodied transformative learnings. Our understanding of arts-based interventions in management education is however still embryonic, with more research needed on both the individual and group learning processes of those engaged in such arts-based experiential activities, as well as explorations of the specific short-term and longer-term effects of such interventions (Sutherland, 2013; Sutherland & Jelinek, 2015). With this project, we aim to develop a more comprehensive understanding of *how* arts-based learning activities impact participants. We build on and seek to extend Sutherland’s (2013) empirically grounded theoretical model of arts-based methods in action. He proposes that arts-based interventions through the development of aesthetic workspaces support aesthetic self-reflexivity and the formation of memories with momentum – memories that will inform future practice, calling for other scholars to test and extend his model with other arts-based activities.

Also, the burgeoning literature on leadership development through arts-based methods has yet to explore more fully and explicitly the potential of such methods to support the ethical development of management students and practitioners (Freeman et al. 2015; Kupers, 2016). Business ethics educators have grown sceptical of an overly analytical approach to ethics; they too see value in complementing the use of cases and theory with arts-based methods. For example, Freeman and colleagues (2016) observed being able, through engagement with literature and theatre, to get students to viscerally feel the importance of shared leadership, collaboration based on trust and empathy, and the possibility of working together relatively free of egos. Similarly, Kupers suggests that through improvisational theatre, students “became bodily and emotionally engaged in a richer way than deliberate cognitive and propositional processes alone might facilitate” (2016, p. 277); alternative

ways of embodied practising and decision making became alive for the students, including sensuous interpersonal intimacies which help blur the boundaries between self and other. Arts engagement can facilitate the development of *proto-ethical moral sensitivities*. In this project, we move beyond literature and theatre to explore the potential of the visual arts to support the ethical development of management students.

METHODS

Sample and approach

This study involved a qualitative analysis of field observations and 30 reflection essays randomly selected from a total of 140, on the undergraduate students' experience of an experiential art-based activity embedded within a management course. Data was analysed to identify thematic and structural patterns, through an iterative back and forth between data and theory, between reflections (i.e. similarities and variations identified through comparison of reflections), as well as within-reflection (i.e. the relationship between the experience of the activity in the context of the participants account of their educational and professional experience).

Research setting and data collection

The arts-based experiential activity was held as a part of a 12-week undergraduate Business Ethics course in an Australian University. The activity took place at the University's art museum where a survey of artwork by an important Australian artist was exhibited. The artist's oeuvre included figurative and abstract paintings and concerned a broad range of issues including mortality, illness, capital punishment and inequity.

The aim of the experiential art-based activity was consistent with the objective of the museum which was to serve the University community by integrating art with core teaching, learning, and research activities. Students participated in the 60-minute activity in tutorial groups of twenty. At the start of the activity students were assigned an artwork for private reflection in groups of five. Students then shared their private reflection experience with their small group before presenting a summary of the group discussion to the whole class. The facilitator then set up a group decision making process in which the class made a hypothetical decision to acquire one of the assigned artworks on behalf of the

museum. Within a week of the activity students wrote a reflection essay on their experience of the arts-based experiential activity. In the reflection essay students were asked to describe their experience of the activity, to reflect on what they learnt about themselves and others, as well as what they learnt about group decision making and leadership, and to consider how the experience might impact the way they approach decision making or working with others in educational or professional contexts in the future.

A critical element of the activity’s instructional system was a worksheet that was provided to each student at the start of the activity. The worksheet included of a series of open-ended questions prompting individual and group reflection on an assigned artwork and provided the necessary scaffolding to encourage and support the student’s embodied learning experience (Briggs, 1996). The underlying logic and structure of the open-ended questions was based on the analogous social, cognitive and affective processes involved in aesthetic and ethical judgment and decision making (Rest, 1986; Haidt, 2001). Each open-ended question prompted a specific stage of the aesthetic decision making process. By guiding students slowly and deliberately through the aesthetic decision making process students gained insight into the deep structure of ethical decision making. Unconstrained by deeply held and stable moral values, the novel context provided a unique opportunity to understand the self in the context of others, and to develop skills that could later be applied beyond the context to art to situations involving ethics.

Table 1 sets out the comparable stages of aesthetic and ethical decision making. It also describes the social, cognitive and affective processes associated with each stage of aesthetic and ethical decision-making, and demonstrates how the instructional design of an arts-based experiential activity elicited each component of the decision making process.

Insert Table 1 about here

RESULTS

A safe aesthetic workspace. By taking students out of the classroom and into the physical, psychological and aesthetic space of the art museum, we literally invited them to “cross over into a

different world” (Van Burskirk et al. 2017). Students qualified the experience as novel, different, unusual; the learning environment was effectively de-routinized (Sutherland, 2013).

It was an unconventional and different experience, not typical of a commerce/business class. (Paul)

Overall, it was a cool experience to be out of the classroom and in a space where I am very outside my comfort zone. (Margot)

Students reported a mix of skepticism, confusion and anticipation. Many admitted to question early on the value of the arts-based activity in relation to the purpose of the course.

I initially thought that this activity was of no relevance to the subject of business ethics and would not be of any use to learning. (Paul)

Although I was excited to participate in this activity, I was initially unsure as to how the interpretation of art and deducing of narratives and themes from these pieces of artwork would be able to relate to the study of business ethics. (Susan)

The facilitator addressed the ambiguity and apprehension with minimal framing, verbal and written direction as to what to do with the art, and psychological safety building. She highlighted briefly the connections between aesthetic and ethical decision making in that they are both fully human activities. Participants were then provided with concrete instructions and told that there is no right or wrong way to interpret art. Students’ early confusion and lack of confidence, especially given their lack of experience with art, gave way to increasing levels of comfort.

Initially, I was very worried about the tutorial because I am no expert in art. However, when I was instructed to keep an open mind and there is no right or wrong answer, I felt more assured.

(Josephine)

Establishing psychological safety is vital to the success of arts-based methods, which require a kind of openness and willingness to be vulnerable (Freeman et al. 2015).

Inner knowing. The first segment of the arts-based activity primed sensemaking behaviours based on the students’ immediate experience (Barry & Meisiek, 2010; Van Burskirk et al. 2017). They were at first not given access to traditional sensegiving cues such as a description of the artist’s intention. The experience of contemplating an artwork for a while, while paying attention to one’s perceptions, emotions and interpretations, was new to many students. Slowing down the process of observation enabled a move away from traditional analytical modes of knowing towards “the more reflexive style

of inner knowing” (Van Burskirk et al. 2017). This was a particularly challenging move for some students, some of whom expressed frustration at not being able to make sense or difficulty at slowing down.

At first, I was unsure of what it was meant to represent, and I felt almost angry that I could not understand it, until I really concentrated to see what I could make of it. Upon further reflection, I started to see something I could not see before. (Sarah)

In the beginning, I found it extremely difficult to sit for 10 minutes and look at the same piece of artwork as I am naturally quite a fast-paced individual. (Susan)

Students valued and welcomed the art encounter for the unique opportunity it gave them to rely on their intuition, imagination and to some degree self-reflection to understand and make meaning from the painting. The artworks were an object of curiosity.

The art was very deep and created a lot of curiosity to know more about the painting before we were given the artist information, it challenged me to use my knowledge of art and my experiences to draw conclusions about what the artist wanted to convey. (Fanny)

The ambiguity of art prompted a higher engagement within myself as I was forced to think more conceptually and try and relate it to the information I have already acquired, encouraging a higher order learning process. (Melissa)

Students reported being amazed at the evolving set of connections and thoughts happening in their minds, especially as they questioned their ability to make sense of art.

It is amazing how a painting so simple can generate thought and discussion that would never normally enter your head. (Maxim)

In the beginning, I felt like I went in with a somewhat negative perspective on my ability to understand artwork, as it has never been a strength of mine. However, once I stepped out of this and allowed myself to open up my mind, I was able to see more than I originally thought. (Susan)

The provision of information about the artwork, including the artist’s intention, midpoint through the individual reflection segment, triggered another round of sensemaking and a recalibration of emotional responses. Students described how being provided information challenged their initial interpretations or pushed them to see more.

After discovering the motives behind the painting it pushed me to apply the information and try look at the same piece from a different perspective than I had 5 minutes before. The information obviously changed my interpretation however it also pushed me to look for the meanings in the image and draw further conclusions. (Fanny)

Others, who had struggled to make sense and were emotionally ambivalent toward the painting, expressed how the information helps them develop more positive feelings towards the work and the artist. In some cases, there was an intense dislike or ambivalence towards the artwork and after receiving information about the artwork what was once ugly becomes beautiful demonstrating how beauty resides in the eye of the beholder.

After reading the information about the artwork, I can see what the artist was trying to say. It was eye opening because now I can be empathetic, in a way, towards the paintings and the artist itself. (Belinda)

Our group had a changed perspective on these paintings at the end of the day as we felt sympathy and appreciation instead of the initial fear and devastation that the painting had shown us. (Kate)

Interpersonal learning. The second segment of the art-based activity invited students to share their subjective experience of the artwork with one another in small groups. By design, we created a separate dialogue among viewers to extend the personal dialogues between the work and themselves the students had just experienced. There was a general sense that it was easy to share one’s subjective experience with the small group, with the sharing of feelings perhaps a bit more challenging than the sharing of interpretations. Some expressed how surprised they were at how comfortable they were in that conversation. A student assigned that particular affordance to art.

It surprised me how easily we could talk about the art, without having any experience with art before. (Sienna)

In art there is generally no concept of right and wrong, and I think this opens a forum that is more open to discussion and there is no fear of being incorrect and thus it facilitates students to be more open. (Melissa)

In most if not all cases, they were standing or sitting unusually closed to one another, creating an impression of intimacy. Students reported experiencing a kind of interpersonal engagement that varied

greatly from what they were used to in the classroom, one that felt more authentic (Freeman et al. 2015).

I think the abstract nature of art prompted a more natural discussion between classmates and one with genuine engagement compared to sit down tutorials. (Melissa)

When the students heard about others' experiences of the artwork, they looked intrigued, surprised, interested. They occasionally smiled and laughed when they saw and understood new perceptual experiences or interpretations. They were amazed that somebody could experience hope in front of a painting that personally devastated them. They closely listened to the experience of others while looking directly at the artwork, further expanded their mind and heart as a result.

I learned a lot from others also. They opened my eyes to things I didn't see initially and made me think about the art in different ways. (Stella)

This was a really interesting time to compare with my group and hear the different interpretations [...] Another girl in my group had a complete stark contrast in her interpretation to mine, one that I would never have seen without her expressing her views. It was very interesting to learn about what thoughts steered them to their own interpretation of the painting. (Fanny)

Some students suggested that the social sharing offered a welcome opportunity for increased self-understanding and other-understanding (Sherman & Morrissey, 2017). The small group discussion helped them refine what the artwork meant to them as they got a chance to compare and contrast and attempted to articulate their experiences.

I realized that having to listen to other's perspective has helped me understand my own interpretation of the artwork as well which in turn changes my perspective on how I view them as a result. (Kate)

The differences in the meanings created from the artwork between observers also provided students with the critical insight that there can be multiple valid subjective experiences or meanings of a single object or situation.

I learned that people have different perspectives of things, and what we think is "right" might not necessarily mean it is their idea of right. (Belinda)

Straight up acknowledging and respecting that everyone's brain works differently in how they interpret and connect ideas and prioritize details is important in most if not all situations. (Sneha)

The students also reported finding the diversity of experiences and interpretations very enriching; the activity getting them to experience in a unique way the value of diversity:

However, I realised that it is these differences in every individual that makes this world interesting as well. For instance, the different views offered by my peers made me look at the painting from a different perspective and this has opened up my mind. (Josephine)

I found being able to hear everyone's opinions, feelings and perceptions of the artwork to be really enriching. Each individual obviously experienced it differently due to disparate personal factors such as background, culture, beliefs and past experiences. It was interesting to consider how these differences have impacted each individual's perceptions, as well as to contrast it to my observation of the artwork. (Vivian)

Experiential learning from large group decision making. Next, the students were invited to present their group's collective experience to the rest of the class, in front of their respective artworks. Sharing became more public (Van Burskirk et al., 2017). Typically, a student stepped in to represent their group. In some cases, students collaboratively elaborated the narrative of their group's experience. There was overall a high level of attentiveness to the presentations. Students seemed fairly interested in hearing out about the other pieces and their peers' experiences of it. They stayed present to what their colleagues were saying.

The facilitator then invited the students to form a big circle and empowered the large group to make an acquisition decision on behalf of the museum, reminding them of the museum's mission and asking them to reflect on how they were going to make the decision. Field observations revealed that oftentimes the more confident students either asked procedural questions or volunteered their impressions – providing a rationale often for their suggestions. The discussion felt relaxed overall, with some light-hearted humour, despite tight time constraints. There was quite a bit of debate around decision criteria. For example, some students, while referencing the education mission of the museum, tentatively encouraged students to select the most explicit of the artworks, as they would enable more easily students with no arts experience to hinge their opinions on something. Others pushed against this, proposing that the most abstract artworks have higher educational value for their ability to generate multiple interpretations. Perhaps influenced by their earlier deep enriching experience of

confronting oneself with diversity and complexity, it was not uncommon for the most ambiguous object to be ultimately selected.

The artwork that had been picked at the end of the activity was the one that allowed the most freedom for interpretation, perhaps instilling a desire for individuals to try and understand others' perceptions.
(Vivian)

Democratic voting procedures were adopted while keeping the option open to challenge the vote. Some large groups proceeded to vote early; other groups waited before putting the decision to a vote. There were often multiple rounds of voting despite the time constraints. Throughout, students viscerally felt the importance of voice and democratic decision making. They expressed concern about dominating leaders, were critical of majority rules used too quickly or once only, and emphasized the need to create a safe space for discussion.

Especially when working with teams on matters that are ambiguous, it is important to consider people's ability to express themselves. This can be related at one end of the spectrum to people's tendency to stay quiet and not contribute to the group, but also at the other end to dominate the conversation and expect that their opinion will represent the majority. (Margot)

I think the fact that no one questioned or judged anyone else's decision was really important in maintaining a good environment to collectively make the decision. People changed their minds because of new information we were told, not because others were pressuring them to. (Sneha)

Memories with momentum. In their reflection essays, students objectified the art experience, and gave it agency (Sutherland, 2013). The experience in its totality compelled them to think about themselves and to evaluate what they do and might do in the future (Van Burskirk et al. 2017). Students started to question their habits, and to envision how they might act in future situations based on what they learned during the arts-based experience. They clearly saw the experience as relevant to the practice of leadership and ethical decision making, drawing explicit associations between the two.

During the activity though I felt like the way an individual draws a personal conclusion and the clash of conflicting ideas that arise through differing context were an accurate representation of how an ethical discussion can unfold. (John)

This experiment was similar to many other experiences I have come across throughout my degree and in professional contexts. It reinforces the fact that distributed leadership is often necessary, and it is

essential to take time to listen to others' point of view and take their opinion into consideration.

(Vivian)

The students explained that the experience taught them about the importance of paying attention to one's emotions and to speak up. It perhaps more critically made them aware of their own biases and compelled them to become more open-minded in the future, by respectfully listening to and considering other people's opinions and trying to understand where they are coming from.

In the future, it will help me understand that my decision and thought process might be biased due to my experiences and opinions and I will definitely seek a second opinion. (Rebecca)

I would very much like to apply this more holistic, pluralistic lens to my own decision making processes in my academic, professional and even day to day life. Often, I think as an individual in a very black and white and potentially a myopic lens, with myself as the prime stakeholder in the event.

Discussion as a group, with opportunity to explore the diverse options available and gain insight into other perspectives is something I would enjoy to keep on partaking. (Melissa)

Students mobilized the unique learning experience as a resource for rethinking what it takes to lead ethically. The experience afforded new understandings of good leadership. A good leader is defined by his/her actions such as ensuring people feel safe to voice their ideas and points of view. A good leader doesn't need to be an ethicist.

When making a decision, a good leader will not just put their needs first but combine ideas of as many people as possible, because other people have great ideas and talents and give us a completely new perspective even when we think we've thought of everything. (Rose)

He/she will act the as the unbiased advocate who will ensure that everyone has an opportunity to be heard. (Milly)

If I was a leader in a professional context, I would in the future leave myself time at the end of a group meeting to make sure I can double check with the members that I truly understand their opinions.

(Tom)

DISCUSSION

In this study we set out to explore the potential for arts-based experiential activities to promote distinctive learning processes and developmental outcomes for management students. Drawing on observational and reflective essays, we described the art museum as a safe aesthetic workspace,

discussed how inner knowing is discovered quietly and incrementally, presented how other knowing is nurtured through deep conversation and challenged by group decision making, and documented how new schemas about good leadership are formed and may shape future practice. Combining these findings with existing literature, we conclude that visual arts-based methods can support the ethical development of management students, even within a 60-minute timeframe using minimal resources.

We contribute to recent developments on the value of arts-based learning methods in management education. We validate and extend Sutherland's (2013) model by providing new insights into the relationship between individual and group learning processes during an arts-based education intervention and the role of the facilitator and scaffolding to support learning outcomes. The transformative potential of interpersonal learning is heightened after engaging in a period of deep private reflection, raising student's awareness of, and developing an appreciation for, the value and validity of others' perspectives. Such potential however is contingent upon a willingness to engage in deep conversation and to share openly and honestly one's thoughts and feelings with others. The facilitator and the scaffolding embedded within the activity play a critical role supporting students to become bodily and emotionally engaged with the activity. Specifically, the facilitator helps students to let go of judgment of the self or others and to embrace the experience with an open mind.

By further enhancing our current understanding of arts-based experiential learning processes and their developmental outcomes, we hope that the findings of this study will provide the basis for developing and offering empirically tested and vocationally relevant education in ethical leadership and decision making for commerce students and practitioners.

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Table 1: Aesthetic and Ethical Decision-Making Stages, Processes and Associated Arts-Based Activity Instructional Design

<i>Stage (aesthetic and ethical)</i>	<i>Process (aesthetic and ethical)</i>	<i>Arts-based experiential activity instructional design</i>
Awareness	Individuals becomes aware of the unique features of an artwork or ethical dilemma	Individuals are assigned an artwork in small groups and privately record exactly what they could see; facilitator encourages individuals to imagine the artwork as a ‘document’ to be forensically examined; encouraged to notice specific details (e.g. colour, tone, form, texture, line, symmetry, balance, style); individuals are not provided with curatorial information (e.g. artist’s name, materials, artist statement)
Emotion and intuition	Awareness triggers valanced emotional response and intuitive reaction to the artwork or ethical dilemma	Individuals consider how the artwork made them feel; asked to notice and record their raw sensations (e.g. sadness, disgust, anger, pleasure, wonder, excitement, chills)
Private reasoning	Individuals engage in private and creative reasoning about the artwork or ethical dilemma which is influenced by personal and situational factors	<p>Individuals document their personal interpretation of the meaning or narrative of the artwork; facilitator encourages individuals to support their interpretation with evidence (e.g. figurative or abstract elements, symbols, human faces, place, words)</p> <p>Individuals use their imagination and speculate on multiple interpretations of the artwork; facilitator reminds individuals there is no one way to interpret art</p> <p>Individuals document how their background (e.g. gender, sexuality, nationality, religion, education, physical ability), their knowledge of art (e.g. beliefs about beauty, preferences, taste), and current state (e.g. mood, fatigue) affect their thoughts and feelings about the artwork</p> <p>Individuals are provided with curatorial information about the artwork (e.g. artist’s name, materials, artist statement); facilitator encourages individuals to consider how additional contextual Information affect their thoughts and feelings about the artwork</p>
Reasoned persuasion	Verbal communication with others about the artwork or ethical dilemma offers emotionally or logically compelling alternative interpretations creating new affectively valanced intuitions, and triggering perspective-taking and empathy	Individuals enunciate their personal experience of the artwork honestly and openly to the small group; facilitator encourages individuals to listen carefully to the experience of others and to reflect on alternative perspectives and interpretations of the artwork

Choice	Group norms and decision-making processes shape an individual's privately held judgments and influences aesthetic or ethical choice	Small groups present their group experience to the whole class in front of their assigned artwork; facilitator sets up a final hypothetical scenario in which the group must choose to acquire one of the assigned artworks on behalf of the museum; facilitator provides additional information (e.g. museum mission, strategy, budget) and answers further questions from the group relating to the acquisition decision; group discusses decision-making process (e.g. decision by consensus, majority-rules, voting); group works together to make an acquisition decision)
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**Students Gender and Service Quality Ratings: A Cross-national comparison in
Asia Pacific region**

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Students Gender and Service Quality Ratings: A Cross-national comparison in the Asia Pacific region

ABSTRACT: As higher education institutions have been forced to become more student-oriented, there has been a need to differentiate themselves from their competitors by providing higher quality student support services. This study focuses on the gaps between expected and perceived student services, using a modified SERVQUAL instrument to examine gender differences in the perceptions of undergraduate business students in Australia, Malaysia and Singapore. It found that there was an observable difference between male and female students' expectations and perceptions of the quality of service in Australia; but not in Malaysia or Singapore. With such knowledge, administrative service managers can design appropriate development programs to provide higher quality services to the students, thus enhancing their institutions' regional reputational and competitive advantages.

Keywords – Asia Pacific; student gender; service quality rating; discrepancy/gap; SERVQUAL; higher education.

INTRODUCTION

Colleges and universities have attempted to become more student-oriented (Wright 1996), students' perceptions of the higher education experience have become more crucial. Higher education institutions must upgrade their approaches to business management to keep up with the demands of today's students, who behave more and more like customers (Abeyta 2013; Thomas 2011). In order to compete effectively in the marketplace, institutions need to differentiate themselves from their competitors by providing higher quality services (Joseph 1998). Perceived service quality is consumer's judgment about an entity's overall excellence or superiority (Zeithaml 1987). Parasuraman, Zeithaml and Berry (1988) stated it is an attitude that results from a comparison of expectations with perceptions of performance. Two key elements of students' experiences (their treatment during the service process and the actual outcomes experienced by them) affect their judgment of the quality of services provided, and ultimately influence their choice of enrolment in higher education institutions. To complement the research on teaching and learning service quality, this study focuses on the effect of undergraduate business students' gender on perceptions of discrepancies/gaps of quality of higher education services in three Asia Pacific higher education environments – Australia, Malaysia and Singapore by using a modified SERVQUAL instrument.

SIGNIFICANCE OF THE STUDY

The extant literature on students' perceptions of higher education service quality has generally overlooked the potentially important variable of students' gender. Thomas and Ganster's (1995) study

showed little consideration of potential gender-based differences. Female raters generally give higher performance ratings than their male counterparts as found in Henderson's study (1984). Conversely, Snipes, Thomson and Oswald (2006) examined gender differences in customer ratings of service performance and found male customers tended to rate the fairness of service encounters higher than female customers. Healy, Doran and McCutcheon (2018) findings showed female students experienced higher difficulty on dysfunctional interpersonal relationships and organisational challenges than male. These evidences indicated a need to further understand the effect of students' genders on their rating of the quality of administrative services in higher education environments.

The study contributes to the extant literature in three ways: it complements findings on student perceptions of teaching and learning services with new data on their perspectives of administrative enrolment and support services (student advisors); it explores these dimensions in three competitive Asia Pacific countries; and the study focuses on potential differences in these perceptions from male and female university business students in these diverse contexts. Given the intensity of regional competition for students, such strategies may provide significant competitive advantages to higher education institutions which seriously address these issues.

LITERATURE REVIEW

Service Quality

Perceived service quality is defined as the consumer's judgment about an entity's overall excellence or superiority (Zeithaml 1987). It is a form of attitude and results from a comparison of expectations with perceptions of performance (Parasuraman et al. 1988). Gronroos (1982) developed a model which illustrates that the qualities of a service as perceived by customers: technical dimension refers to the result of the service (what has been provided); and functional dimension refers to the way the service has been delivered (how has the service been provided). However, this theory may not be adequate because it is important to study quality in each specific situation (Lagrosen 2001). Expanding on the research and development initiated by Gronroos (1988; 1990), Parasuraman et al.'s (1985; 1988) concept of service quality was refined and developed into the SERVQUAL instrument. An exploratory qualitative study was undertaken to investigate the concept of service quality. The study found consistent patterns that emerged from the executive interviews on 'A set of key discrepancies or

gaps exists regarding executive perceptions of service quality and the tasks associated with service delivery to consumers. These gaps can be major hurdles in attempting to deliver a service which consumers would perceive as being of high quality’ (Parasuraman, Zeitham & Berry. 1985, p. 44). These authors further identified five potential discrepancies or gaps associated with the delivery of a service showed in Figure 1 (Quality of Service Model) – Parasuraman et al. 1985).

Figure 1

The explanation of the five potential discrepancies or gaps are:

Gap 1	The gap between consumer expectations and management perceptions of those (consumer) expectations.
Gap 2	The gap between management perceptions of consumer expectations and the firm’s service quality specifications.
Gap 3	The gap between service quality specifications and actual service delivery.
Gap 4	The gap between actual service delivery and external communications about the service.
Gap 5	The gap between expected service and perceived service.

(Parasuraman et al. 1985, p.44)

In 1998, Parasuraman et al. concluded that if the consumer’s expectations are met, service quality is perceived to be satisfied and may affect the consumer to behave in positive ways. If the consumer’s expectations are not met, quality is perceived to be unsatisfactory and may affect the consumer to behave in negative ways, which is the cost of the company. To ensuring good service quality is meeting or exceeding what consumers expect from the service, it is illustrated in Gap 5 (Parasuraman, et al. 1985). This paper focuses on Gap 5 in the study to examine the discrepancies or gap between expected and perceived services using a modified SERVQUAL instrument to capture the perceptions of different student genders of the service quality with respect to university business student support services. This addresses a clear research gap in previous research, and complements similar studies on teaching and learning services.

Students versus Customers

Students have been recently considered as customers of higher education because they are the key group affected by service quality in commodified higher education systems. How customers are treated during the service interaction and the actual end result experienced by them inevitably affects their judgment of service quality and their choices of institutions within a highly competitive regional industry sector (Pariseau & McDaniel 1997). Rowley (2003, p. 144) stated four reasons for collecting

student feedback: to provide auditable evidence that students have had the opportunity to pass comment on their courses and associated services, and that such information is used to bring about improvements; to encourage student reflection on their learning; to allow institutions to benchmark their services, and to provide indicators that will contribute to the reputation of the university in the marketplace; and, to provide students with an opportunity to express their level of satisfaction with their academic experience.

The students' perspectives on all aspects of their higher education experiences are now widely canvassed and regarded as essential to the effective monitoring of quality in universities (Hill et al. 2003). Ostrom, Bitner & Burkhard (2011) argued, students are the core customers and viewed education as a service system. Even though service quality is difficult to measure in higher education environments, student evaluation of teaching, learning and support services is a vital source of input data (Helms, Williams, & Nixon 2001). This research concurs with Yeo's (2008) study, perceptions of tertiary students as either customers or consumers will have a direct impact on the dynamics created within and outside a learning space. As confirmed by Dicker, Garcia & Kelly (2017, p. 1), student expectations with regard to what comprises quality in higher education can impact upon their learning, engagement and overall satisfaction. These results suggest the importance of clearly articulating what is available in terms of support (academic, pastoral, study and health) to all students.

The higher education environment and its customers

Pitman (2016, p. 350) stated, higher education market adopting a supply-driven approach, students have been seen as some form of customer. In similar vein, Kemp and Norton (2014, p. x) asserted that it was desirable to 'create more competition with the public universities', which brought the role of student-as-customer into sharper relief. Furthermore, studies that examine student satisfaction in higher educational institutions from a customer-oriented perspective may provide additional dimensions to the educational planning activities of colleges and universities (DeShields, Kara & Kaynak 2005). In Koris and Nokelainen's (2015, p.128) findings, 'students expect to be treated as customers in terms of student feedback, classroom studies, and to some extent also in terms of communication'. Student satisfaction surveys provide institutions with a tool to understand the

complexity of the total learning experience and include the institutional leadership more directly in quality development issues, thus reducing student drop-out rates (Wiers-Jenssen, Stensaker & Groggaard 2002).

Student Gender and service quality ratings

The masculinity and femininity cultural dimensions are of particular interest because this is the only cultural dimension for which Hofstede (1980, 1991) identified gender differences. The masculine dimension is the social emphasis on traditional masculine values such as competitiveness, assertiveness, achievement, ambition, and high earnings (Hofstede 1991). In masculine cultures, gender roles are clearly distinct. The feminine dimension refers to social emphases on values such as nurturing, concern for relationships, and valuing the quality of life (Hofstede 2001). According to Hofstede Insights (Country Comparison n.d.), Australia scores 61 on masculine dimension. In a masculine society, behaviour in school, work, and play are based on the shared values that people should ‘strive to be the best they can be’ and that ‘the winner takes all’. Australians are proud of their successes and achievements in life, and it offers a basis for hiring and promotion decisions in the workplace. Conflicts are resolved at the individual level and the goal is to win. Malaysia and Singapore, as stated on Country Comparison (n.d.), scores 50 and 48 respectively. This means that the softer aspects of culture such as levelling with others, consensus and sympathy for the underdog are valued and encouraged. Being modest and humble is seen as very important, thus showing that one knows it all and therefore has come to educate one’s counterparts is not liked. Conflicts are avoided in private and work life and consensus at the end is important. During discussions, being cautious is important and not to being too persistent (Country Comparison n.d.). Understanding the cultural differences of Australia, Malaysia and Singapore could therefore lead to insights into different genders’ perceptions of service quality.

The service quality literature has generally overlooked the potential importance of customer gender. Researchers suggest that men and women are dissimilar in information processing patterns (Maheswaran & Meyers-Levy 1990; Meyers-Levy & Maheswaran 1991; Dube & Morgan 1996).

According to Dube and Morgan (1996) and Fisher and Dube (2003), women seem to engage in more

detailed elaboration of information, whereas men tend to have a more general information processing style. Women also tend to over-emphasise negative information, and men appear to give more salience to positive information. Iacobucci and Ostrom (1993) concurred that women might be more sensitive to relational aspects of the service interaction than male counterparts. Since services are provided by both men and women, service organisations have an interest in research that examines how male and female customers respond to service encounters. The quality of any service encounters experienced by customers forms part of their overall impression of the whole service provided (Dale 2003).

Most organisational studies have been conducted in male-dominant occupations with little consideration of potential gender-based differences (Thomas & Ganster 1995). Some studies have found that the gender of the customer may affect employee performance ratings, and female raters generally give higher performance ratings than their male counterparts (Henderson 1984). Another study, however, found this to be true only in cases where the performance of the employee was low (Huber 1989). Mattila’s (2000) study revealed, customer gender failed to have an impact on service encounter evaluations in a hotel and restaurant setting. Similarly, Leong and Sohail’s (2006) study, found that gender was considered a non-issue in career influences in Malaysia. However, Snipes, Thomson and Oswald (2006) findings showed biases exist in service quality evaluations; male customers tended to rate the fairness of service encounters higher than female customers. Therefore, this current study is designed to close this gap in the research by investigating students’ gender and service quality ratings in service encounters in higher education settings.

Research Question and Hypotheses

The conceptual framework (Diagram 1) and research question for the study was developed.

Diagram 1: Conceptual framework



The research question for the study: Will students' gender affect their service quality ratings of university student advisors in Australia, Malaysia and Singapore?

Hypotheses for the study:

H1: There is significant difference between male and female students' expectations of the service quality of university student advisors in Australia, Malaysia and Singapore.

Ho1₁: There is significant difference between male and female students' expectations on service quality in Australia.

Ho1₂: There is significant difference between male and female students' expectations on service quality in Malaysia.

Ho1₃: There is significant difference between male and female students' expectations on service quality in Singapore.

H2: There is significant difference between male and female students' perceptions on service quality of university student advisors in Australia, Malaysia and Singapore.

Ho2₁: There is significant difference between male and female students' perceptions on service quality in Australia.

Ho2₂: There is significant difference between male and female students' perceptions on service quality in Malaysia.

Ho2₃: There is significant difference between male and female students' perceptions on service quality in Singapore.

H3: There is significant difference between male and female students' discrepancy/gap on service quality of university student advisors in Australia, Malaysia and Singapore.

Ho3₁: There is significant difference between male and female students' discrepancy/gap on service quality in Australia.

Ho3₂: There is significant difference between male and female students' discrepancy/gap on service quality in Malaysia.

Ho3₃: There is significant difference between male and female students' discrepancy/gap on service quality in Singapore.

METHODOLOGY

SERVQUAL instrument

The modified SERVQUAL instrument was used to assess service quality in the study. It was developed by Parasuraman, Zeithaml and Berry in 1985 with an original 10 dimensions (i.e. tangibles, reliability, responsiveness, competence, access, courtesy, communication, credibility, security and understanding), which was further reduced to 5 dimensions (i.e. tangibles, reliability, responsiveness, assurance and empathy) due to overlapping among the dimensions (Parasuraman et al. 1988). There are two parts of the modified SERVQUAL, with 22-items measuring expectations of customers, and similarly worded 22-items measuring perceptions of customers to measure the quality of the service quality. Responses to the expectation and perception statements are compared. If the expectation response is higher than the perception response, the score will be negative. If the perception response is higher than the expectation response, the score will be positive. A positive score indicates an area of strength that represent a competitive advantage for the service provider (Parasuraman et al. 1988).

Research Method

The study was conducted by survey questionnaire with a sample of first- and third-year undergraduate business students in universities in Australia, Singapore and Malaysia. A pilot study of ten volunteer students was used to confirm the validity of the survey, in line with Masato's (2011) argument that conducting pilot studies are to find and correct flaws before main studies are conducted. A random number of 250 to 300 students was invited from each year and surveyed, resulting in a total of 1277 usable completed surveys (Australia – 750; Malaysia – 264; Singapore – 263). The structured questionnaire comprised a cover letter; 16 demographic questions; and two sets of 22 statements of students' expectations and students' experiences of the services provided. A seven-point interval scale was used ranging from 1 (strongly disagree), 2 (disagree), 3 (somewhat disagree), 4 (neither agree nor

disagree), 5 (somewhat agree), 6 (agree), to 7 (strongly agree). The seven-point interval scale was deployed to avoid the central-tendency ‘bunching’ that commonly characterises Asian responses to a questionnaire (Ellis & Williams 2001). Finally, the questionnaire contained two open-ended questions to students to provide general comments of the study. SPSS was used to analyse the data obtained.

According to Parasuraman et al. (1988), the five dimensions of service quality have a reliability score of 0.92. Vaughan and Woodruffe-Burtin (2011) stated, the attributes contained in each dimension of SERVQUAL has Cronbach alpha scores above the minimum score of 0.7 for confirming the internal consistency of attributes contained in each dimension. Tebai, Maharani and Rahardjo (2017) further supported the reliability test of the SERVQUAL was in excellent agreement with Expectation 0.95 and Perception 0.88.

DISCUSSION

Hypothesis 1: A T-test was performed to determine if there was a difference between male and female students’ expectations of service quality in Australia, Malaysia and Singapore (Table 1). For Australia, given that Levene’s test has a probability greater than 0.05, the two-tail significance of equal variances indicates that $p < 0.05$ ($p = 0.014$) and, therefore, is significant. Therefore, accept H_{01} . This means that there is significant difference in male and female students’ expectations of service quality in Australia. The result may further relate to Hofstede Insights (Country Comparison n.d.), Australia is considered a “Masculine” society, behavior in school, work, and play are based on the shared values that people should “strive to be the best they can be” and that “the winner takes all”. Australians are proud of their successes and achievements in life. In Malaysia and Singapore, given that Levene’s test has a probability lesser than 0.05, it can be assumed that the population variances are unequal. The two-tailed significance of unequal variances indicates that $p > 0.05$ (Malaysia, $p = 0.528$; Singapore, $p = 0.267$) and therefore is not significant. The null hypothesis H_{012} and H_{013} are rejected. This means that there is no significant difference between male and female students’ expectations of the quality of service in Malaysia and Singapore. This is in line with discussion on Hofstede Insights (Country Comparison n.d.), this means that the softer aspects of femininity cultural dimension such as leveling with others, consensus, sympathy for the underdog are valued and encouraged. Being modest and

humble is seen as very important; conflicts are avoided in private and work life and consensus at the end is important. During discussions being cautious is important, not to being too persistent.

Table 1 here

Hypothesis 2: A T-test was performed to determine if there was a difference between male and female students’ perceptions of service quality in Australia, Malaysia and Singapore (as showed on Table 2 below). For Australia, given that Levene’s test has a probability greater than 0.05, the two-tail significance of equal variances indicates that $p < 0.05$ ($p = 0.024$) and, therefore, is significance.

Therefore, accept H_{02_1} . This means that there is significant difference in male and female students’ perceptions of service quality in Australia. In Malaysia and Singapore, given that Levene’s test has a probability greater than 0.05, it can be assumed that the population variances are equal. The two-tailed significance of equal variances indicates that $p > 0.05$ (Malaysia, $p = 0.850$; Singapore, $p = 0.276$) and therefore is not significant. Therefore, the null hypothesis H_{02_2} and H_{02_3} are rejected. This means that there is no significant difference in male and female students’ perceptions of the quality of service in Malaysia and Singapore.

Table 2 here

Hypothesis 3: A T-test was performed to determine if there was a difference between male and female students’ discrepancy/gap of service quality in Australia, Malaysia and Singapore (Table 3). For Australia, Malaysia and Singapore, given that Levene’s test has a probability greater than 0.05, the two-tail significance of equal variances indicates that $p > 0.05$ (Australia, $p = 0.847$; Malaysia, $p = 0.736$; Singapore, $p = 0.115$) and, therefore, is not significance. Therefore, reject H_{03_1} , H_{03_2} and H_{03_3} . This could infer that male and female students’ expectations are met and the quality of service is perceived to be more than satisfactory in Australia, Malaysia and Singapore. However, this current finding is inconsistent with Hadikoemoro (2001) findings, where male students perceived discrepancy/gap higher service quality than do females.

Table 3 here

Implications

Previous research has shown differences in perceptions of the quality of service according to gender, with female students both expecting and perceiving higher levels of the quality of service than male students (Ruby 1996). This study found significant differences between male and female students' expectations and perceptions of university student support services in Australia; however, not in Singapore and Malaysia. This may reflect cultural differences between Australia, Malaysia and Singapore or the differing quality of their respective services. Regardless of the reasons, Australian university support services could use these findings to review their processes, especially as they need to remain competitive for international students in the region. Understanding the expectations and perceptions of both male and female students, the service managers will be able to develop and design service strategies that respond to the different needs of male and female customers. Knowing these needs would also be useful for designing training and development programs for the front-line staff, so that they can be more tactful and effective, in providing services to the students. Cultural aspects of their service delivery processes might be an important factor in these deliberations. On the other hand, none of the student cohorts in any of the three countries indicated a significant discrepancy or gap between their expectations and perceptions. This might be attributed to low expectations on the one hand or satisfaction on the other. These issues could be explored further across the region, with larger samples and more countries included, together with longitudinal studies.

Research limitations

The data collection was conducted in 2007, 2008 and 2009, thus more recent comparative study could be conducted to gain an insight into possible differences between students' perceptions of service quality in higher education environments on the basis of gender. Secondly, private institutions and other faculties in universities could be invited to participate in the study, and larger sample sizes from Malaysia and Singapore might better justify our findings on the situation in Malaysia and Singapore.

Future research

Numerous research studies have shown that culture has an impact on students' perceptions of service quality (Donthu & Yoo 1998; Furrer, Liu & Sudharshan 2000, 2001; Imrie, Cadogan & McNaughton 2002; Kueh & Voon 2007). Future research could extend to an understanding of the

influence of cultural aspects on the perspectives of the participants; this could provide insights into their expectations, perceptions and gaps in service quality. Hence this would improve services provided by students' advisors. Another future research area would be to examine universities' strategies on the training and development of business student advisors. And expand on current findings to do a comparative study on student genders' discrepancy/gap on perceived quality service.

CONCLUSION

As colleges and universities have attempted to become more student-oriented (Wright 1996), students' perceptions of the higher education experience have become more important to tertiary institutions. In order to compete effectively in the marketplace, institutions need to differentiate themselves from their competitors by providing higher quality services (Joseph 1998). To consider how, and to what effect this is done, this study focuses on the discrepancies/gaps between expected and perceived services, using a modified SERVQUAL instrument to examine business students' genders' discrepancies/gaps of the quality of service in higher education environments in the Asia Pacific region, across Australia, Malaysia, and Singapore. The total usable survey was 1277, caution must be used in generalising results.

The findings showed male and female students' expectations are met, and the quality of service is perceived to be more than satisfactory in all three countries (Australia, Malaysia and Singapore), perhaps due to limited expectations. However, the findings showed female students in Australia demonstrate higher expectations and perceptions of the quality of service than male students, a finding not replicated in Malaysia or Singapore. With an understanding of the expectations and perceptions of both male and female students, the service managers are able to develop and design service strategies that respond to the different needs of male and female customers in Australia. Hence, knowing these needs would be useful for designing training and development programs for the front-line staff, so that they can be more tactful and effective, in providing services to the students.

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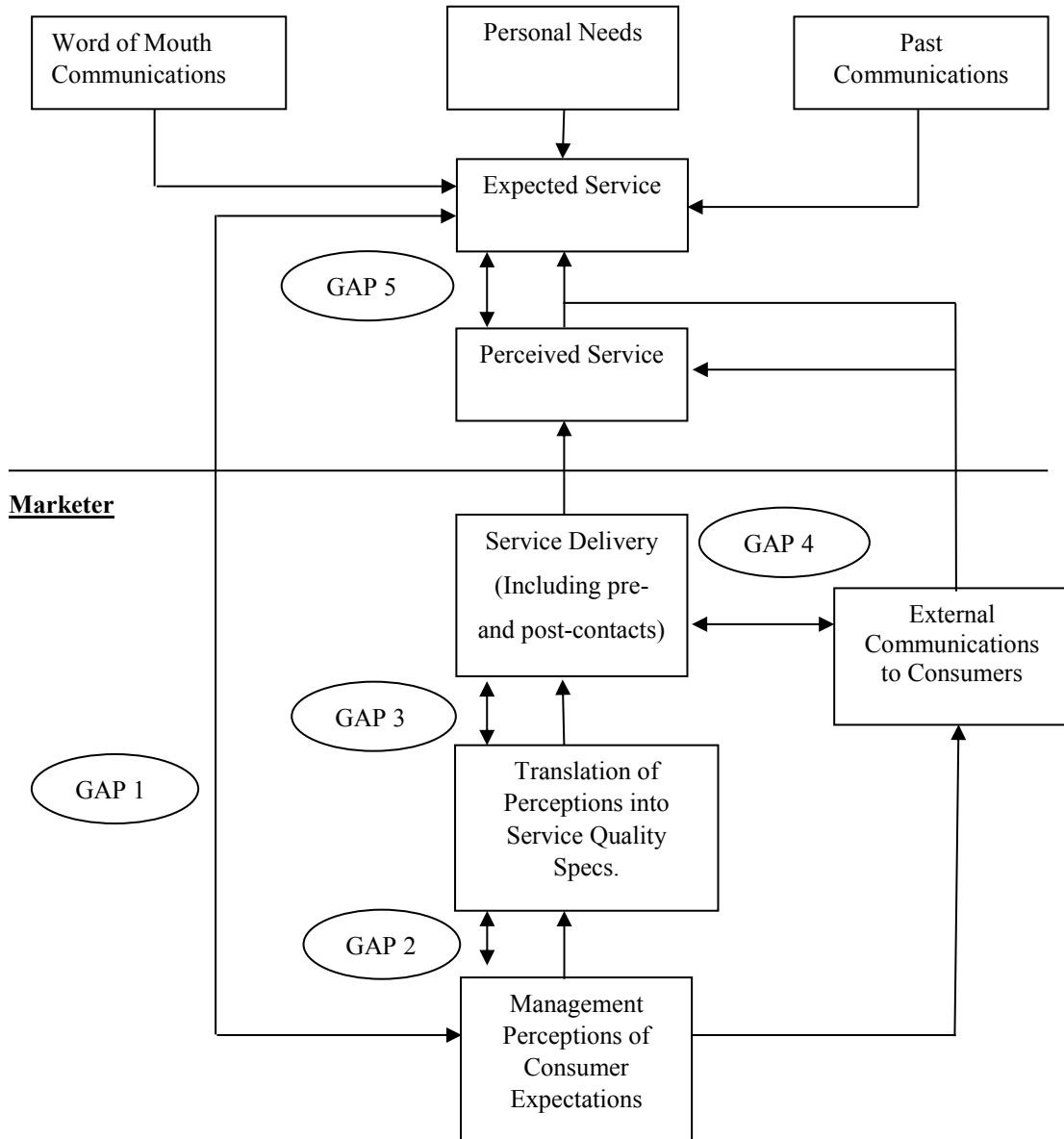
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Figure 1: Quality of Service Model

Consumer



(Source: Parasuraman, Zeithaml & Berry 1985)

Table 1: Independent Sample T-test for Male and Female Students' Expectations of the Quality of Service in Australia, Malaysia, and Singapore

Australia

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
Expectation	Male	394	112.7513	12.85915	.64783
	Female	356	115.0393	12.48813	.66187

Independent Samples Test

		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	of the Difference	
									Lower	Upper
Expectation	Equal variances assumed	.255	.614	-2.467	748	.014	-2.28806	.92753	-4.10893	-.46718
	Equal variances not assumed			-2.470	744.108	.014	-2.28806	.92615	-4.10624	-.46987

Malaysia

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
Expectation	Male	49	110.8163	12.88034	1.84005
	Female	215	112.0651	10.19783	.69549

Independent Samples Test

		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	of the Difference	
									Lower	Upper
Expectation	Equal variances assumed	5.714	.018	-.735	262	.463	-1.24879	1.70008	-4.59635	2.09877
	Equal variances not assumed			-.635	62.409	.528	-1.24879	1.96710	-5.18045	2.68287

Singapore

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
Expectation	Male	146	122.1712	8.87955	.73488
	Female	117	123.4017	8.96647	.82895

Independent Samples Test

		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	of the Difference	
									Lower	Upper
Expectation	Equal variances assumed	.079	.778	-1.112	261	.267	-1.23048	1.10660	-3.40947	.94852
	Equal variances not assumed			-1.111	247.623	.268	-1.23048	1.10779	-3.41237	.95142

Table 2: Independent Sample T-test for Male and Female Students’ Perceptions of the Quality of Service in Australia, Malaysia, and Singapore

Australia

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
Perception	Male	394	98.7157	12.60277	.63492
	Female	356	100.7697	12.16727	.64486

Independent Samples Test

		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	of the Difference	
									Lower	Upper
Perception	Equal variances assumed	.624	.430	-2.266	748	.024	-2.05393	.90659	-3.83368	-.27417
	Equal variances not assumed			-2.270	744.714	.024	-2.05393	.90497	-3.83052	-.27733

Malaysia

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
Perception	Male	49	95.2653	14.50111	2.07159
	Female	215	95.6837	13.84772	.94441

Independent Samples Test

		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	of the Difference	
									Lower	Upper
Perception	Equal variances assumed	.230	.632	-.189	262	.850	-.41841	2.21142	-4.77284	3.93601
	Equal variances not assumed			-.184	69.353	.855	-.41841	2.27670	-4.95990	4.12307

Singapore

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
Perception	Male	146	102.6644	6.85543	.56736
	Female	117	101.6154	8.71468	.80567

Independent Samples Test

		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	of the Difference	
									Lower	Upper
Perception	Equal variances assumed	1.505	.221	1.093	261	.276	1.04900	.96004	-.84140	2.93940
	Equal variances not assumed			1.065	216.904	.288	1.04900	.98540	-.89318	2.99118

Table 3: Independent Sample T-test for Male and Female Students' Discrepancy/Gap regarding the Quality of Service in Australia, Malaysia, and Singapore

Australia

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
GAP	Male	394	-14.0355	17.63480	.88843
	Female	356	-14.2697	15.31841	.81187

Independent Samples Test

		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	of the Difference	
									Lower	Upper
GAP	Equal variances assumed	1.081	.299	.193	748	.847	.23413	1.21209	-2.14536	2.61362
	Equal variances not assumed			.195	746.857	.846	.23413	1.20351	-2.12854	2.59680

Malaysia

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
GAP	Male	49	-15.5510	15.52560	2.21794
	Female	215	-16.3814	15.52007	1.05846

Independent Samples Test

		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	of the Difference	
									Lower	Upper
GAP	Equal variances assumed	.343	.559	.338	262	.736	.83037	2.45701	-4.00762	5.66837
	Equal variances not assumed			.338	71.521	.736	.83037	2.45756	-4.06924	5.72999

Singapore

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
GAP	Male	146	-19.5068	11.52882	.95413
	Female	117	-21.7863	11.73547	1.08494

Independent Samples Test

		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	of the Difference	
									Lower	Upper
GAP	Equal variances assumed	.092	.762	1.581	261	.155	2.27948	1.44197	-.55990	5.11885
	Equal variances not assumed			1.578	246.743	.116	2.27948	1.44481	-.56626	5.12521

Stream 15. Technology, Innovation and Supply Chain Management
Competitive Session

**Managing Terminal Service Performance:
In the Context of Indonesian Container Ports**

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Stream 15. Technology, Innovation and Supply Chain Management Competitive Session

Managing Terminal Service Performance: In the Context of Indonesian Container Ports

ABSTRACT:

Container terminals act as vital nodes in the global supply chain for the import of goods. The terminal service performance depends on its resource availability, the efficiency of the logistics flow process and policy intervention from the government. Drawing on the resource-based view theory, this study investigates the effect of terminal resources, terminal logistics processes and government support in container terminal service performance. Results of SEM using survey data from Indonesian container terminals show that terminal resources and government support have a positive and significant effect on terminal process improvement which then affects the terminal service performance positively. The study draws the attention of managers that the efficiency of terminal logistics processes can help improve the overall terminal service performance.

Keywords: Organizational Performance, Operations Management, Supply Chain Management, Improvement, Integration

1. BACKGROUND

Seaport inevitably acts as a vital node in global supply chain facilitating diverse logistics and transshipment functions through container terminals within the port (Kunaka, Antoci, & Sáez, 2013; Lam, 2016; Thai & Grewal, 2005). The globalization of trade has encouraged companies to engage in import and export of goods from/to countries across the border. In this context, the container terminals represent a convergence point between intermodal transport and cargoes transshipment (H. Cho & Kim, 2015). As the majority of seaborne container cargo pass through the terminals, hence, the performance of the container terminal is very vital and thus depends on the operating efficiency (Bichou, 2013; Ju & Liu, 2015; Yeh et al., 2007), and smooth flow of inbound and outbound logistics (Geweke & Busse, 2011). However, cargo unit is commonly used to measure port output rather than service unit, thus neglecting the resource utilization by the port in cargo handling operation. Therefore, the service performance in container terminal becomes important and has drawn the attention of academics. Terminal service performance is defined as the in-terminal supports and procedures offered during a service encounter to the satisfaction of the parties involved in the trading (Ali, Hussain, & Ryu, 2016; Grove, Fisk, & Dorsch, 1998).

Whilst the importance of service quality in the maritime industry and port in specific is recognized (Thai, 2008; Thai, Tay, Tan, & Lai, 2014; Yuen & Thai, 2015), the corresponding service performance

studies in the container terminal are few and do not have a uniformity on the definition and the attributed dimensions (Ha, 2003; Yeo, Thai, & Roh, 2015). For instance, Lopez and Poole (1988) suggested efficiency, timeliness, and security as the indicator to measure the quality of port services, whereas Ha (2003) came up with seven port service quality factors namely: ready information availability of port-related activities, port location, port turnaround time, facilities available, port management, port costs, and customer convenience. In the meantime, C.-H. Cho, Kim, and Hyun (2010) introduced the endogenous, exogenous and relational quality as the determinants of port service quality and investigated its effect on customer satisfaction, loyalty, and referral intentions. Further, Thai (2008) confirmed a six dimensions model, namely: resources, outcomes, process, management, and image and social responsibility (ROPMIS) to define service quality concept in maritime transportation. Subsequently, Yeo et al. (2015) confirmed that resources, outcomes, process, management, and image and social responsibility simultaneously reflect port service quality which has a positive effect on customer satisfaction. However, these preceding studies omitted the imperative dimension such as government support, which was mainly characterized as strategic development initiative of Asian container port (Lee & Flynn, 2011). Henceforward, from the resource-based view (RBV) perspective, the current study comprises physical and non-physical resources as factors of container terminal resources (H. Cho & Kim, 2015) as well as take account of government support and terminal logistics processes as important determinant that contributes to terminal service performance.

Seaports are vital to the country's international trade and affect logistics cost (Wu & Goh, 2010). Accordingly, low port performance will significantly affect the country's economic growth. Munim and Schramm (2018) empirically find the importance of seaborne trade which turns out as a major contribution to the economy where port infrastructure and logistics performance play an important role. Indonesia, in this context, is the largest economy in ASEAN and has stable political and economic growth in the South East Asian region (Ryu, 2015). Also, Indonesia is the 16th largest GDP in the world (IMF, 2018) and ranked 13th in the world annual container throughput. In 2016, Indonesia exported 3,889 commodities to 220 countries and imported 4,403 commodities from 213 countries with an overall exports value (FOB) of US\$ 144,490 million and an overall import value (CIF) of US\$ 135,653 million (WITS, 2018). As the world largest archipelagic country and consisting of about 17,000 islands,

Indonesia experiences ever-increasing trade volume and suffers from inadequate port capacity and infrastructure resulting in shipping congestion problems and poor dwell times (Ray, 2008). The container terminal within the port experiences major operational challenges in dealing with the volume of cargo passing through it.

Additionally, compared to its neighboring countries, Indonesia is recently ranked 46th in the 2018 Logistics Performance Index (LPI), facing tighter trade competition with neighboring countries like Singapore (7th), Thailand (32nd), Vietnam (39th), and Malaysia (41st) (World Bank, 2018). As ports become a part of the global supply chain, competition occurs between the intermodal networks, not between ports (de Langen & Chouly, 2004). LPI itself contains a quality parameter of logistics, infrastructure, timeliness, and service, as well as Customs inspection. As a result, the low LPI poses a competitive pressure in improving the terminal service performance in current terminal resources and logistics processes; and thus, it requires further investigation to understand the dimensions that port authority and government to address.

Therefore, this research aims to determine the extent to which the terminal resources and government support are related to improving terminal logistics processes that eventually help to achieve higher terminal service performance. In order to achieve the objective, the following research questions are developed:

- a. What is the nature of the relationship between the terminal resources, terminal logistics processes and government support in influencing the terminal service performance?
- b. To what extent do the terminal resources, government support and terminal logistics processes will influence the terminal service performance?

This paper is organized as follows. The initial part evaluates the resource-based view as a theory underpinning the study. Next section proposes a conceptual research framework that houses all the constructs discussed in the literature review. Third, the research design is presented, followed by the data analysis and findings. Subsequently, the theoretical and organizational contributions are conferred. The paper is summarised with a conclusion.

2. LITERATURE REVIEW

2.1. Resource Based View Theory

The supply chain in a port is widely regarded as being complex and possesses a unique control hierarchy among port authorities, governments, terminal operators and shipping firms that together influence the interaction of authority, investment, and innovation among the port actors (Burns, 2015). Barney (1996) suggests that resources are scarce, limited and in-substitutable. Based on the resource-based view (RBV) theory, this study argues that tangible and intangible resources determine a firm's capability to achieve competitive advantage in the port sector. Physical resources are tangible assets (Burns, 2015; Lirn, Thanopoulou, Beynon, & Beresford, 2004); whereas, organizational culture and knowledge (Barney, 1991, 1996), natural environment of hinterland (Wang, Jung, Yeo, & Chou, 2014), port interconnectivity (Burns, 2015; Wang et al., 2014) and value-adding activities (Burns, 2015) are signified as intangible resources that can be utilised to create competitive advantage (Barney, 1991, 1996). As terminal operations conform to government regulation and policies (e.g., provision of land and equipment for physical inspection by Customs and Quarantine), consequently, the limited resources within the container terminal determine the level of performance (Cai, Jun, & Yang, 2010).

2.2. Service Performance

Terminal operators provide services in container handling from the ship's berth to the exit gate where it accounted for around 80% of the cost of stacking and unstacking a container (Tovar, Trujillo, & Jara-Díaz, 2004). This process involves various operators and customs procedures; therefore, terminal operators are required to integrate the logistics functions to maximize its efficiency and adds value rather than rely solely on location and individual operation (Jacobs & Hall, 2007). Grönroos (1990) define service as intangible activities that happen in the interactions between the client and the facility supplier, where supplier's employees, goods and system are provided by the service provider as problem solutions for the customer. Handling facilities and equipment are primarily managed by the port authority, terminal operators or inland logistics corporations. These various agents provide numerous assistance, ranging from berthing services, container stacking yards, cranes, and vehicles (Burns, 2015).

Overarching the facility provided by terminal operators is the terminal service performance, where it quantifies whether a port is performing well or not. The performance itself can be described as

a number of received products or services that is reported on a scale with good and bad performance ratings (Oliver, 2010). The supports and processes delivered by the service providers during a service encounter leading to stakeholder's satisfaction are referred as 'service performance' (Ali et al., 2016; Grove et al., 1998). Preceding literature in port service quality also indicated a significant association between the performance of the service provider and consumer satisfaction (Sayareh, Iranshahi, & Golfakhrabadi, 2016; Thai, 2008; Yeo et al., 2015). Ovretveit (1993) argue that service quality involved internal management processes, not just based on customers' perceptions. Subsequently, Thai (2008) identifies that the quality of internal and external management processes is as important as the satisfaction of customers. Therefore, the terminal operators' perception is utilized in this study as the source of perceived service quality within the terminal. While the literature demonstrates many dimensions of service performance; the current study attempts to fill the gap by the proposing terminal service performance into four groups with 'government support' as the new determinant. Hence, the contemporary framework is proposed as follow: (1) *Terminal Resources*: associated with tangible and intangible inputs, such as personnel, equipment, infrastructure and hinterland; (2) *Terminal Logistics Processes*: associated with business and related logistics processes, including lean practices, managing employees and customers relationship as well as managing information sharing, all together with integration practices in the terminal; (3) *Government support*: basically, associated with government support, incentive, policy and regulation in the terminal container industry; (4) *Terminal Service Performance*: encompasses service achievement in time, cost and quality that resulted in value-added service, fast response and higher customer satisfaction.

3. CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

From the RBV perspective (Barney, 1991), port resources can be categorized into three types: human resources, equipment, infrastructure, and hinterland. Therefore, channel depth/ width/ length, number of exit gates, and the container yard are viewed as port infrastructure (Bichou, 2013; Wanke & Barros, 2015). The number of cranes (Cullinane, Ji, & Wang, 2005; Cullinane & Wang, 2007; Cullinane, Wang, Song, & Ji, 2006), number of forklifts (Bichou, 2013), labors, number of tugboats (Tongzon, 2001), and warehousing area (Nguyen, Nguyen, Chang, Chin, & Tongzon, 2015) are specifically categorized as container handling facilities and equipment in container ports (J. J. Liu, 2012; Talley,

2009). The allocation of resources and the amount of resources needed are vital in providing the quality of port services (Talley, Ng, & Marsillac, 2014). Therefore, these resources within container port are likely to have a positive effect on terminal service performance. Therefore, the following hypothesis is proposed:

Hypothesis H1: Terminal resources have a positive effect on terminal service performance.

When a port operates providing a service, it means the port allocate and utilize its limited resource in the most efficient way possible (Talley et al., 2014) to maximize its output (Talley & Ng, 2016). It implies the importance of resources adequacy and availability to conduct logistics operations and processes (i.e. cargo handling and other port services) which in turn affect service quality. Hence, an inadequate port infrastructure is likely to slow down operations efficiency in a container terminal. Adding to the number of exit gates and upgrading the computer systems will improve the container flow. Well-equipped infrastructure and integrated business process will help to reduce the inventory level, container waiting time, and related document processing by eliminating any unnecessary steps in the process itself. Smoother material and information traffic as well as seamless operations are likely to result in fewer deficiencies in the container flow process. An increased number of berths, improvement in yard occupancy and berth dwelling time, and a reduction in the operations bottleneck will lead to less waiting time, reduced inventory, and faster document processing. Utilization and transformation process of port resources into delivering value-added products to consumers define the logistics service capability (C.-L. Liu & Lyons, 2011). Hence, the following hypothesis is proposed:

Hypothesis H2: Terminal resources positively affect the terminal logistics processes

An efficient port is a port that is proficient in its operations (De Monie, 1987). The requirement to be efficient drives port to streamlining their operational processes by adopting the lean principle, just-in-time, network collaboration, and agility approach which eventually convert the port into a center of excellence (Casaca, 2005). The lean port network offers a notion that port should transform itself into a provider of transport solutions where service can be provided to customers with no delay (process wastes) in the system (Paixão & Marlow, 2003). As lean practices and process integration in port operations enhance overall port performance (Bešković & Tvrđy, 2011; Loyd et al., 2009; van Hoek, Harrison, & Christopher, 2001), these attributes are critical to container movement.

Further, information sharing (Olesen, Dukovska-Popovska, & Hvolby, 2011) and resources exchange are important to provide a total ‘supply chain integration’ in container terminal operation (Burns, 2015). The flow of material, services and information from berth to landside are critical (Braziotis, Bourlakis, Rogers, & Tannock, 2013), therefore, the collaboration and coordination amongst the stakeholders to expedite the flow process is also important (Mentzer et al., 2001). Subsequently, the network of relationship of internal functions or external activities within the supply chain (Stock & Boyer, 2009; Walters & Lancaster, 2000) would create an efficient, cost-effective and cohesive process (Elmuti, 2002; Lummus, Krumwiede, & Vokurka, 2001) to deliver value-added services to end customers (Basnet, Corner, Wisner, & Tan, 2003; Christopher, 2011). The effort to improve logistics performance can be made by integrating services, infrastructure development and achieving streamlined administrative processes (World Bank, 2007). Also, managing relationships amongst the key actors in ports such as port authorities, terminal operators, and logistics providers support the supply chain process integration (Rodrigue & Notteboom, 2009). The above mentioned logistics activities where inputs are transformed into value-added outcomes that satisfy the consumer can be categorized as a process (Berry, 1999). Hence, the terminal logistics process comprising of lean practices, information sharing, managing relationships, and integration practices dimensions, is proposed to influence terminal service performance. The following hypothesis is proposed:

Hypothesis H3: Terminal processes affect the terminal service performance positively.

Ng and Gujar (2009) state that the government plays a crucial role in improving the terminal operations. The government supports logistics and trade via regulatory policy, monetary funding for training, standardization, and certification for skills and develop human capital for infrastructure (World Bank, 2016). Further, government also plays vital function in establishing regulation and policy in port environment and logistics chains (Ng & Gujar, 2009) in term of privatization (Cullinane & Song, 2002; Tongzon & Heng, 2005), hinterland connectivity (Chen, Cullinane, & Liu, 2017; de Langen & Chouly, 2004; Flitsch, 2012; Notteboom & Rodrigue, 2007), as well as freight logistics (Ferreira & Tetther, 2004; McKinnon, 2009). Further, Stevens and Vis (2015) suggest that port supply chain integration can be achieved when port authorities facilitate flows, attract new flows, conduct value-adding actions, and perform as a knowledge center. Therefore, government support in the success of companies’ economic

performance is imperative (Park et al., 2016). As government authority impacts the overall port environment, therefore the following hypotheses thus are proposed:

Hypothesis H4: Government support is positively associated with terminal resources

Hypothesis H5: Government support is positively associated with terminal processes

Hypothesis H6: Government support is positively associated with terminal service performance

A conceptual framework with hypothesized relationships is presented in Figure 1.

Insert Figure 1 about here

4. METHODOLOGY

4.1. Population and Sampling Frame

Considering the wide range of volume coverage, operations complexity, and the number of container terminal operators, the ports of Tanjung Priok Jakarta, Tanjung Emas Semarang, and Tanjung Perak Surabaya was chosen for this research. These three city ports (i.e., Jakarta, Semarang, and Surabaya) have accounted for an average of 86.85% of import container volume in Indonesia for the last decade (DGCE, 2017) and played a central role in establishing swift container movement. Jakarta accommodates five major firms: PT. Jakarta International Container Terminal (JICT), PT. Terminal Peti Kemas (TPK) Koja, PT Pelabuhan Tanjung Priok (Terminal 3), PT New Priok Container Terminal 1 (NPCT1), and PT. Mustika Alam Lestari (MAL). While Semarang holds PT. Terminal Peti Kemas Semarang (TPKS), Surabaya holds two firms namely PT. Terminal Petikemas Surabaya (TPS), and PT Terminal Teluk Lamong (TTL).

4.2. Measurement and Survey Design

Valid measures of container terminal resources, terminal process, and government support were adapted from previous literature (Barney, 1991, 1996; Thai, 2008). The measures of terminal process was adopted from the fields of lean production (Andrés-López, González-Requena, & Sanz-Lobera, 2015; Marlow & Casaca, 2003; Prajogo, Oke, & Olhager, 2016), integration practices (Alfalla-Luque, Medina-Lopez, & Dey, 2013; Song & Panayides, 2008), information sharing (Germain & Lyer, 2006; Prajogo & Olhager, 2012; Shih, Hsu, Zhu, & Balasubramanian, 2012) and managing relationships (Song & Panayides, 2008) with stakeholders. The measures of government support in this study were mainly adopted from Cai et al. (2010) whilst items for value-added services and responsiveness were developed

from the work of Song and Panayides (2008), and customer satisfaction from the work of Bozarth, D.P., Flynn, and Flynn (2009) and Feng, Wang, and Prajogo (2014).

A seven-point Likert scale was employed with an anchor from 7 (strongly agree) to 1 (strongly disagree). The pilot study was conducted with five firms in the container port industry in order to assess and develop the content and relevancy of the survey items (Saunders, Lewis, & Thornhill, 2003). The data for this study is extracted from respondents working in the participating terminal operators who own pertinent knowledge and experience in terminal operations management, container handling, and supply chain management. Respondents were asked to make comments on the clarity of the statements and the length of the questionnaire. Suggestions received in relation to relevance, clarity, and comprehension of the questions were incorporated in the final version of the questionnaire.

Further data collection gathered through the mail and online questionnaire survey and directly sent to 354 employees working across eight terminal operators located in Port of Tanjung Priok, Jakarta, Port of Tanjung Emas, Semarang, and Port of Tanjung Perak, Surabaya. Out of the returned 276 responses, the sample was reduced to 255 cases due to incomplete answers and thus resulting in a 72% response rate. The survey was administered through human resource department of the terminal operator firms and subsequent reminders resulted in higher response rate. The subsequent sample was examined for further analysis. Table 1 shows the distribution of the sample regarding their position, work experience, and education level. Further, the outlier analysis decreased the sample size from 255 to 216. Thus, 216 respondents from these eight operators participated in the survey, and the study applies AMOS-structural equation modeling to analyze the relationships of the variables abovementioned.

Insert Table 1 about here

5. DATA ANALYSIS

5.1. Preliminary Analysis

Following Hair, Black, Babin, and Anderson (2014), preliminary data analysis was conducted to assess missing values, normality, outliers, and multicollinearity. The data were analyzed with exploratory factor analysis (EFA) followed by confirmatory factor analysis (CFA) to check the factor structure. The measurement model provided a satisfactory good fit model with with $\chi^2 (269) = 402.013$, $p = 0.000$, $\chi^2/df = 1.494$, Bollen-Stine $p = 0.194$, CFI = 0.964, GFI = 0.885, TLI = 0.953, RMSEA =

0.048 and SRMR = 0.0368. The measurement model is presented in Table 2 below.

Insert Table 2 about here

5.2. Reliability and Validity

Internal consistency can be determined either by Cronbach’s alpha value or composite reliability. The Cronbach's Alpha value is > 0.7 more than a minimum acceptable value 0.7 (Hair, Black, Babin, Anderson, & Tatham, 2010), and CR value is > 0.7, indicating the constructs have good composite reliability (Fornell & Larcker, 1981). Satisfactory convergent validity is attained when the construct’s AVE value is at a minimum of 0.5 (Fornell & Larcker, 1981). Table 3 shows that the AVEs were in the range of 0.585 and 0.825 for all constructs, thus satisfying the 0.5 thresholds, confirming the convergent validity of the constructs. Afterward, the discriminant validity is evaluated using the square root of the AVEs compared to the inter-construct correlation (Hair et al., 2014). Table 4 shows AVEs are greater than the maximum inter-correlation of other constructs, verifying no issue with discriminant validity (Fornell & Larcker, 1981).

Insert Table 3 about here

Insert Table 4 about here

5.3 Structural Model and Hypotheses Testing

The final path modeling confirmed the model fit with $\chi^2(41) = 101.929$, $\chi^2/df = 2.486$, $p = 0.000$, GFI = 0.925, TLI = 0.910, CFI = 0.933, SRMR = 0.0511 and RMSEA = 0.083. The normed chi-square values (χ^2/df) is less than three which means a model demonstrates a reasonable fit (Iacobucci, 2010; Kline, 2010). Comparative Fit Index (CFI) and Standardized Root Mean Square Residual (SRMR) which recommended for small samples ($n \leq 250$) (Hu & Bentler, 1999) demonstrated an acceptable model fit where CFI > 0.9 (Bentler & Bonett, 1980) and SRMR < 0.8 (Hu & Bentler, 1999). Considering these fit indices which are within the satisfactory range, it confirms an acceptable good-fitting model. The fit statistics are presented in Figure 2 and Table 5.

Insert Figure 2 about here

Insert Table 5 about here

SEM method used to examine the six hypotheses simultaneously. The relationship of terminal resources on terminal service performance was not statistically significant ($\beta = 0.282$ at $p > 0.05$); hence,

H1 is rejected. In contrast, terminal resources construct significantly influence terminal processes ($\beta = 0.685$ at $p < 0.01$); therefore, *H2* is supported. Terminal processes construct demonstrated a significant relationship with terminal service performance ($\beta = 0.747$ at $p < 0.01$); supporting *H3*. Further, government support is positively associated both with terminal resources ($\beta = 0.438$ at $p < 0.01$), and terminal processes ($\beta = 0.314$ at $p < 0.01$); supporting *H4* and *H5*. Lastly, government support has no significant association with terminal service performance ($\beta = 0.125$ at $p > 0.05$); hence, *H6* is not supported. A mediation test was further performed using the bootstrap approximation in AMOS 24 by constructing two-sided bias-corrected using 95% confidence intervals.

Insert Figure 3 about here
Insert Table 6 about here

The result confirmed a significant indirect association between terminal resources and government support on terminal service performance via terminal processes, while there also direct effects between both terminal resources and government support on both terminal processes and terminal service performance. Therefore, it can be inferred that the relations of government support on terminal processes is partially mediated via terminal resources. The investigation is continued by assessing a contending framework where the direct pathway between both terminal resources and government support to terminal service performance were deleted. The results presented a minor alteration in the X^2 value from the initial 97.910 (df=39) to 101.929 (df=41). The results confirm that removing both paths between terminal resources and government support to terminal service performance do not deteriorate the fitness of the model. This validates that terminal logistics processes fully mediate the effect of both terminal resources and government support on terminal service performance.

5.4. Discussions and Implications

The study shows that adequate resources such as material handling equipment, information systems network and their readiness are vital to accomplish the terminal operations. Nonetheless, sufficient capability of the yard to accommodate container stacking and adequate exit gate capacity to manage container traffic is also imperative to support infrastructure and hinterland connection. Further, the lean methods and standardization of operational procedures could significantly affect the terminal operations. Also, cooperation amongst port stakeholder is considered beneficial to expedite terminal

logistics process. The integration process can be achieved by choosing the best transport modes to link terminal and hinterland destinations and choosing better channels for smooth cargo flow. Equally, dissemination of updated information to the employees and stakeholders are critical for knowledge management. Correspondingly, to retain customer satisfaction, container terminal firms should provide services that at least meet the customer standards. Lastly, government support in providing support, incentive, policy, and regulation helps to improve the terminal service performance. From RBV perspective, the positive influence of terminal resources on terminal processes indicates that the adequacy of resources may have a positive effect on a terminal's business processes. The overall results indicate that government support is positively associated with improvement in terminal resources and terminal processes which in turn affecting the terminal service performance. It is unlikely for the government to influence terminal service performance directly without regulating the resources procurement, logistics processes, hinterland connectivity as well as establishing the port legal system. Government interference in ports is likely to ensure security and expediting the flow of goods via Customs regulation, as well as providing legal certainty for business actors, whether from inland transporters, importers, exporters, freight forwarders, terminal operators to the shipping industry. Theoretically, the study contributes to the literature in the maritime study in several ways. *First*, this research has employed multiple dimensions like value-added services, responsiveness and customer satisfaction as measures of terminal service performance. This is a contribution over the recent study conducted by Yeo et al. (2015) who have used a single measure customer satisfaction to assess port service quality. *Second*, the significant direct effect of government support on terminal resources and terminal processes indicates the strong influence of government role in Indonesian port environment context and supporting the study by Lee and Flynn (2011). *Third*, the result implies that there is an indirect cross-contribution amongst government support and terminal resources to the terminal processes that lead to the achievement and realization of terminal service performance. Hence, this study supports the investigation of value chain perspective where a set of inputs, conversion processes, and outputs engage in the resources consumption (Porter, 1998). Practically, the research provides useful insights for container terminal managers and policymakers. Managers should update themselves with the terminal services and document clearance procedure as they are the key to terminal operating

efficiency. Resource-based view (RBV) perspective indicates that resources are limited and scarce indicating the managers to optimally use the available resources. Further, incorporating shipping lines, government agencies, and inland transport operators as strategic partners in resolving the bottleneck in the terminal services may help in achieving a streamlined and sustainable container flow efficiency.

6. CONCLUSION AND LIMITATIONS

The results indicate that the terminal container service performance is likely to be enhanced by improving the terminal resources adequacy, accommodating government regulation in acquiring terminal resources and operating the terminal logistics process efficiently. Subsequently, the study also acknowledges some limitations. First, the study investigated the container terminal sector in Indonesia, thus, its external validity may be limited to the generalization to other ports. Second, future research may include age, experience, asset base, and education as control variables that are likely to affect the relationship. Lastly, customer satisfaction in this model is measured from the terminal operators' perception which could limit the insights from the perspective of the customers. The future research may include external customers, shipping lines, government agencies, and inland transporters for their responses.

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APPENDICES

Figure 1: Conceptual Framework of Import Container Logistic Flow

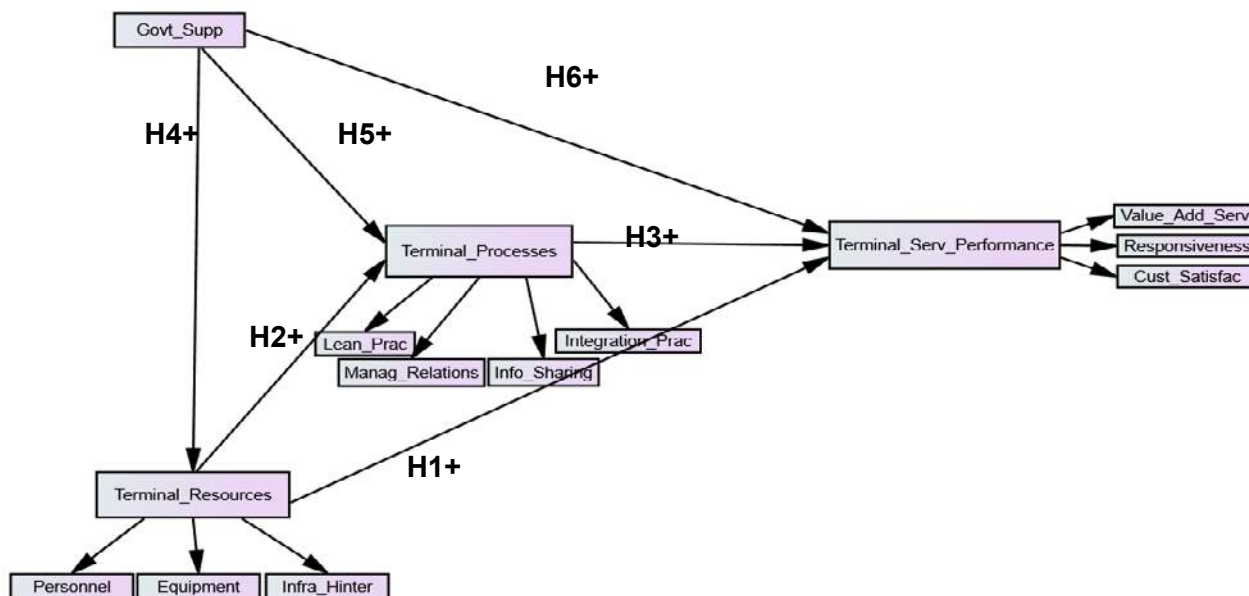


Table 1: Respondents' Profile (N=216)

Position	%	Work Experience in port industry	%	Education level	%
Assistant Manager	6.7%	Less than 5 years	25%	High school	6.7%
Director	0.8%	6 - 10 years	25%	Diploma	12.9%
General Manager	0.8%	11 – 15 years	11%	Bachelor	63.1%
Manager	16.5%	16 – 20 years	28%	Master	16.9%
President Director	0.4%	More than 20 years	15%	Doctoral	0.4%
Senior Manager	1.2%				
Senior Staff	3.1%				
Supervisor	70.2%				
Vice President Director	0.4%				
Grand Total	100.0%				

Source: Data processed

Table 2: Measurement Scale and Factor Loadings

Construct	Scale Items Description	Factor Loading
A. Scale and factor loading of Terminal Resources from CFA (N=216)		
Terminal Personnel	TP2 Personnel with sufficient capability	0.821
	TP4 Personnel with sufficient reliability	0.880
	TP5 Trustworthy personnel	0.553
Terminal Equipment	TE1 Sufficient quantity of terminal equipment	0.843
	TE2 Equipment readiness	0.923
Infrastructure_Hinterland	IH3 Sufficient container handling capability in CY	0.723
	IH5 Sufficient capability of exit gate operation	0.773
B. Scale and factor loading of Terminal Process from CFA (N=216)		
Lean Practices	LP7 Calculate the time of container and document flows and achieve efficiency using methods and tools	0.913
	LP8 Regular operational procedures standardization	0.810
Managing Relations	MR3 Cooperation with shipping lines, government agencies and inland transport operators	0.781
	MR4 Diagnose external customers' current and future requirements	0.860
	MR5 Customer requirements are disseminated and understood by personnel	0.886
Integration Practices	IP1 Performance evaluation of various transport modes to link terminal and hinterland destinations	0.729
	IP4 Identify competing channels for cargo flow	0.873
Information Sharing	IS1 Knowledge transfer for personnel	0.869
	IS2 A particular team to update company's knowledge management	0.818
	IS6 Information exchange with stakeholders	0.749
	IS7 Training and development courses for personnel	0.775
C. Scale and factor loading of Government Support Factor from CFA (N=216)		
Government Support	GS2 Government provides support to the implementation of container transportation best practices	0.888
	GS3 Government provides support in container transportation ICT (e-Gate, tracking system, RFID, etc.)	0.946
	GS4 Government provides support, logistics education system	0.890
D. Scale and factor loading of Terminal Service Performance from CFA (N=216)		
Value Added Service	VAS5 Terminal's service performance delivers higher value for customers	0.770
	VAS6 Our services are faster than competitors	0.874
Responsiveness	R2 We deliver new services to the market quickly	0.841
	R3 We are first in the market in introducing new services (innovation)	0.877
Cust Satisfaction	CS2 We always met customer standards	0.888
	CS3 Customers are pleased with our services	0.908

$\chi^2 (269) = 402.013, p = 0.000, \chi^2/df = 1.494, \text{Bollen-Stine } p = 0.194, \text{CFI} = 0.964, \text{GFI} = 0.885, \text{TLI} = 0.953, \text{RMSEA} = 0.048 \text{ and } \text{SRMR} = 0.0368$

Note:GFI=Goodness-of-Fit Index; CFI=Comparative Fit Index; TLI = Tucker-Lewis Index; * RMSEA=Root Mean Square Error of Approximation; SRMR=Standardized Root Mean Square Residual; $p < .001$

Table 3: Reliability and Validity Test

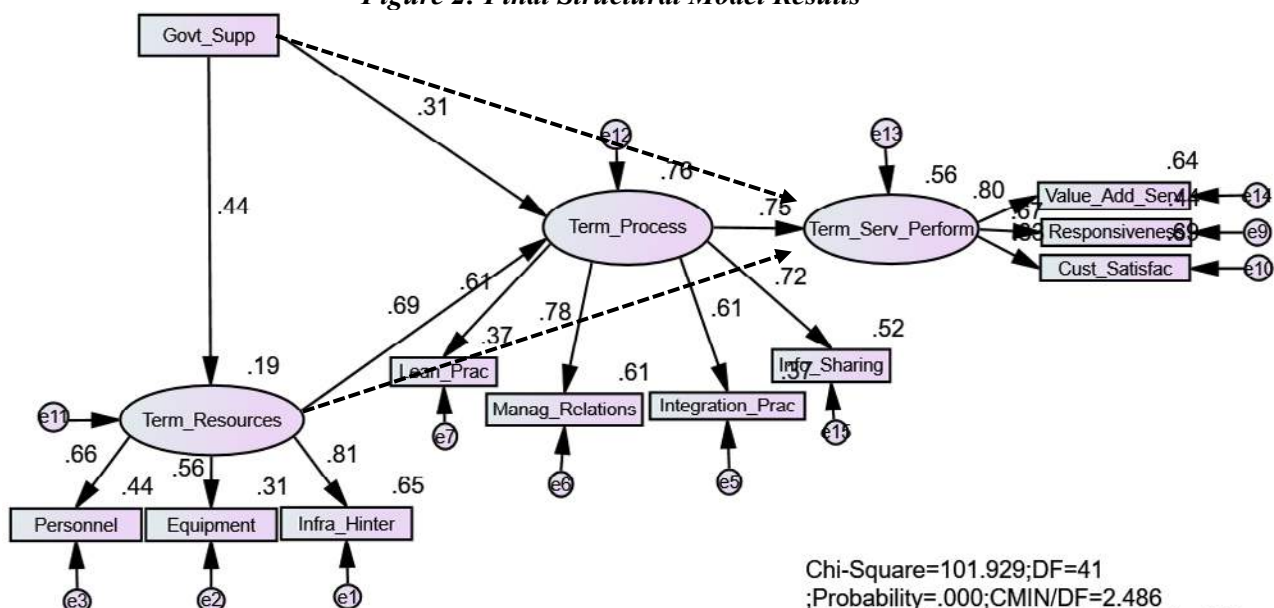
Construct	Scale Items	Description	α	CR	AVE
A. Terminal Resources					
Terminal Personnel	1	TP2	0.793	0.803	0.585
	2	TP4			
	3	TP5			
Terminal Equipment	4	TE1	0.875	0.877	0.782
	5	TE2			
Infra_Hinterland	6	IH3	0.715	0.718	0.560
	7	IH5			
B. Terminal Logistics Process					
Lean Practices	8	LP7	0.844	0.853	0.745
	9	LP8			
Managing Relations	10	MR3	0.878	0.881	0.711
	11	MR4			
	12	MR5			
Integration Process	13	IP1	0.774	0.784	0.647
	14	IP4			
Information Sharing	15	IS1	0.878	0.880	0.647
	16	IS2			
	17	IS6			
	18	IS7			
C. Government Support					
Government Support	19	GS2	0.932	0.934	0.825
	20	GS3			
	21	GS4			
D. Terminal Service Performance					
Value Added Service	22	VAS5	0.794	0.807	0.678
	23	VAS6			
Responsiveness	24	R2	0.840	0.849	0.738
	25	R3			
Cust Satisfaction	26	CS2	0.893	0.893	0.807
	27	CS3			

Table 4: Discriminant Test

Variables	1	2	3	4	5	6	7	8	9	10	11
Infra_Hinterland	<i>0.748^a</i>										
Term_Equipment	0.545	<i>0.884^a</i>									
Term_Personnel	0.739	0.442	<i>0.765^a</i>								
Govt_Support	0.434	0.323	0.309	<i>0.908^a</i>							
Inform_Sharing	0.556	0.341	0.418	0.569	<i>0.804^a</i>						
Integration_Practices	0.430	0.479	0.331	0.429	0.523	<i>0.804^a</i>					
Manag_Relat	0.644	0.354	0.498	0.482	0.632	0.665	<i>0.843^a</i>				
Lean_Practices	0.631	0.344	0.633	0.357	0.505	0.457	0.551	<i>0.863^a</i>			
Value_Added_Serv	0.681	0.434	0.408	0.333	0.498	0.385	0.526	0.350	<i>0.823^a</i>		
Customer_Satisfaction	0.531	0.352	0.346	0.516	0.528	0.405	0.536	0.367	0.783	<i>0.898^a</i>	
Responsiveness	0.485	0.269	0.248	0.425	0.523	0.424	0.384	0.329	0.652	0.613	<i>0.859^a</i>

^a Diagonal values represent the square root of AVE
 Values below the diagonal are the correlation coefficient

Figure 2: Final Structural Model Results



-----> insignificant path at $p > 0.05$
 -----> significant path at $p \leq 0.05$

Table 5: Results of the hypotheses

Hypotheses	Path	Estimate	p-value	Conclusions
H1	Term_Resources ---> Term_Serv_Perform	0.282	0.068	Not supported
H2	Term_Resources ---> Term_Process	0.685	***	Supported
H3	Term_Process ---> Term_Serv_Perform	0.747	***	Supported
H4	Govt_Supp ---> Term_Resources	0.438	***	Supported
H5	Govt_Supp ---> Term_Process	0.314	***	Supported
H6	Govt_Supp ---> Term_Serv_Perform	0.125	0.118	Not supported

Figure 3: Mediator Analysis

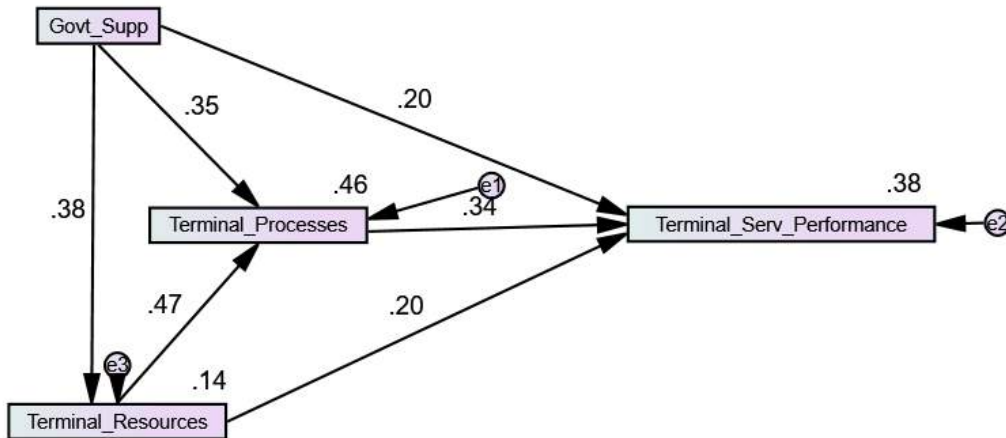


Table 6: Direct and Indirect Effects

Effects	Stdzd Direct Effect	p two-tailed direct effect results	Stdzd Indirect Effect	p two-tailed indirect effect results
Term Resources → Term Processes	0.468	p=.006 sig at p<0.01	0	
Term Resources → Term Service Performance	0.200	p=.040 sig at p<0.05	0.161	p=.004 sig at p<0.01
Govt. Support → Term Resources	0.376	p=.012 sig at p<0.05	0	
Govt. Support → Term Processes	0.346	p=.023 sig at p<0.05	0.176	p=.005 sig at p<0.01
Govt. Support → Term Service Performance	0.196	p=.018 sig at p<0.05	0.255	p=.009 sig at p<0.01
Term Processes → Term Serv.Performance	0.344	p=.007 sig at p<0.01	0	

10. Organizational Behaviour

Refereed Interactive Paper

To the (Not so) Bitter End:**Termination or Re-defining of Leader-Member Exchange Relationships**S. Gayle Baugh

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10. Organizational Behaviour

Refereed Interactive Paper

To the (Not so) Bitter End:**Termination or Re-defining of Leader-Member Exchange Relationships**

There has been a great deal of scholarly attention on the leader-member exchange model of leadership. However, less attention has been focused on the development of these leader-member relationships and virtually no attention has been directed toward successfully disengaging from a high-quality relationship. While there are structural differences between leader-member exchange relationships and the related developmental relationship of mentoring, the phase model of mentoring relationships is used to suggest the possibilities for the termination or redefinition of leader-member exchange relationships. Suggestions for future research are offered.

Interpersonal behaviour

There has been a long history of research on leader-member exchange (LMX) theory, which was summarized almost 15 years ago (Graen & Uhl-Bien, 1995), but has continued on since that point in time (Huang, Wellman, Ashford, Lee, & Wang, 2017; Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016; Yu, Matta, & Cornfield, 2018). The research has focused on the antecedents (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012) and consequences (Dulebohn et al., 2012; Gerstner & Day, 1997) of leader-member exchange relationships as well as on the quality of the relationship. However, there has been less attention directed toward the development process of the relationship itself (Cropanzano, Dasborough, & Weiss, 2009).

The relationship development process has been characterized as following the sequence of strangers to acquaintances to a mature relationship (Lord, Day, Zaccaro, Avolio, & Eagly, 2017; Nahrgang, Morgeson, & Ilies, 2009). These phases have also been identified as role-taking, role-making, and role-routinization (Bauer & Green, 1996; Graen & Scandura, 1987; Kelley & Basil, 2014). As a superior-subordinate relationship moves through these phases, the individuals are set on a path to develop a connection that can vary from a high-quality, enriched relationship to a low quality, impoverished relationship. This process takes place rather quickly (Graen & Cashman, 1975; Nahrgang, Morgeson, & Ilies, 2009) and, barring unusual circumstances, the relationship will remain relatively stable. As the term role-routinization implies, the supervisor and subordinate will have at this point developed a set of interlocked behaviors such that the relationship will remain stable unless some circumstance occurs to disrupt the pattern of behaviors (Graen & Scandura, 1987).

It is puzzling that neither theory nor research has moved beyond the point of role-routinization. Neither people nor circumstances remain static over time, so it is surprising that attention has not yet been directed toward changes in status of relationships (Nahrgang et al., 2009). The closely related literature on mentoring, a developmental relationship that is also connected to the workplace, has explicitly included consideration of termination and change of status within the model of the relationship process (Collins, 1993; Kram, 1983; Ragins & Scandura, 1997). There are differences between mentoring and leadership

relationships that suggest that the mentoring model cannot simply be “borrowed” and incorporated into the leader-member exchange model. However, it is reasonable to summarize what is known about the life-cycle of mentoring relationships as well as the differences between mentoring and leader-member exchange relationships in order to extend the leader-member exchange model beyond the role-routinization phase. Thus, first the leader-member exchange model will be briefly summarized, followed by a discussion of mentoring relationship phases, and then information relative to differences between mentoring and leadership relationships. Finally, using mentoring relationships as a comparison, questions regarding the termination of leader-member relationships will be presented.

THE LEADER-MEMBER EXCHANGE MODEL

While in most models leadership is viewed as a leader to group phenomenon, in the leader-member exchange model of leadership it is suggested that leaders develop relationships of differing quality with their various subordinates (Graen & Uhl-Bien, 1995; Katerberg & Hom, 1981). In essence, leaders treat each individual in the work group somewhat differently. Relationships can vary on a continuum from highly enriched to a more economically-based type of exchange. Enriched relationships extend beyond the formal job description. Enriched relationships involve high levels of trust and mutuality, frequent interaction, high levels of support, a full range of rewards, and a long time horizon. By contrast, lower quality relationships are constrained by the formal job description and are more economically-based with a short time horizon (Graen & Uhl-Bien, 1995; Graen & Scandura, 1987). As noted, relationships are set on a path relatively early (Graen & Cashman, 1975; Graen & Scandura, 1987; Liden & Graen, 1980; Liden, Wayne, & Stilwell, 1993).

There are a number of positive outcomes that are enjoyed by subordinates who are engaged in high quality leader-member exchanges. These positive outcomes for individuals include greater job satisfaction, greater job latitude, greater access to information, faster and more frequent promotions, and lower job stress (Dulebohn et al, 2012; Gerstner & Day, 1997; Humphrey, Nahrgang, & Morgeson, 2009; Liden, Sparrowe, & Wayne, 1997). There are also positive effects that accrue to the organization as a result of high quality relationships, including increased job performance, enhanced organizational

citizenship behaviors, and reduced turnover (Dulebohn et al., 2012; Gerstner & Day, 1997). Thus, the benefits of high quality leader-member exchange relationships are well-established in the organizational literature. However, most of the research on leader-member exchange has been cross-sectional and little attention has been paid to the development process (Cropanzano et al., 2017). Further, the limited research that has explored the relationship development process has directed only very limited attention to the latter stages of such relationships in which redefinition or termination might occur (Cropanzano et al., 2017). As a result, it is important to examine what is known about phases of mentoring relationships. Mentoring relationships are also developmental relationships and might be used to shed some light on the final phases of leader-member exchange relationships.

PHASES OF MENTORING RELATIONSHIPS

Based on her qualitative study of 18 dyads engaged in mentoring relationships, Kram (1983) developed a model of mentoring relationships that included initiation, cultivation, separation, and redefinition that has received some empirical support (Chao, 1997). The qualitative study included dyads that had been engaged in their relationship for differing time spans, thus permitting the identification and explication of relationship phases. Since that initial qualitative study, there has been a great deal of research on mentoring. However, scholarly attention has been quite unevenly distributed across the phases of mentoring.

Initiation phase

The initiation phase of a mentoring relation is the period in which the relationship begins. According to Kram (1983, 1985), this phase is the period during which the parties become aware of the possibilities of the relationship. The mentee begins to experience the support and respect of the mentor, whereas the mentor begins to see the mentee as an individual with potential to develop similar values and perspective. If the relationship in question is assigned through a formal program, then the initiation phase is constrained due to the fact that the parties do not have complete control over the choice of partner (Baugh & Fagenson-Eland, 2007). In LMX terms, both the role-taking and role-making processes of

relationship development would appear to be the equivalent of the initiation phase included in the mentoring model.

Cultivation phase

The cultivation phase of the mentoring model is the period of time when the number of mentoring functions increases to the maximum for the relationship. That is, the cultivation stage is when the parties fully enjoy the benefits that the relationship can bring to them (Kram, 1983; Kram & Brager, 1992). This phase of the mentoring relationship is equivalent to the role-routinization period of leader-member exchange. During this period, both parties learn and develop through the relationship, whether mentoring or leader-member exchange (Kram, 1985; Lankau & Scandura, 2002).

Separation and redefinition phases

The mentoring model includes two more phases that are not reflected in the leader-member exchange literature. The mentoring model includes a separation phase and a redefinition phase (Chao, 1997; Kram, 1985). The separation phase occurs as the parties grow apart or the mentee moves beyond the mentor. This phase may include conflict and some hurt feelings on the part of both parties (Collins, 1983; Ragins & Scandura, 1997). If the separation phase is successfully negotiated, then the relationship evolves into the redefinition phase. A relationship in the redefinition phase may continue indefinitely, with the parties engaging in a more peer-like relationship. Peers may also provide mentoring support and, presumably, peer mentoring will occur in this phase (Kram & Isabella, 1985). However, mentoring may be provided by either party and only on as-needed basis.

The leader-member exchange model, by contrast, concludes with the role-routinization phase. However, it is clear that the dyad will not remain permanently in this state. There are a number of options for how changes can occur in a relatively stable leader-member exchange relationship. However, these possibilities for changes in a routinized relationship have not been identified or explored in the leader-member exchange literature.

LEADER-MEMBER EXCHANGE COMPARED TO MENTORING

Before the extension of the leader-member exchange model can be proposed, however, it is necessary to delineate the differences between mentoring and leader-member exchange relationships. These differences may influence the extent to which findings on the separation and redefinition phase can be applicable to the leader-member exchange relationship.

Voluntary nature of the relationship

The first and most obvious difference between leader-member exchange relationships and mentoring is that mentoring relationships are voluntary. That is, one may choose to engage in a mentoring relationship—or choose not to do so. An individual may even seek a mentoring relationship or choose to enter a mentoring program within an organization (Colling, 1983; Ragins, 1989; Ragins & Cotton, 1991). In any case, the parties must take some action in order for the relationship to be initiated (Kram, 1983, 1985). By contrast, one must engage in a relationship with a superior. While the new economy permits the option of a self-initiated career in which one contracts with different organizations sequentially as well as simultaneously, most individuals nonetheless work in an organizational setting in which there is some formal superior with some degree of formal authority that influences the relationship.

Choice of partner

There are also differences between mentoring and leader-member exchange with respect to freedom in the choice of a partner. Partners in a mentoring relationship are not necessarily in the same work unit or even in the same organization (Baugh & Fagenson-Eland, 2005). Thus, there is a much wider range of individuals from which to choose one's mentoring partner. If a potential mentee does not respond to a potential mentor's overtures or a potential mentor does not see a good "fit" with a potential mentee, there are a number of other choices that each individual can pursue (Fagenson-Eland & Baugh, 2006; Ragins & Scandura, 1999). By contrast, an individual is hired into, promoted into, or transferred into a position. The superior is already in place in this situation. While the superior likely had a voice in the selection of the subordinate, there is less latitude with respect to the choice than would be the case for a mentor selecting a mentee. Similarly, the subordinate may have a choice of declining the position, but that choice may be constrained by an absence of alternatives (Huang et al., 2017). Thus, while there are a

wide range of choices for a partner in a mentoring relationship, superiors have a choice of partners only among their subordinates and subordinates have a choice of one superior in leader-member exchange relationships.

Duration of relationship

The duration of a mentoring relationship is indeterminate and depends on the willingness of the parties to engage in it. If the relationship fails to meet the needs for one or both participants, it is possible to withdraw (Ragins & Scandura, 1997). While the ability to sever the relationship may be somewhat constrained in the case of a formal mentoring program, such programs rarely require interactions beyond the period of a year (Baugh & Fagenson-Eland, 2007). The duration of a leader member relationship is also indeterminate, but it is less easily terminated by either of the parties. For a subordinate to change superiors, he or she must either quit the job or transfer to another work unit. Quitting one's job may not be possible if alternative employment is limited, whereas transfers may be constrained by the absence of open positions at the appropriate level in the organization. Thus, while mentors and mentees may limit the duration of a relationship that is unsatisfying, superiors and subordinates are less free to terminate a difficult relationship.

Frequency of interaction

Mentors and mentees regulate the frequency of their interactions, subject to time constraints imposed by other responsibilities. The parties can schedule time together and may look forward to meetings with great anticipation (Collins, 1983). Interactions between leaders and members are much more frequent and may take place on most or all work days. While frequency of interaction may enhance good relationships, poor relationships may be further damaged by required contact.

Degree of dependency

Although some individuals identify their supervisor as their mentor, generally a mentor is more advanced in the organizational hierarchy and may even be outside of the mentee's line of reporting (Collins, 1983). The mentor's success in his or her position is not immediately dependent on the mentee's job performance, although the mentor's reputation may be affected by the mentee's ability to

function in highly visible roles (Ragins & Scandura, 1999). The supervisor's ability to succeed in her or his position is intimately tied to the subordinate's job performance (Graen & Uhl-Bien, 1995).

As a result of the differences in the contextual factors surrounding the two types of relationships, the redefinition of a leader-member relationship and the consequences of that redefinition may be somewhat different than the separation and redefinition process identified for mentoring relationships. However, the evidence with respect to the later phases of mentoring relationships may be informative when considering the later phases of leader member relationships (Ragins & Scandura, 1997).

DISRUPTIONS TO LEADER-MEMBER EXCHANGE RELATIONSHIPS

All relationships must come to an end in some form, and leader-member exchange relationships are no exception. The LMX model does not include any information about anything beyond the role-routinization of leader-member exchange relationships (Graen & Scandura, 1985; Graen & Uhl-Bien, 1995). It is reasonable to expect, however, that the quality of a relationship may be affected by changes in circumstances both external and internal to the relationship itself. Due to the differences in characteristics of the leader member relationship as contrasted to mentoring relationships, there are different questions and areas to pursue with respect to leader-member relationships. Both changes in circumstances surrounding the relationship as well as physical separation may cause a disruption to the leader member relationship.

Changes in the quality of relationships

The first and most obvious question with respect to leader member relationships concerns changes in the quality of such relationships. While the implication regarding the role-routinization phase of the relationship suggests that the relationship becomes self-sustaining at a particular level of quality (Liden et al., 1993; Nahrgang et al., 2009), there are clearly instances where disruption of such relationships will occur. Given that trust is an essential characteristic of high quality relationships (Brower, Schoorman, & Tan, 2000; Scandura & Pellegrini, 2008), a breach of trust will seriously damage an enriched relationship.

A severe breach of trust may permanently damage a high quality relationship (Brower et al., 2000; Graen & Scandura, 1987). However, the parties to a leader member relationship do not have an easy way to “escape” from the relationship. While a breach of trust in a mentoring relationship will result in a separation that is both physical and psychological (Collins, 1983; Ragins & Scandura, 1997), a superior and subordinate must continue to work together for at least some period of time unless the breach is so severe as to result in immediate termination of the subordinate.

Questions arise as to whether there are individual differences in willingness to forgive such a violation. Just as individuals vary in propensity to trust (Ashleigh, Higgs, & Dulewicz, 2012), perhaps there are differences in tolerance for violations of trust. What is considered a severe violation by one superior might be viewed as only a moderate concern by another. It is important for subordinates to be aware of the level of tolerance and sensitivity points with respect to trust in order avoid a serious blunder.

An additional question in this situation is whether there is a possibility of recovery after a violation of trust (Schoorman, Mayer, & Davis, 2007). Given that the parties must continue to work together, is it possible to repair the damage over time? Can a third party—for example, the subordinate’s mentor—intervene in such a situation to help the parties to come back together?

By the same token, an extraordinary action on the part of a subordinate in a low quality relationship might serve to re-define it. While a superior is unlikely to offer opportunities to an individual who has developed a less enriched relationship, it is possible for such a subordinate to come to the aid of the superior in a crisis situation (Graen, 1989). Given that the superior’s success is highly dependent on subordinate performance, could such actions serve to elevate the quality of the relationship on a relatively permanent basis? While there is a recognition that events may intervene to change the nature of the leader member relationship, there is been only limited exploration of what those events might be (Cropanzano et al, 2017).

A final question about the possibility of change in the quality of a leader-member relationship is whether an enriched relationship can degenerate through simple neglect. Is it possible that one or both parties would simple stop investing in the relationship? If so, why would the investment discontinue?

Would a change in goals on the part of one or both parties cause a previously enriched relationship to evolve to a lower quality relationship without a violation of trust on the part of either party? Possibly the entry of a promising new subordinate into the work unit would result in a change in the investment pattern on the part of the superior.

Physical separation

Similar to the parties in a mentoring relationship, leader and member may be separated by a job change on the part of one of the parties. Either party may accept an external offer or an internal promotion or transfer. If this separation occurs prematurely, before the subordinate feels that he or she has derived the benefits and the learning possible, are there effects on that subordinate? If the superior leaves, would the subordinate feel “cheated” and as a result resentful toward the organization or reluctant to engage in another enriched relationship? Might the propensity to invest in relationships suffer a permanent decrement?

If the subordinate is transferred or promoted or accepts another offer too early in the course of the relationship, would the subordinate’s self-efficacy be affected? Relationships that end prematurely due to transfer or promotion may be continued through virtual means (Bierema & Hill, 2005; Knouse, 2001). Lacking confidence, the former subordinate might become over-reliant on the former superior in a virtual manner or on another partner in a developmental relationship. Should human resource professionals explore such possibilities before recommending a promotion or transfer?

The alternative scenario is that an enriched leader-member relationship continues beyond the point when the subordinate would like to separate from the relationship and function more independently (Scandura, 1998, discusses this situation with respect to mentoring relationships). A skilled superior would be expected to grant sufficient autonomy to subordinates in high quality relationships. However, it is possible that despite such autonomy, the subordinate may still desire greater freedom to act independently. Do subordinates reach a point where they believe that they have outgrown a leader member relationship? Do superiors generally concur with such beliefs and assist the subordinate in finding a new, more challenging work situation or is this belief viewed as a form of disloyalty? If

viewed as disloyalty by the superior or by others in the organization, there may be negative career effects for the subordinate.

Supervisor proactive behavior

The superior, rather than the subordinate, may be the motivating force behind a separation. The superior has invested in the development of the subordinate and may at some point feel that it is appropriate for the subordinate to “try his or her wings.” The superior may encourage the subordinate to move into a new position either within or outside of the company and may even proactively attempt to identify appropriate positions for the subordinate (Graen & Scandura, 1987). The subordinate’s response to these efforts may differ depending on his or her self-assessed readiness for the move.

The ideal situation occurs when both superior and subordinate agree that the time is right for some kind of change. In this case, it is reasonable to expect that the former subordinate will enter a new position feeling confident to meet challenges with support (but not necessarily direction) from the former superior. In this very fortunate situation, success on the part of the former subordinate is expected. But once again, there is limited empirical evidence with respect to overall success in the position (Graen, Dharwadkar, Grewal, & Wakabayashi, 2006; Wakabayashi & Graen, 1984). The evidence that does exist is supportive, but the readiness for separation from the previous leader member relationship was not explored in this research.

Alternatively, the superior may perceive that the subordinate is ready to move beyond the relationship, but the subordinate remains dependent. This situation may occur when the superior is nearing retirement or some other form of separation from his or her position or is experiencing severe pressures from other areas of work or personal life. Thus, the superior may wish to hasten the separation, whereas the subordinate, who may or may not be privy to the pressures on the superior, believes that more development within the leader member relationship is needed before taking on a new position.

In this situation, it is important to learn why the subordinate lacks confidence in his or her own abilities. A high quality leader-member exchange should serve to develop the requisite belief on the part of the subordinate in his or her own abilities. Is it possible that some individuals, despite support, remain

overly dependent? Alternatively, perhaps attributional errors cause superiors to attribute competence to the subordinate that has not truly been achieved.

The proactive efforts on the part of the superior if successful will eventually result in a physical separation of the dyad. However, this separation will occur as the result of a “push” on the part of the superior, rather than as a result of some external circumstance. As noted, the implications of the two situations are quite different.

FUTURE DIRECTIONS

Most of the literature on leader-member exchange relationships has focused on the development and outcomes of such relationships. Very little attention has been paid to events or actions that can change the nature of such relationships or their termination. In this paper, I have begun to examine possibilities that will result in change, including termination, in the leader-member exchange relationship. These questions have yet to be explored empirically.

The initial study of phases of mentoring relationships was accomplished through qualitative exploration (Kram, 1983). Given how little information exists with respect to leader-member exchange relationships beyond the role-routinization phase, a qualitative approach to investigation is recommended. Qualitative research can be used to shed light on questions for which limited theory has been developed and little information exists. Qualitative exploration should precede any formal hypothesis testing and hypothesis testing can form the basis for theoretical development.

This discussion of relationship changes has been predicated primarily on the perspective of the subordinate within the exchange. But a relationship requires two parties. Given that LMX theory has been identified as the only leadership theory which focuses on the relationship, rather than either of the parties to the relationship (Lord et al., 2017), it is important to take a more comprehensive approach to this subject matter. Further development is clearly necessary. The present discuss serves only to identify the importance of extending LMX theory and to suggest questions that may facilitate further exploration.

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10 Organisational Behaviour

Refereed Delivered Session

**Gaze and Posture in Collaborative Building: A multimodal video analysis of
emergent shared knowledge**

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Gaze and Posture in Collaborative Building: A multimodal video analysis of emergent shared knowledge

ABSTRACT: *This paper reports on analysis from a corpus of audio-video recorded interactions during a collaborative building task. The task generates distinct knowledge asymmetries which motivate interaction toward acquiring shared understandings. The analysis suggests that the convergence of the communicative modes of posture and gaze is crucial to producing shared knowledge. These findings support claims that there are no fixed norms for gaze distribution and postural orientation in interaction, but that these are heavily influenced by the environment and task. Furthermore, the findings suggest participants prioritise producing communicative intersubjectivity over perceptual intersubjectivity. The implications of these findings for the nature of intersubjectivity and research into teamwork are considered.*

Keywords: Group dynamics, Group processes, Interpersonal behaviour, Negotiation, Team processes, Decision making

Knowledge, and processes associated with developing, managing and sharing knowledge have been inextricably linked to organisational operation and competitive advantage (Argote & Ingram, 2000). Drawing on participatory and transactional models of communication (Kastberg, 2014; Scollon, 2001), interactions between staff are seen as a critical site for sharing and creating knowledge (Szulanski, 2000; Tsoukas, 2009). Knowledge transfer or creation by staff is often expected to involve large scale practices, such as a manufacturing or production process (Szulanski, 2000; Zack, 1999), but analysing finer levels of detail is possible and likely to develop insight. Indeed, interactions are replete with subtle moments of intersubjectivity where understanding is shared (Linell, 1998). Although many of these moments are minor in comparison to larger scale organisational process, there is a long history of academic innovation stemming from exploring how people negotiate the most everyday of situations (Garfinkel, 1967). In this paper, we apply a multimodal analytical framework to develop a fine-grained analysis of emergent moments of shared knowledge and show how video analysis and corresponding multimodal theories and methodologies (Hindmarsh & Llewellyn, 2018; Norris, 2004; Norris, Geenen, Metten, & Pirini, 2014; Pirini, 2016; Toraldo, Islam, & Mangia, 2018) can be utilised

in organisational studies to develop new insights regarding materiality and intersubjectivity during knowledge communication.

INTERSUBJECTIVITY, MULTIPLE MODES AND MATERIALITY

A multimodal perspective aligns closely with the sociomaterial interest in organisational research (Hindmarsh & Llewellyn, 2018; Leonardi, 2013; Orlikowski, 2007). The basic premise of sociomateriality, that the material world is inseparably intertwined with the social, is congruent across differing theoretical bases (Leonardi, 2013). This premise aligns with a mediated one adopted by sociocultural scholars (Wertsch, 1998) building on the work of Vygotsky (1978), and adapted further in linguistics (Scollon, 1998) and multimodal interaction (Norris, 2004). All actions are taken to be *mediated actions*, where social actors act with and through mediational means (Wertsch, 1998). The mediated action embeds a tension between the social actor and their historical body (Nishida, 1958), and the mediational means, which have both psychological and material aspects (Scollon, 1998).

In this paper, we analyse the way that groups of three people reach moments of shared knowledge when they are tasked with building a replica of a model out of blocks. Our analysis shows that moments of coordination emerge at key stages throughout the task, where participants confirm that consensus has been reached solving a troublesome block placement. A multimodal approach highlights the multiple modes through which coordinated actions are produced. We find in this task that moments of coordination are exemplified by gaze and postural alignment. Importantly, posture and gaze practices in particular differ from commonly observed maxims (Goodwin, 1980). Drawing on Pirini's (2016) concept of an interactive substrate, and tiers of materiality, these moments of shared posture and gaze provide a material basis for intersubjectivity. We explore below in detail how these moments develop, and in the discussion section we question what kinds of knowledge these modes of posture and gaze offer access to, while also relating our findings back to the literature on gaze practices. However, first, we address the importance of video analysis to progress this type of research, before describing the task setting in detail.

MULTIMODAL VIDEO ANALYSIS AND ACTION

The multimodal theoretical basis we apply here to intersubjectivity requires a suitable approach to data and methodology. Organisational studies exploring social interaction, discourse and dialogue

commonly utilise interviews and observations as empirical methods (Hindmarsh & Llewellyn, 2018). However, while interviews provide access to people's perceptions of their actions, self-reporting on action and action-as-produced are very different things. During interviews people construct meaning through language (Fairclough, 1992), producing their identity (Bauman, 1996), in response to the presence of the researcher (Labov, 1972). In addition, people often have a low level of awareness of their actions. For example, Scollon and Scollon (2000) report interviewing a woman who spoke against using baby talk with infants, all the while using baby talk with a child sitting on her lap. The disconnects between accounts of action, and action, highlight the methodological issues with using interview data as the primary source when seeking to understand the production of action. Observation overcomes some of these issues, by allowing the researcher direct access actions of interest. However, even when researchers take field notes during observations, they can only develop limited granularity regarding actions (Hindmarsh & Llewellyn, 2018).

Video recordings can address some of the challenges faced by interviews and observation. Furthermore, technological developments over the last 10 - 15 years have made digital video recorders cheaper and less intrusive. Video can be transcribed in detail, facilitating a micro level analysis of action. However, video also raises methodological and theoretical challenges (Hindmarsh & Llewellyn, 2018; Luff & Heath, 2012; Toraldo et al., 2018), and a multitude of multimodal approaches have emerged to address these challenges (Bateman, Wildfeuer, & Hiippala, 2017; Jewitt, Bezemer, & O'Halloran, 2016; Pirini, 2017), each with their own take on data collection (Pirini, Norris, & Matelau-Doherty, 2018). We describe the theoretical and methodological approach we take in more detail below.

A MULTIMODAL METHODOLOGICAL APPROACH

We utilise multimodal (inter)action analysis as a theoretical/methodological framework to analyse the video data collected in this project. Norris (2004, 2011, 2013) lays out the basis for multimodal (inter)action analysis, building on mediated discourse analysis (Scollon, 1998) as a theoretical basis. In line with this approach we take mediated action as our unit of analysis and use Norris's (2004) notion of lower and higher-level actions to delineate mediated actions into analysable units. A lower-level action refers to the smallest pragmatic meaning unit of a mode. For example, an utterance is a lower-

level action in the mode of spoken language, and a gaze shift from one point to another is a lower-level action in the mode of gaze. A higher-level action is made up of a chain (or chains) of lower-level actions and has a socially recognisable start and end point. Of course, higher-level actions may therefore be nested within one another. As an example, we can see how different phases of the building task are nested within larger phases, and within the entire task itself.

At times we make reference to attention/awareness of participants and use modal density to determine this phenomenologically (Norris, 2004, 2011; Pirini, 2014). Modal density is a composite measure of the intensity of modes in a higher-level action, and/or the complexity and multiplicity of intersecting modes in a higher-level action. As pointed out above, lower-level actions are defined as the smallest pragmatic meaning unit of a mode, and thus we can determine attention/awareness by analysing the intensity of particular lower level actions (e.g. gaze), and/or the intersection of lower-level actions in any one particular higher-level action (e.g. gaze, object handling, body posture). Higher level actions where the intensity of lower-level actions is high, and the complexity of intersecting modes is high are usually phenomenologically at the focus of a person's attention/awareness. See Norris 2004 for a broader discussion of this concept.

TASK DESIGN AND LAYOUT OF TASK SPACE

The task involves a collaborative building project where participants must re-create a complex Lego structure using variable sources of information. In each task group, three people construct a Lego model to exactly match an abstract replica. During the building process, multiple replica structures are positioned so that from any one seat the view to the left, the right, and straight ahead provides the same perception of a replica model as from any other seat. However, it is impossible for any participant to see the rear of a replica. Participants overcome this challenge by choosing from two of five possible 'assists' which involve taking pictures, turning or breaking apart a single replica structure. Participants must collaboratively decide who is the builder and which "assists" they will select and then they can begin the build process. The builder may not utilise the assists, so needs to rely on communication with the other participants. Three cameras are placed around the space to audio and video record the building process, and participants may not leave their seats during the task.

COLLABORATIVE GAZE AND COMMUNICATIVE INTERSUBJECTIVITY: ANALYSIS OF REPRESENTATIVE SAMPLES

The multimodal (inter)action analysis (Norris, 2004, 2011) of triadic problem-solving sequences during the goal-oriented building task reveals a decisive preference for collaborative gaze and postural orientation as a means to maintain communicative intersubjectivity. The representative data samples discussed herein show that participants display an overt and consistent prioritisation for a convergence of gaze and postural orientation during problem solving sequences. A collective *divergence* of gaze orientation would provide participants with an identical perceptual view-point of the replica structures which are situated within the task space. Given that the building task is contingent on gaining an accurate visuo-spatial understanding of block combinations and placements, the same perceptual view-point could be a great advantage which would simultaneously support intelligibility of the linguistic propositions which are heavily deictic in nature. More specifically, we expect that the accurate comprehension of “the green block to the left of the blue one is sitting on top of the white large one” would be most easily understood if all participants engaged in the interaction could actually see the physical locations and material entities being referenced through the mode of spoken language. However, the analysis reveals ‘orientational following’ whereby participants both individually and collaboratively prioritise *the same* replica structure during problem solving communicative sequences. Within the corpus there are even some cases whereby participants exemplify individual divergence in deictic orientation whereby they may undertake a deictic gesture toward one location, however, allocate postural and gaze orientation in collaboration with other social actors.

In frame 1 of Figure 1, Tom (left) is currently attending to the mobile phone “assist” which includes pictures of the replica structures. This is clearly evidenced through modal complexity built through gaze, body posture, proxemics and object handling. The multiple simultaneous lower-level actions indicate that the phone is in the foreground of his attention/awareness continuum. Chris (middle) and Celia (right) are at this point in mutual gaze and postural orientation toward one another as Celia is confirming the accuracy of the latest block placement through a lower-level action in the mode of spoken language, saying “that looks right to me”. In frame 2, Chris’s lower-level action of gaze alteration toward a replica structure occurs as Tom alters his gaze toward Chris and their model

structure. At this point, in frames 3 and 4, influenced by Chris’s gaze alteration which is recognized by Tom, Tom undertakes a lower-level action of gaze alteration followed by a demonstrable postural shift and comes into collaborative orientation with Chris. Both social actors are clearly focused on the replica structure to the right of Tom. Simultaneously, Celia alters her gaze orientation twice: first to the replica structure which is in front of her and then back to Chris. In frame 5, Tom and Celia both shift their gaze again toward the replica structures in front of them conceivably hoping to confirm the accuracy which Chris has confirmed through spoken language in frame 4 saying “that looks right to me as well”. In frame 5, all social actors are divergent in their gaze and postural orientations, all looking at the structures which are located in front of them. In frame 6, Tom interjects signalling that he has perhaps recognized an incongruity saying “but if you”. Simultaneously, he alters his gaze and posture, coming once again in collaborative orientation with Chris. Tom’s interjection catches Celia’s attention who in frame 6 has altered her gaze toward Tom. Recognizing the potential infelicity which was indicated by Tom and recognizing his postural and gaze orientation toward the replica to his right, Celia alters her gaze which includes a slight postural shift evidenced in the drop of her right shoulder, presumably kinaesthetically facilitating the gaze alteration which co-occurs with head movement. At frame 7, all social actors come into collaborative orientation which is evidenced through gaze and posture, all allocating focus to the replica structure which is to the right of Tom. As Tom acknowledges his potential misperception saying “oh ya” followed by “no that looks right” in confirmation of the other social actors’ position, Tom reallocates his gaze toward Chris who reciprocates in mutual gaze and postural orientation.

[INSERT FIGURE 1 HERE]

The multiple lower-level actions unfolding indicate a collaborative effort to confirm the accuracy of the most recent block placement during the building task. Each social actor, at different times, appears to confirm this accuracy through the mode of spoken language, though Tom is unsure at first. Paramount in the data segment is how gaze and postural orientation of the social actors is mutually influential as they seek a position of shared knowledge and understanding which will allow them to move forward in the build process. Celia’s affirmation through the mode of spoken language motivates a gaze alteration by Chris in an attempt to confirm this position. At this point, Tom also reorients

toward the same structure becoming orientationally aligned as he too must confirm accuracy so the group can come to a position of shared knowledge. By frame 7, Celia recognizes the other social actors' orientation to the same replica structure and additionally alters her own postural and gaze orientation in that direction. Celia and Chris have already provided affirmative confirmation of accuracy, however, Tom's direction of orientation coupled with his negative interjection motivate collaborative orientation toward the structure to Tom's right. The other social actors seem to recognize some locus of information evidenced by Tom's gaze and postural orientation and as a result, come into collaborative orientation toward this replica structure. Even though collaborative orientation will not provide access to the locus of information which is causing apprehension for Tom, the collaborative focus on a single replica structure indicates that they are communicatively aligned with Tom. In other words, in order to follow Tom's thought process, the others appear to prioritise collaborative orientation with a focus on the general locus of information (the replica) rather than on the information source itself (Tom). This collaborative orientation which persists throughout the corpus appears central to the establishment and maintenance of communicative intersubjectivity. While perceptual intersubjectivity is possible and available, social actors appear to prefer communicative alignment or communicative intersubjectivity over perceptual. Reasons for this are explored in more depth in the discussion section.

Another representative data sample involving collaborative gaze and postural orientation as an interactive strategy prioritising communicative over perceptual intersubjectivity is evidenced in Figure 2. Here, social actors are collaboratively trying to determine the placement/location/connection of a specific block on their structure. In frame 1 of Figure 2, Dan (centre) breaks the triadic instructional exchange asking "Yeah but how are they attached". Previous instructional discourse is unproblematic to this point, until the particular connection method is lexicalised is an 'issue' which needs resolution. At the moment of problem introduction, Jim (Left) and Craig (Right), the building assistants have diverging gaze and postural orientations. Jim is evidently focused on the building pieces on the builder's desk while Craig is resolutely oriented toward the model structure in the foreground of the frame. The lower-level action in the form of a spoken interrogative does little to attract the current orientation of the building assistants. The seamlessness by which problem introduction occurs without

further exploration or probing on behalf of the assistants suggests the logic of the question is intuitively understood by the participants. This may be due in part to the fact that method of connection is a key instructional ingredient in much of the directive discourse but is demonstrably evidenced by the lack of clarification required (i.e. What do you mean how are they attached? Which portion are you asking about etc.).

[INSERT FIGURE 2 HERE]

The resulting higher-level action involves dramatic postural and gaze shifts and alterations to and from various replica structures and the pieces in question sitting on the builder's desk. Craig also initially seeks clarification using additional pictures of the replica on a mobile phone and then immediately begins to seek the relevant information from the various replica structures which are available. In frame 5 of Figure 2, the assistants investigate the builders current block location in response to further confirmation requested by the builder who asks "like this I" in frame 3 and "like this right" in frame 4. In frame 6, Jim seeks confirmation visually by a dramatic postural alteration and gaze shift away from the builder's desk and toward one replica structure. Attempting to confirm the visual similarity, the builder elevates the portion of structure which has been completed so as to compare it with replica structure to which his gaze is directed. This shift in orientation is followed by Craig who begins seeking perceptual self-confirmation as well by comparing the finished portion to the replica structure just off screen to the left (the same replica attracting the builder's gaze and postural orientation).

As the nested higher-level action unfolds, multiple coordinated lower-level actions in the form of postural and gaze shifts occur as the participants work seeking knowledge about the method of connection between the two blocks in question. In frame 10, the social actors converge in their gaze orientation to the replica structure located to the right, just out of frame. At the next complete collaborative convergence point in frame 14, the builder signals tentative assurance regarding the accuracy of placement in a lower-level action through the mode of spoken language suggesting "I think its correct". Maintaining convergence of gaze and posture on the same replica, Jim confirms the accuracy of connection which has just "now" been established saying "yeah right now". In frame 15, Craig undertakes multiple lower-level actions, altering posture, proxemics to desk and gaze direction while then immediately following with affirmation through the mode of spoken language saying

“yeah” immediately following the triadic convergence of gaze and posture to the single replica structure.

In Figure 2, the bi-directional influence of postural and gaze orientation alongside orientational following amongst all social actors is clearly evident at multiple points during the interaction. In frame 2, Dan’s lower-level action through the mode of spoken language indicates ambiguity regarding placement. The modal complexity of posture, gaze direction, object handling and spoken language suggests that the replica is in the foreground of Dan’s attention/awareness. Jim responds to Dan’s interrogative by immediately coordinating his own postural and gaze orientation toward the replica structure in the left of the frame. In frame 7, influenced by Dan’s comparative gaze, posture and object handling, Craig undertakes multiple lower-level actions in the form of gaze alterations between the replica, the model itself and back to the replica from frames 7 to 9. At this point, Jim becomes aware of the other social actors converging orientation resulting in a gaze alteration and postural shift coming into orientational convergence with the others. In frame 11, there is a slight divergence as Craig remains oriented toward the replica but all social actors converge again collaboratively in frame 15 which immediately precedes multiple confirmations of accuracy through the mode of spoken language on behalf of each social actor.

DISCUSSION AND DIRECTIONS FOR FUTURE RESEARCH

Paramount in the two representative samples from the corpus are the ways in which the attentive orientation exemplified through postural and gaze direction affects the orientation of other social actors resulting in orientational convergence. As stipulated earlier, given the specific nature of the task and in line with Argyle and Graham (1976), material entities and objects attract gaze as they function as information loci in the task structure. However, the influence of the organisation of the task also results in a dramatically reduced mutual gaze which is typically one cornerstone convention of face-to-face interaction (Goodwin, 1980) as it signals communicative attentiveness to the ongoing talk at hand. The interactional goal established by the task led to a preference for collaborative orientation through the modes of posture and gaze. The two rules Goodwin proposed about gaze in face-to-face interaction, namely “A speaker should obtain the gaze of [their] recipient during the course of a turn -

at – talk (1980, p. 275) and “recipient should be gazing at the speaker when the speaker is gazing at the hearer” (1981, p. 57) do not appear applicable across interaction types.

Objects and artefacts not only attracted attention within the course of the unfolding task, gaze and postural alterations which momentarily indicate alterations of attention/awareness through modal density (Norris 2004, 2011), were not only acceptable by all social actors but often times expected. Thus, the gaze alterations in the form of withdrawals from each other and toward model structures or assists were not only considered ‘less sanctionable’ but actually not sanctionable at all. Rossano (2012) aptly suggests that gaze is employed in response to and in service of the current course of activity. Our analyses generally confirm this idea; however, this should be refined to acknowledge that it is not just current course of activity, but rather, the precise nature of lower-level action (Norris 2004) at specific site of engagement (Scollon 1998; Norris 2011) acknowledging the influence of spatial arrangements, cultural tools, practices and communicative goals.

While participants regularly diverge in their gaze direction as a means to ‘collect’ information or confirm the accuracy of contributions from other team members, penultimate process moments which precede a new task phase (new block placement/reorganisation etc.) are characterised by a multiparty convergence of gaze and mutual confirmations indicating that shared knowledge has been reached. Collective gaze toward a single replica structure which characterises these moments is a peculiar phenomenon due to the precise spatial organisation of the task structure. Gaze divergence provides participants with concrete and material visual intersubjectivity which ought to be a priority when establishing shared understanding of a material and visual structure. The way that participants diverge their gaze during problem sequences indicates that ‘similar perspectives’, i.e. achieved by looking away from one another, provide an important locus of information. However, reunification of collaborative gaze appears paramount in establishing shared knowledge. Thus, a collaborative establishment of communicative intersubjectivity indicated by gaze and postural convergence on “the same” structure appears instrumental in establishing shared knowledge and thus, in the progression to a new problem-solving phase.

These findings inform us about what people prioritise when working together to complete a task that requires multiple moments of shared understanding. At a high level of abstraction this

characterises many organisational tasks, although further work is required before any kind of generalisation is possible. Important in our findings here is the way that knowledge is produced through co-ordinated action. We have described the coordination here as a convergence of gaze and posture. Drawing on Pirini (2016) we argue that coordinating gaze and posture provides a similarity or constancy to the material environment for these social actors, which produces a material basis for intersubjectivity. The nature of this material basis of intersubjectivity is important for understanding what participants prioritise to complete the task. We have argued that the material basis is not a perceptual one, where participants seek to gain the same visual perspective of a replica, but rather a communicative one, where participants converge their gaze upon the same object. This strikes us as an attempt to gain a single perspective, or indeed, as we have argued, a moment of shared knowledge, whereby the perspective of any one member is not paramount, but the moment of combined knowledge facilitating movement towards the next problem phase.

One question that arises is why participants do not look to one another to confirm shared knowledge, but rather look to the same object. Further work to explore more precisely what leads to converging gaze and posture will offer some insight here. A first gloss of the phenomenon suggests that in some cases one participant will be in disagreement and the remaining two participants will converge their attention with the person in disagreement. At other times, the person in disagreement will converge their attention on the perspective of the others'. Understanding this shared knowledge seeking behaviour when the majority of the group members are in agreement may offer insight into group dynamics at a micro level of detail.

In conclusion, we have established a block building task environment to encourage sharing and producing knowledge, with objects as central to the action. A multimodal (inter)action analysis shows that participants converge gaze and posture just prior to solving troublesome block-placement issues. Our analysis shows that participants' gaze orientation is responsive to the particulars of the task (Rossano, 2009,2012), rather than following norms observed in 'typical' face-to-face conversation (Goodwin, 1980). Furthermore, participants prioritise communicative intersubjectivity, by looking towards the same structure, over perceptual intersubjectivity, by looking towards different structures which would offer the same visual perspective to each participant. We suggest that converging gaze

and posture allow participants to go beyond their individual perspective of the task, to create shared knowledge and facilitate progress. This programme of research offers several pathways. One particularly interesting pathway includes exploring how modal configurations of shared knowledge are produced in a variety of task environments and exploring in more detail the different antecedents of converging attention.

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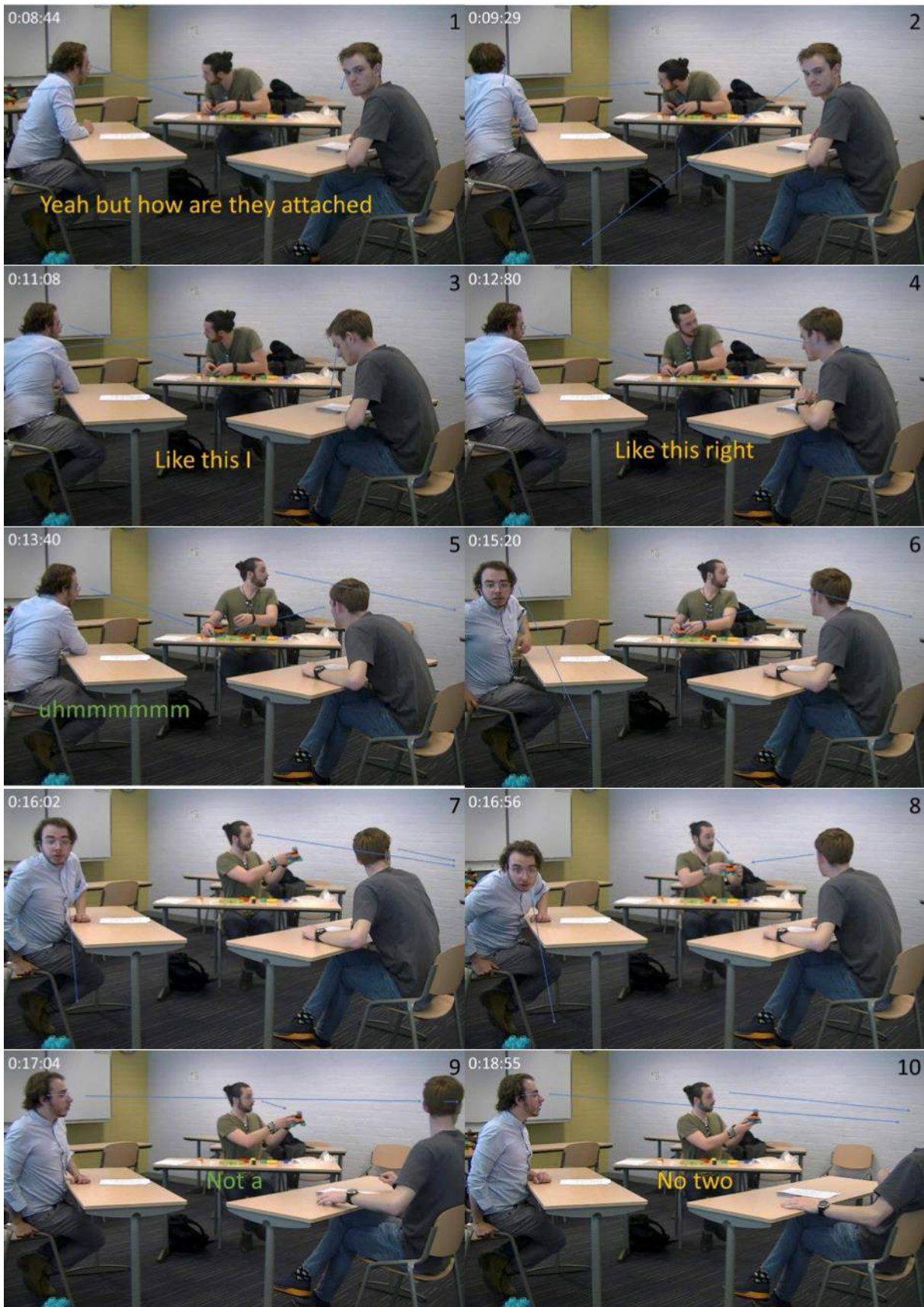
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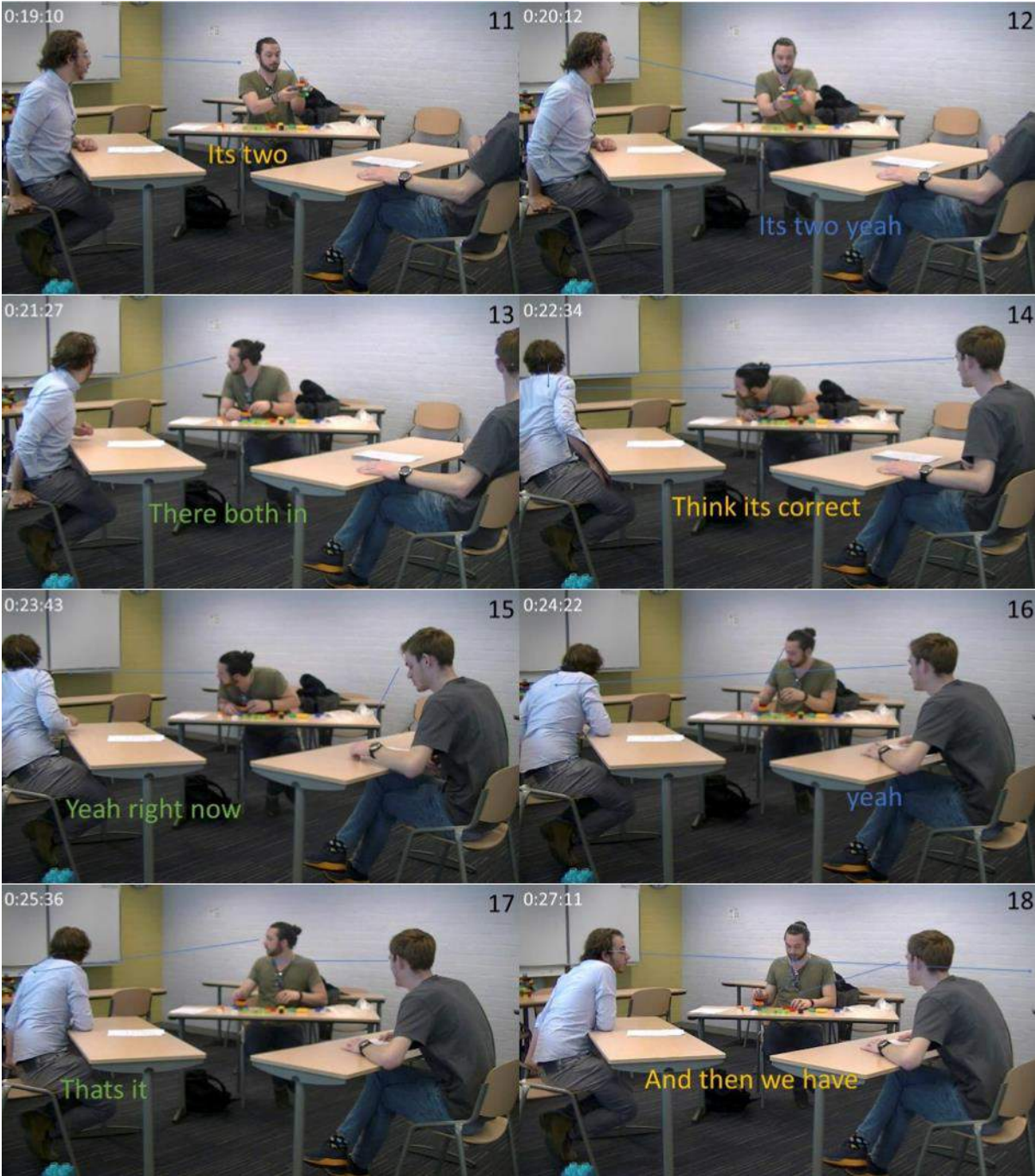
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Figure 1: First excerpt showing participants reaching agreement



Figure 2: Second excerpt showing participants reaching agreement





11. Project Organising

Interactive Session

Examining the Role of Communication in Transforming Project Management World

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UNDERSTANDING THE ROLE OF COMMUNICATION IN TRANSFORMING THE PROJECT MANAGEMENT WORLD

ABSTRACT

Project management has experienced new conceptual developments over the past few decades. The developments and transformations have focused on two main project objectives: schedule and cost. To meet project objectives, the project manager relies on information to communicate with the project team and stakeholders. Efficient information and communication management systems can help project managers to track cost and schedule and to identify issues, risks and other challenges for project completion. This research examines the role of communication in project management and explores the key drivers of effective communication and suggests that developing a front-end planning information tool could not only help project managers to meet communication needs but also be useful in transforming the project management world.

Keywords: Communication, Project Objectives, Leadership, Culture, Stakeholder, Integrated Process System.

INTRODUCTION

Project management is an evolving process aimed at delivering successful projects. Since the 1940s systematic tools and techniques have been employed to better manage projects (Sylvain & Christoph, 2010), and from the 1970's advancements in technology and the use of computers projects started being managed through software like Oracle, PRINCE2 and CCPM (Seymour and Hussien, 2014). There are four periods through which the project management evolved: prior to 1958, 1958 – 1979, 1980 – 1994, and 1995 to present (Kwak, 2003). Each era saw the evolution of a new concept that brought transformation to project management. Prior to 1958 the Gantt chart was introduced to illustrate project schedules. Between 1958-1979, the program evaluation review technique (PERT) or critical path method (CPM) was practiced, which remains an essential tool used in project management for scheduling project activities in conjunction with PERT. During the third era, from 1980-1994, the project world saw the emergence of advanced

technologies and the application of software that were used to manage projects focusing on schedule, cost, quality and risk management. The fourth era, from 1995 to the present, technology continues to be the prominent force in driving projects. Critical Chain Project Management (CCPM) an alternative schedule tool to CPM was introduced by Eliyahu M. Goldratt in 1997. This shows that all the developments in management evolved around schedule and cost: Gantt chart, PERT, CPM, and CCPM. There are limited research exploring how planning information flow can help meet the communication needs of the project. There is an urgent need of research to establish that planning information flow will help deliver successful projects. A Project team can plan information using a front-end planning information tool. A front-end planning information tool would help the project team to plan information flow at the planning stage of the project. Planning information using the information planning tool could help address communication issues and mitigate communication risks. Managing communications effectively and efficiently would drastically improve project performance and chances of project success (Gina, 2013) as 40% project fail because of poor communication (Leybourne, Kanabar, & Warburton, 2010). This suggests that there is a dire need of research to establish that planning information using a front-end planning information tool is critical. This will allow managers to plan, execute, monitor and control information and effectively communicate with team members and stakeholders to complete each construction activity and to meet project objectives. The future may see a transformation in project management with the evolving significance of communication.

This paper explains the role of communication in project management and how information and communication influences projective objectives. It argues that project manager relies on information and communicates with the project team and the stakeholders to meet the project objectives. Without which tracking project cost and schedule and providing the stakeholders with project updates and work information reports would not be possible. This paper suggests that communication is a key to achieve project objectives. The next section introduces to the key drivers of communication. Addressing and managing these key drivers is critical to effective communication. If these drivers are not addressed they can cause barrier to communication which in turn impair project objectives. This research identifies a gap

and explains the importance of planning information flow to meet communication needs of project useful to meet the project objectives. It is then followed by conclusion.

ROLE OF COMMUNICATION IN PROJECT MANAGEMENT

Communication is an integral part of project management and plays an important role in project success (Muszynska, 2015). The importance of project management and communication processes cannot be understated in the success of any project (Müller & Turner, 2010). The project manager’s communication is primarily between the project team and the stakeholders (Rajkumar, 2010). Research by the project management institute (PMI) finds that 55 percent of Project Managers agree that communication with the stakeholders is the most critical success factor in project management (PMI, 2013). Management, as a key stakeholder, focusses on cost, schedule and contractual risk due to their own interest as they have a stake in the outcome of the project. Due to their interest they set the project objectives and monitor progress of the project intermittently (Rajkumar, 2010). To achieve the project objectives, the project manager relies on the information and communicates with the project team and the stakeholders regarding timing, cost and quality as well as any identify issues, risks and challenges for project completion (Pitts, et al., 2012). The completion of all the project activities have exponentially increased the exchange of information and knowledge between the project team and the stakeholders. The project manager provides regular project updates, status and work information reports to the stakeholders. Without proper information and communication system cost, and schedule tracking would not be possible. The project would lack information to predict future project status and would lack strategy to manage the project objectives within its parameter. Figure 1 show how project objectives are informed through work information data, project status, project update and work information reports, and this information is dependent on an effective information and communication system.

Insert Figure 1 about here

It is observed that communication in project management is not efficiently followed and practiced by project managers (Monteiro de Carvalho 2013). Projects fail due to poor communication and project

manager's work involves 90% of communication (Leybourne et al, 2010). A Bull survey reveals that 40% of projects fail because of poor communication, and is ranked as the third most frequently cited reason for project failure. It demonstrates that communication is key to achieving project objectives. An effective information flow and communication system helps management in the following ways:

- 1) It enables management to integrate data from various processes and provide information for business performance across multiple projects.
- 2) A well-informed communication system provides access to Project Performance to manage risk and the required information to respond promptly to changing environments.
- 3) It provides Scoreboards/Dashboards as it transforms information into one centralized place in the form of graphs, charts and indicators.
- 4) It allows management to mitigate risks and strategically analyze what could happen in the future that impacts budgets and forecasts, and allows informed data-supported business decisions.

The role of communication in communicating effectively is key to project success (Gina, 2013). There are key drivers of communication that influences the information flow. Addressing the issues related to the key drivers of communication is a prerequisite to use the information flow model for effective communication. It is also critical to understand how cultural diversity influences these key drivers of communication. Cultural diversity contributes to communication complexity that cause project failure.

A review of the literature identified the following key drivers of communications: leadership skills (Luthra, 2015), cultural diversity (Hall, 1959), stakeholder management (Gina, 2013), integrated functional processes (Everse, 2012) and knowledge transfer (Gumus, 2007). Research suggests that if these key drivers of communication are not managed well, they can disrupt information flow and make communication ineffective.

KEY DRIVERS OF COMMUNICATION IN PROJECT MANAGEMENT

The first driver of communication is leadership skills. Since 90% of the project manager's work involves communication (Leybourne, Kanabar, & Warburton, 2010), and communication is driven by effective leadership or vice versa (Luthra, 2015), it is critical for the project manager to have leadership skills to be

able to communicate efficiently and complete the project successfully. Skilled leadership and effective communication are critical success factors in project performance (Turner and Muller, 2005 as cited in Anantamula, 2015). Both are integrated (Luthra, 2015). It is important to understand the impact of leadership on communication as Leadership impacts communication.

It is noted that project managers should have leadership initiatives, interpersonal skills, cross cultural competence, coaching and motivational skills, resolving team conflict capability, and effective stakeholder communication skills to complete projects successfully. Deficiencies in leadership skills causes communication issues (Oline, 2015). Most project managers lack intercultural competence, cross-cultural communication skills and leadership skills to manage cultural diversity in project management (Obikunle, 2002). A Leader must possess interpersonal and relationship skills. Leadership is built on relationships (Kouzes, 2014). A survey of 250 project managers identified that the most critical success factor for project success is ‘relationships’, surpassing schedules and costs (Kuchta, 2013, p3). Relationships are built on trust which is an essential component for effective communication between project team members and project leaders. A trustworthy leader motivates teams to achieve project goals. Individuals want to follow a truthful and ethical leader. Project leaders manage a diverse set of people coming from varied cultural backgrounds which can cause misrepresentation and misinterpretation of ideas and misunderstandings, and therefore result in mistrust and conflict that ultimately impacts communication (Obikunle, 2002). In such a scenario, communication becomes challenging due to increasing complexities and cultural diversity. If this issue is not addressed, poor leadership style would impact communication that can lead to project failure. Leadership style influences communication process (Luthra, A. 2015). Strong leadership skills will overcome these shortfalls and improve communication to lead the team towards project success (Maznevski, 2007). Thus, leadership impact the effectiveness of communication (Oline 2015).

The second driver of communication is cultural diversity. According to Hall “Culture is communication and communication is culture” (Hall, 1959). Communicating effectively in a diverse and cross-cultural environment is imperative to achieve project objectives. People from different cultures have different ways of accomplishing tasks (Kiss, 2005). They differ in their values and beliefs. They pursue task differently as

they vary in perception, relationship building, assertiveness level and time-orientation (Kiss, 2005) It is therefore critical for project managers to manage cultural diversity in today's complex business environments to avoid a serious communication issue. Moreover, individual culture is influenced by national culture, race, religion and gender and how people behave and communicate in that cultural context (Kiss, 2005)

Cultural factors are inextricably linked with key drivers of communication. It influences Leadership, Stakeholder relationship, Knowledge sharing and Integrated processes. Cultural diversity possesses distinct leadership challenges for project managers (Eberlien, 2008). Cultural factors can impact knowledge transfer. Culture can influence one's understanding, judgment and action (Lee and Yang, 2000 as cited in Al Alawi et al, 2007). It plays a significant role in the way leader's transfer and shares knowledge to help the project meet its objective. People can cause a barrier as they can be hesitant to transfer and share knowledge due to cultural differences (Hauke, 2006). Culture also significantly influences the stakeholder relationship. In today's era of diversity, stakeholders are from different cultural backgrounds. Cultural biases, different usage of languages, attitudes, and gestures may impact stakeholder communications (Brisline, 2008 as cited in Gina, 2013). Culture also influences integrated processes and communication system as it could be impacted by behaviors of people, as people come from different cultural backgrounds (Everse, 2012). Therefore, it is critical to understand how cultural factors influences key communication drivers and communication process. As communication is an integral part of project management (Muszynska, 2015), addressing cultural issues would improve communication and success rate of project. The third driver of communication is stakeholder management. Stakeholder management has especially gained its importance in today's complex business context. Cultural diversities affect effectiveness of stakeholder communication. Communication is more challenging as the stake holders are in different locations, countries, and can be remote or virtual stakeholders. Significant communication takes place with stakeholders from different cultures as compared to homogenous stakeholder groups (Luckmann 2016, p.92). Communication is primarily between the project team and the stakeholders (Rajkumar, 2010) and majority of communication takes place between them at all stages of the project. Poor stakeholder

management can cause barrier to communication between the project team and the stakeholders. Ineffective communication can result into misunderstanding, conflict, unhealthy relationship and impact project success rate. Therefore, a strong stakeholder management can ensure effective communication and improve the chances for project success. It is critical to perform stakeholder analysis at the planning phase of the project. It helps to identify the information flow for each type of stakeholders at each stage of project as stakeholders interacts and influences each other in different ways (Jepsen & Eskerod, 2008) Not performing stakeholder analysis at the planning stage will impact the information flow and communication with stakeholders. Stakeholder analysis is crucial to manage stakeholder expectations (Jepsen et al, 2008) because cultural biases, different usage of languages, attitudes, and gestures may impact stakeholder communications (Brisline, 2008). The project manager must have communication, management and negotiation skills to manage stakeholder expectations and meet their needs, address issues, resolve conflict situations, and achieve project goals. Stakeholder analysis helps in identifying cultural factors that disrupts knowledge transfer and stakeholder communication (Luckmann, 2016 p90). Research suggests that there is a need for future research to infuse stakeholder analysis and enterprise resource planning (ERP) as this can significantly contribute to information systems application (Mishra, 2013, p9) and communication effectiveness. Planning communication well will get all stakeholders involved to meet project needs (Gina, 2013).

The fourth driver of communication is integrated business processes through software applications. Communication is best driven when the project team uses information within integrated business processes and systems to communicate between themselves and other stakeholders to complete project activities (Back & Moreau, 2001, p1). An automated business process system provides managers with accurate data and enable them to plan, report, manage a project efficiently and deliver value to clients. When a project delivers value, clients receive benefit and the performing organization receives business profit. On the other hand, a disconnected functional system results in business process inefficiencies that inhibit communication, productivity and profitability. To improve performance an organization must integrate business processes, resources, and communication to achieve desired goal (Boev et al., 2008)

The fifth driver of communication is knowledge transfer. Knowledge transfer and sharing is critical for effective communication and firm success as it can foster the firm’s development (Syed-Ikhsan & Rowland, 2004). Communication is driven by knowledge transfer in an organization where there is skilled leadership, integrated processes, strong cross-cultural skills, diversity, and good reward systems (Gupta & Govindarajan, 2000). A good organization culture is formulated when lessons learned from mistakes are addressed and knowledge is shared among members as a process of continuous improvement (Park, 2004). Interpersonal trust is high because knowledge sharing is more effective in firms. Knowledge repositories are shared through integrated information systems containing data and processes. However, cultural differences can impede effective knowledge transfer in an organization in spite of the existence of an established communication system. Even with a sound communication system and strong internal conditions, people may be hesitant to share and transfer knowledge because of lack of trust, fear, high esteem, and discrimination. It is a challenging task for managers to motivate, encourage and promote a culture in the organization in order to share knowledge within the process system (Al Alawi, Al-Marzooqui, & Mohammed, 2007). In Summary, figure 2 shows the key drivers of communication.

Insert Figure 2 about here

It should be noted that the above key drivers of communication are interrelated. If any of them is not managed well, they can impact communication. This relationship becomes more complicated with increased business complexities. Coping with complexity has become a challenge to sustainable growth in a competitive business environment (Ozel, 2013). One of the main drivers of increasing business complexities is diversity (Maznevski, M. 2007) which impacts communication. An organization faces challenges of diversity from both internal and external factors (Maznevski, 2007). Complexities occur when there are changes and uncertainties in both the internal and external factors (Cavanagh, 2011). “Today’s complexity is only expected to rise” (Palmisano, 2010). For organizations, one approach to respond to external pressure from the constantly changing environment is to develop its internal capability (Cavanagh, 2011). Firms should have strong knowledge of business processes, procedures, systems, policies, and plans,

and be able to forecast. In addition, firms should display strong culture, and leadership skills to build relationships with team members, stakeholders and clients in order to deliver results and achieve organizational goals (Cavanagh, 2011). Thus, capability development is a key to managing the challenge of rising complexities.

NEED FOR PLANNING INFORMATION TO MEET COMMUNICATION NEEDS

As noted before, communication is key to achieving project objectives. Project objectives can be achieved through effective communication. Communication can be effective if the information flow is planned at the planning stage of the project. A front-end planning information flow tool can make it convenient for the project team to plan the information at the planning phase of the project. It will enable them to plan and manage the information through all the phases of the project. The front-end planning information model could speed up communication and enable the project team to make well-informed decision. Enhancing communication capability could transform the project management world. Absence of front-end information planning tool would continue to overwhelm the project team in managing communication efficiently. Therefore, it entails that there is a dire need of research to establish that there is a need for planning information to meet communication needs of the project that could transform the project management world.

Previous research shows that the objectives of project management mainly focused on the schedule and cost. Not many research indicates that communication is core competence of project management which keeps the project team and the stakeholders well-informed about the project. An innovation in project information and communication system could drastically transform the way the projects are being currently managed.

Project managers communicate with key stakeholders and project team members for project updates to meet project schedule, cost and quality. Project managers depend on information and communication for project updates, work information reports and forecasts to report to stakeholders that intermittently monitors the progress of projects. Without effective information and communication systems, progress monitoring would not be effective. Planning information and communication can enhance the effectiveness of

communication to manage projects efficiently. Project Management Institute (PMI) suggests planning is important and project planning is directly related to project success (Tesfaye et al., 2016). PMI is a globally accredited organization (since 1969) that certifies a person as a project professional to manage projects. In 1987 PMI introduced the project management book of knowledge (PMBOK). PMBOK is a book that guides and provides a fundamental framework for project professionals to practice project management effectively. It covers 10 knowledge areas, 5 process groups and 49 processes (PMBOK 6, 2017). PMBOK affirms the imperative role of planning in project success and stresses that communication has not been emphasized as a significant knowledge area. PMBOK indicates that there are 49 processes in project management. Out of these 49 processes, communication has only 3 processes. Whereas planning is one of the five elements within project management process groups. PMBOK advises that planning includes 24 processes out of the total 49 processes, which is 48.97% of the total process involving planning. Further, out of these 24 processes in planning, communication includes only 1 process. The statistics show that planning has been significantly emphasized in project management while the important role of communication has been largely overlooked.

Figure 3 shows the processes of communication in the management plan. This diagram shows a broad spectrum of communication management in the project management context. It emphasizes managing communication through information systems but ignores the importance of stakeholder communication in the planning phase of projects. This diagram shows the importance of interpersonal skills and modes and methods of communication but fails to address issues that causes barrier to communication. Therefore, more comprehensive research is needed to explore how information can be planned and used as a front-end planning tool for project teams to manage communication effectively. Both planning and communication are critical in project management. A useful front-end information planning tool will not only help the project team and stakeholders to plan information flow and communicate effectively in order to meet project objectives, but also can transform the future project management practice.

Insert Figure 3 about here

CONCLUSION

Communication management is broadly discussed in the project management literature (Dow & Taylor, 2010), and is considered one of the most important critical success factors in project management (PMI, 2013). Project objectives primarily focus on cost, schedule and quality. To meet project objectives, project managers need effective communication management and information systems. While key stakeholders focusses on cost and schedule, project managers communicate with project teams and stakeholders for project status, updates, and work information reports to meet project objectives. If communication is not understood or practiced efficiently, projects run into risk and project objectives are not achieved. Therefore, communication is a key that integrates information to keep all the project members and stakeholders well-informed, manage risks, and pursue project objectives (Muszynska, 2015).

PMI places less emphasis on processes of communication and more on the planning phase of project management. It should be noted that both planning and communication are critical to meet project objectives. Although current concepts of project management have evolved to focus on schedule and cost components, information and communication model may transform the project management world. Therefore, this study aims to fill the gap and develop a front-end information planning tool which is useful to communicate and manage projects effectively. The intended information planning tool will address the key communication issues and allow managers to plan, execute, monitor and control information and effectively communicate with team members and stakeholders in order to complete each construction activity and to meet project objectives. Designing such an information planning tool need to consider key factors that influence communication processes such as leadership, culture, relationships, involvement of stakeholders, integrated systems, and knowledge transfer (Gina, 2013).

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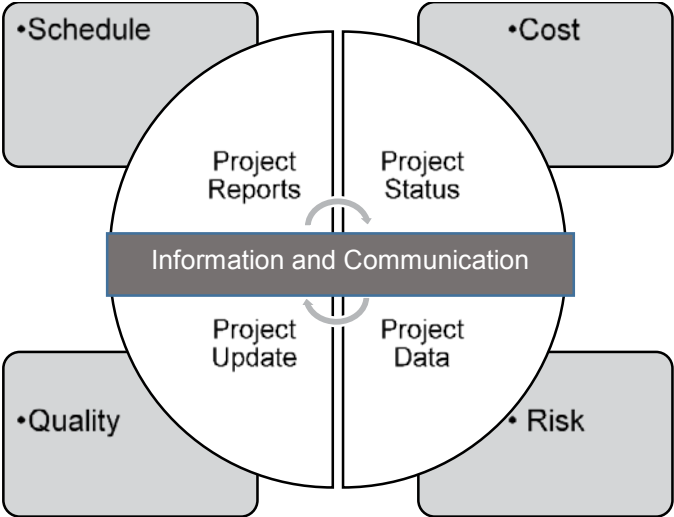


Figure1. Project objectives driven by project reports and data through communication system

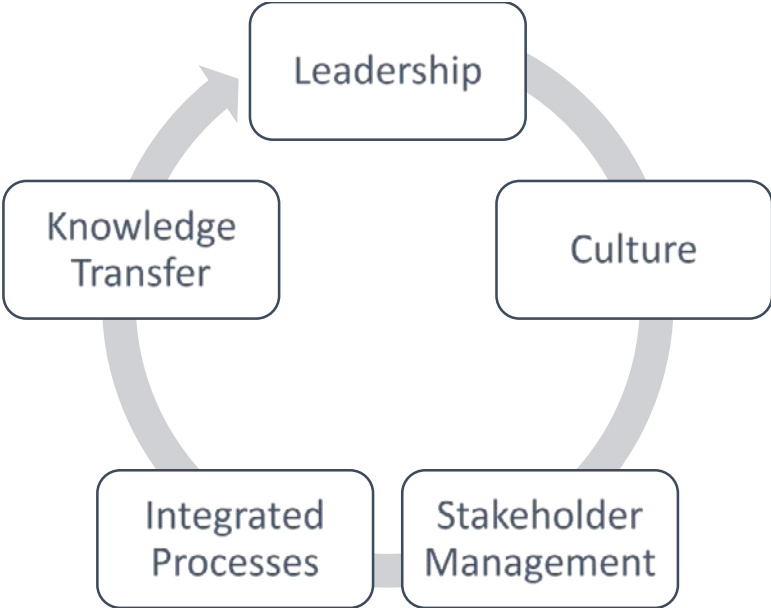


Figure 2. Key Drivers of Communication

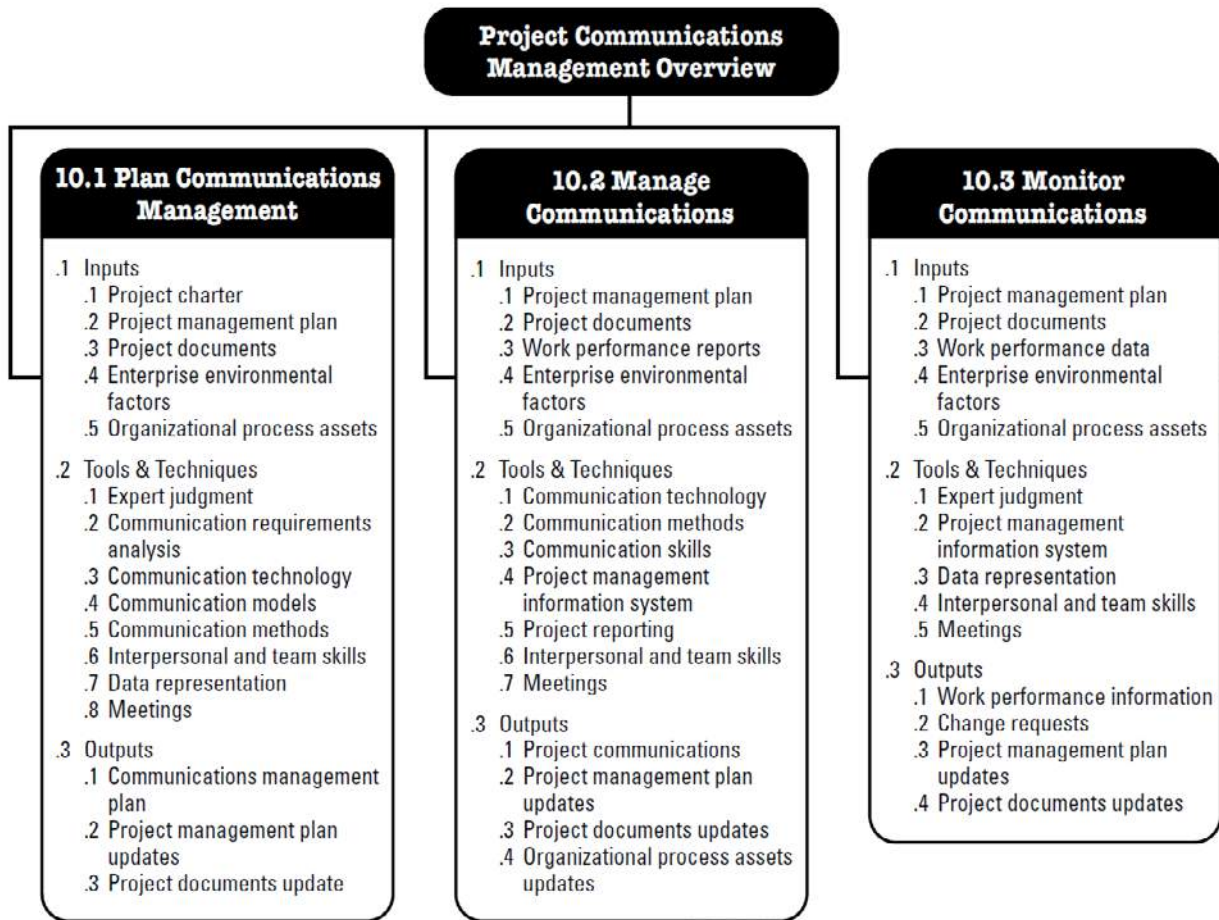


Figure3. Project Communications Management

Source: PMBOK sixth edition, 2017, <http://www.projectengineer.net/the-10-pmbok-knowledge-areas/>

HRM practices in Palestine

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HRM practices in Palestine

ABSTRACT

HRM practices are part of the broader management practices in organisations and deal specifically with people management and focus on areas including R&S, T&D, PM, and RM. It has been previously suggested that HRM practices can contribute to organisational performance, hence this current research is significant in addressing the call within the extant literature to explore the HRM practices that are used in organisations and particularly those operating in politically unstable countries like Palestine in the Middle East. The data findings show that in private organizations most HRM practices have strategic aspects and are highly similar to those practices discussed in the literature; while only some of these HRM practices are used in public and not for profit organizations.

Keywords:

R&S, T&D, PM, RM, Palestine

HRM practices in Palestine

Background

HRM practices influence on employees' behaviour, attitudes, and performance at work (Huselid, 1995; Schuler & Jackson, 1987). HRM practice and research focuses on key four functions, namely, (i) recruitment and selection, (ii) training and development, (iii) performance management and (iv) rewards management. First, Recruitment and Selection (R&S) processes cover the attraction of a pool of suitable job applicants, identification and appointment of the most suitable candidates for and to positions within an organisation (Buettner, 2015; Phillips & S. M. Gully, 2015). Second, Training and Development (T&D) helps develop the key competencies which enable employees to perform better in their work (McLagan, 1983). Third, Performance Management (PM) is an ongoing process of communication between supervisors and employees about the work to be performed to support accomplishment of an organization's strategic objectives (Armstrong & Baron, 1998; Drucker, 1995). The PM process includes clarifying expectations, setting objectives, employees' Performance Appraisal (PA), providing feedback, and reviewing results. PA is an assessment of employees' job performance in relation to the organization's objectives, outputs, and activities generally, and to their specific job requirements (Abraham, 2014). Lastly, rewards management (RM) is concerned with the formulation and implementation of strategies and policies that aim to reward people fairly, equitably and consistently in accordance with their value to the organizations (Armstrong & Murlis, 2004).

There is limited research on business and management in the Middle East (ME). The existing literature about the ME focuses on issues such as leadership (Behery, 2008; Metcalfe, 2012; Sheikh, Newman, & Azzeh, 2013; Yeo, 2012), women and work (Hutchings, Metcalfe, & Cooper, 2010; Mathew, 2010; Metcalfe, 2008), culture and religion (Aycan, 2005; Budhwar, Mellahi, & Budhwar, 2010; Fujimoto, Bahfen, Fermelis, & Härtel, 2007; Hofstede & Hofstede, 2005; Leat & El-Kot, 2007; Tayeb, 1997), nationalization (Budhwar & Mellahi, 2007; Yaghi & Yaghi, 2014), and job satisfaction (Badran & Youssef-Morgan, 2015; Kaya, Koc, & Topcu, 2010). While HRM practices have been researched extensively in the Western world, and more recently in parts of the developing world, there is very limited research on HRM practices in the ME, much of which has been summarized by Budhwar and Mellahi (2006) and more recent publications (Aladwan, Bhanugopan, & Fish, 2014; Farouk, Abu Elanain, Obeidat, & Al-Nahyan, 2016; Saddam & Mansor, 2015). This extant research has explored the link to organizational performance (Budhwar & Mellahi, 2006; Moideenkutty, Al-Lamki, & Murthy, 2011), motivation (Tang & Ibrahim, 1998), effective communication (Fujimoto et al., 2007), the influence of national context on HRM practices (Leat & El-Kot, 2007), and total quality management (Abu-Doleh, 2012).

Palestine is a new state that has a regionally-focussed, services-based economy (Dana, 2011), with a significant requirement for human skills and competencies. Furthermore, the geographical position of Palestine, surrounded by Arab countries and with transport access via the Mediterranean Sea, offers potential advantages to many industries (Niksic, Nasser, & Cali, 2014). Moreover, Israel having become a successful economic entity within the same geographical region provides an example of how Palestine might also benefit from the adoption of Western management practices through repatriation and immigration of qualified people (Budhwar & Mellahi, 2006, 2007; Weisberg, 2010). Detailed information on the study context of Palestine (in terms of geographical background, history & politics, culture, and business & economy) is provided in Appendix 1.

Research on business in Palestine specifically is scant and focuses on: small and micro enterprises in Palestine (Abu-Eljedian & Panayiotopoulos, 1996; Al-Madhoun & Analoui, 2003, 2004; Safi, 1998), health care (Mataria, Raad, Abu-Zaineh, & Donaldson, 2010), management accounting and financial management systems (Alawattage et al., 2007; Schiavo-Campo, 2003), and the allocation process of human capital (Honig, 2001). Other research conducted by organizations such as Organisation for Economic Cooperation and Development (OECD) and World Bank focuses on targeted economic sustainability e.g. the case of E-government in Palestine (OECD, 2011a); Code of Conduct for the Civil Service (OECD, 2011b); and World Bank Studies Area C and the Future of the Palestinian Economy (Niksic et al., 2014). In relation to published research specifically examining HRM practices in Palestine there is almost none. This lack of information and understanding of management practice in Palestine generally and people management in particular provides an important research opportunity, particularly taking into account that despite recent political instability

in the region (Kamrava, 2011), Palestine has a significant need for economic growth and offers many opportunities to investors and exporters across many business sectors (Darwish, Singh, & Wood, 2015; Mouallem & Analoui, 2014). This contextual gap in the empirical literature is thus worthy of exploration.

Literature review

People management practices are considered effective if they assist in production efficiency and effectiveness (Bourne, Pavlov, Franco-Santos, Lucianetti, & Mura, 2013; Huselid, 1995; Youndt, Snell, Dean, & Lepak, 1996). Commencing with the ‘scientific management’ approach (or Taylorism) in the early 1900s with its emphasis on bureaucratic control, and proceeding through the human relations phase in the 1920s-1930s to the development of ‘personnel management’ as practiced across the 1940s-1980s, through to the present approach to HRM as a strategic management function, people management practices have undergone a steady evolution. Historically, people management was carried out by personnel departments, with functions including recruiting, selecting, and supporting employee morale and cooperation, but it was not linked directly to the organization’s business strategy and creation of competitive advantage; such departments primarily operated as employee support and maintenance units (Kaufman, 2008). The evolutionary path of people management towards current HRM reflects the increasing competitive pressures that began in the 1980s, and arose from changing organizational demands for enhanced productivity and competitiveness, as well as employee demands for better compensation, benefit programs, and incentive packages (Byars & Rue, 2000; Cornelius, 2001; Haslinda, 2009).

As a people management approach, contemporary HRM is defined as ‘the process of acquiring, training, appraising, and compensating employees, and of attending to their labour relations, health and safety, and fairness concerns’ (Dessler, 2011) p. 3. Forming a set of interrelated people management practices, HRM emphasizes a strategic approach to the design, development, and implementation of functional activities that influence how well an organization can attract job applicants, motivate and retain successful employees, and influence job performance and organizational productivity, flexibility and effectiveness (Noe, Hollenbeck, Gerhart, & Wright, 2007). Such an approach requires the development and implementation of policies and guidelines with the overall objective of contributing to the establishment of a sustainable competitive advantage based on the quality and performance of the organization’s employees (Armstrong & Taylor, 2014; Dessler, 2011; Shaw, McPhail, & Ressia, 2017). As HRM is now one of the core management functions (alongside finance, production, marketing and strategy), HRM managers may act with professional authority that extends across the organization rather than just as a line authority within their own department. With this authority, the role of the HRM manager is to provide guidance to all managers in the organization, and assist them to manage their staff in accordance with the organization’s strategic business objectives, and policies (Ulrich, 2013).

The theoretical underpinnings of HRM today are reflected in its treatment of employees as the key organizational resource for meeting the competitive challenges of today and tomorrow (Storey, 1989), challenges which have arisen from the pressures of globalization, economic deregulation, and technological and social change (Paauwe, Guest, & Wright, 2013; Ulrich, Brockbank, Yeung, & Lake, 1995). Faced with these pressures, the need to engage in strategic planning and align the various functions and resources of the organization in such a way as to promote organizational effectiveness and performance is considered fundamental to the achievement of a human resource-based competitive advantage. According to Wook Yoo, Lemak, and Choi (2006), an organization's ability to overtake competitors and produce superior financial performance depends on the implementation of an appropriate business strategy. Porter (1985) argues that there are two basic generic business strategy foundations – cost leadership and differentiation – for which different resources, organisational arrangements, styles of leadership, and incentive systems are required. Importantly, each of the generic business strategies holds significant implications for the functions and practice of HRM (Hsieh & Chen, 2011). For example, a cost leadership business strategy requires HRM practices that fully support low cost operational excellence with employees who are adaptable, trainable, and able to follow efficient routines; on the other hand, a differentiation business strategy requires HRM practices that support innovation with employees that are creative and entrepreneurial (Phillips & Gully, 2015). Accordingly, as key elements in the creation of sustainable competitive advantage, the core HRM functions and practices of recruitment and selection, training and development, performance management, and rewards, must integrate, as well as align with the business strategy to enhance employee performance and thus organizational performance.

Following on from Huselid's (1995) seminal empirical study demonstrating a positive relationship between financial performance and specific strategically-oriented HRM practices, a wave of similar studies across a variety of contexts, geographies and industries quickly appeared. These studies support the existence of a positive relationship between HRM practices and organizational performance (Combs, Liu, Hall, & Ketchen, 2006; Wright & McMahan, 2011). This research therefore clearly demonstrates the strategic importance of effective HRM practices, and links practices such as strategic staffing plans, training and development programs, performance management and rewards management, to valuable business level outcomes such as product innovation, customer satisfaction, and financial performance (Dooney, 2005; Huselid, 1995; Pfeffer, 1994; Pfeffer & Veiga, 1999; Phillips, 1998).

Thus, given the demonstrated importance of HRM practices for organizational performance, and the lack of research looking at HRM practices in Palestine, an exploratory study of what HRM practices are used in Palestinian organisations, and why, is therefore opportune. Such a study would contribute to the theoretical and empirical HRM literature by shedding light on the conduct of HRM in a non-Western cultural context, and provide useful insights that will assist management practitioners

in Palestinian organizations to improve employee management and organizational performance. To those ends, the research reported here (and which forms part of a larger study) explores the perceptions of those individuals most affected by HRM practices i.e. employees and managers in addressing the following questions:

What HRM practices, and why, are used in Palestinian organisations?

Methods

The findings reported here, which form part of a larger project, reflect the use of a social constructivism paradigm with an inductive inquiry approach for exploring the research question of what HRM practices, and why, are used in Palestine. Accordingly, the use of a qualitative interview-based data collection process, rather than a quantitative survey-based approach, was considered more appropriate for this study. Also, that qualitative methods are arguably more sensitive to issues such as economic status, gender, and individual difference (Creswell, 2013; Denzin & Lincoln, 2011) – a sensitivity that is important in collectivist societies such as Palestine and in the ME (Hofstede & Hofstede, 2005) – an interview-based data collection method was considered most suitable. In addition, qualitative data provides rich detailed information that might be overlooked through statistical measures (Creswell, 2013, 2014), and help in revealing and understanding complex process and illustrating their influences on the social context (Shah & Corley, 2006). Furthermore, a qualitative method is considered suitable for social and human science research such as this study, the object of which – HRM practices – are evolving and constantly changing (Crandall & Busselle, 2009; Creswell, 2013).

Data for this research were generated from 51 semi-structured interviews conducted with employees and managers working in six private, two public, and two Non-Government Organizations (NGOs) in Palestine. The data was collected between September 2017 and January 2018 and interviews were of approximately 40 minutes in duration. The interviews were conducted and transcribed in the Arabic language and translated into English, following which a random selection of the translated transcripts was back-translated into Arabic to ensure accuracy of translation. The interview data was then coded and organised through MAXQDA 2018 program.

Findings and discussion

Table 1 below presents a summary of the number of employees and managers across the organisational sectors that mentioned specific aspects of HRM practice in their organization.

Insert Table 1 here

Employee perspectives

Role of HRM

As can be seen from Table 1 most employees across the three sectors expressed similar views about the role of HRM in their organization. Generally, from the employee perspective the role of HRM is seen to include: managing job applications and employment issues between individual employees and their managers; dealing with general employment and work issues that relate to employees collectively in the organisation; administering the deployment and transfer of employees; using different recruitment approaches to attract best human resources to the organisation; and, acting as a link between the persons that strategize and plan (management of the organization) and those responsible for the organization's operations and outputs. The following quote from one employee is illustrative of the general view:

“Every employee feels the HR role in accordance with their role in the organization. For example, a technician feels the role different to an employee working in the customers' service department who does office work. Further, it is different to an employee working in the sales department who is in direct contact with the customer. Managers and directors understand and feel the HR role better because of their involvement in the management process of the company.” Majdi (Private 2)

In regard to operational matters, employees interviewed mentioned that: the HR department follow up administratively applying the organization's rules and regulations on employee-related matters: such as, leave applications and entitlements, payroll and salaries, applications for work uniforms, job analysis and descriptions, employee attendance. Mohammad (Public 2) is said:

“They are the specialised party in the organization in relation to your ... [administrative] file. ... Existence of such a department is important in the organization because it provides a professional service on employee related issues”.

In summary, employees generally demonstrated a basic understanding of the broad scope of HRM, as an activity which includes but goes beyond operational practice and involves a strategic function in planning, co-ordination, and implementation in some areas of HRM practices, such as R&S for example. These data suggest that the perceptions of employees about the role of HRM in their organizations broadly align with the role of HRM as theorised in the literature.

Recruitment and Selection (R&S)

Of the 22 private sector employees that were interviewed (see table 1), 11 stated that R&S practices in their organisations include: sourcing for potential new employees from within and outside organisation, recruiting applicants to fill vacancies and new jobs in the company, selecting qualified candidates, and hiring new employees. Fadi from (Private 3) captures the majority view emphasising the centrality and importance of R&S to the organization's set of HRM practices:

“They collect ... [applications and academic] transcripts from the hiring portal and check the grades and academic attainments of applicants. Then they sort their applications and interview the top on the sorted list to select the best applicant for the jobs here”.

Furthermore, private sector employees also recognized that R&S practices involve employment planning, job design, career development and management, employee orientation generally and specifically in relation to the organization’s code of conduct. Waleed’s (Private 2) story of his personal experience of the R&S process for his current organization highlights the potential contribution of formalized R&S practices to organizational reputation:

“In terms of my job, this company was not my target; and frankly speaking, when I applied for this position I was chosen among many graduates. When I was interviewed for the job I was asked why I didn’t apply for the job before at the beginning of my graduation? I answered because all your jobs are settled through nepotism, and that when I presented my papers ... [after several unsuccessful applications] and was accepted, I later noticed that the image about the company in the market was not true. This is a large company with many people and faces huge competition.”

In the public-sector organizations, 7 employees commented that R&S practices in their organizations were designed to recruit and hire new competent personnel for the organization. One employee indicated that R&S practices are a tool of control to ensure transparency and integrity in the process for recruiting, selecting and hiring new employees:

“Recruitment and selection practices are a coordination mechanism for ensuring the suitability of fit between the qualifications and expertise candidates have and the duties and responsibilities the organisation requires.” Madeha (Public 1)

NGOs employees interviewed mentioned that R&S practices involve recruitment and placement of employees in the organization, including for some jobs the transfer of employees from one department to another when there is a vacancy or a new post, and when the employee had applied for that job and agreed to transfer if they were the best candidate selected.

In summary, analysis of the interview data makes clear that private organizations use more R&S practices that involve a strategic element such as planning, which reflects a more professional understanding of the R&S function consistent with the literature; while R&S in the public-sector organizations and NGOs mostly reflects a more basic personnel administration approach with no indicators of a strategic dimension. It is also clear that all employees interviewed had at least a basic operational understanding of R&S practices, and in a few cases a more nuanced view.

Training and Development (T&D)

Ten of the 22 Private sector employees talked about the following T&D practices at their organizations: handling of training records and employees' career development pathways; provision of training opportunities and courses to upskill employees; provision of experience and development opportunities such as job rotation where needed; support for the attainment of higher educational qualifications and skills, within the country and sometimes for attendance at specialised training courses outside the country. The comment by Naif (Private 1) about T&D practices is typical of this private sector employee group:

“We have a training centre. At the beginning of each year, training needs are determined, and each department has the right to propose training that is required. Some training programs are carried out by employees from the company and the rest by trainers from outside the company. There are courses for international professional certificates provided by the department of human resources too.”

Further, some private sector employees also said their organization appreciates that employees are the most organization's important asset, and thus supports and provides T&D opportunities in recognition that such support will provide a valuable return through improved performance. It is also clear from the interview data that in addition to T&D practices such as induction programs, and short-term on-the-job training programs, some private sector organizations recognise the value of having professional development programs focussing more on long-term career development for their employees. For instance, Mohammad (Private 5) said:

“To advise the employee about their career path is very important for the employee, as they will know where they are progressing and when they will get promoted in the future, which keeps them motivated.”

Employees interviewed in the public-sector organizations generally noted that training opportunities and programs are less common because of organisational budget limitations; however, when specific training required to handle important tasks, some employees said that top management provided support in order to keep the organization operating in a steady way. In the NGO sector, employees said, that when required to meet an urgent work need, employees were sometimes sent to a training centre; otherwise project teams were expected to fund training from out of their operational budgets if training was required to get the project done with best outcomes. There was not a strong centralised coordinated approach to T&D in some of these organizations. This approach is understandable for NGOs which may be dependent on short-term project funding for their continued operation.

Based on employee perceptions, it is possible to suggest that over all the organizations in the study, T&D appears to be more planned and linked to the organization's future skills needs in the private sector compared to public sector organizations and NGOs.

Performance Management (PM)

In relation to private sector employees, nine indicated that in their organizations PM practices include annual performance appraisals conducted with specific criteria and objectives, and a link between performance appraisal and job design. The benefits of performance appraisals were recognised by employees e.g. they help in developing employees and promotions are given to employees on a transparent basis. Some organizations educate and train employees about performance appraisal objectives and how to complete the process properly (e.g. filling out the form online, and providing an information booklet and guidelines to employees about the process. Mohammad from (Private 2) said:

“In the appraisal process the employees appraise themselves at first then they are appraised by their manager. If there is inconsistency or difference between the employee’s appraisal and their manager’s appraisal, HRM employees intervene to understand why there is a difference e.g. the employee did not understand the criteria or there is injustice. The HRM employee asks the manager of that employee to meet and discuss their appraisal, then they try to understand if the manager discussed the appraisal with the employee and if the employee is satisfied.”

The views of public-sector employees suggest that in some organizations the PM process is relatively unsophisticated and conducted within a limited administrative framework. One employee described the need to have performance appraisal forms and criteria for each employment level rather than her organization’s present practice using one form and set of criteria for all employees:

“I think performance appraisal process and content are good now, but we still need to have a performance appraisal form and criteria for each job instead of having a form for each employment level.” Nabila (Public 1)

Five of the nine employees at NGOs interviewed said that their PM include: PA for employees; PA that occur once a year; conducting some correction procedures; and PA is good to achieve fairness among employees working at the organization.

PM in the private sector organizations contrasts with that in the public-sector organizations where employees described how employees are often not evaluated, the consequences of which were a lack of promotion and movement on career paths. NGOs employees have mentioned in relation to PM practice that they are undertaking performance appraisal, and their organization are handling some correction procedures. It is obvious here also that HRM practice related to PM are clearer at private organisation and it has some strategic role seeking to build employees job satisfaction as per the literature.

Rewards Management (RM)

Several of the 16 private sector employees interviewed talked about the following RM practices at their organisations: salaries and incentives and financial assistance provided to employees by the organisation, providing financial incentives for employees after PA results, and provision of health

insurance. Employees in some organizations also mentioned arrangements where advance payments could be requested by employees. A range of other rewards were also mentioned; for example, Walid from (Private 1) said:

“As well as including new meals in the company's restaurant, ... [the organization provides] a discount on the prices of the company's products; and grants special purchasing offers for the company's products to the employees.”

Moreover, some private sector employees mentioned that their organisations offer presents and gifts for the employees, as well as entertainment programs:

“[The organization] provides ... entertainment activities to promote affiliation with the company and conducted in the company e.g. the company football team. These activities are very necessary and essential to local companies and it allows the company to compete successfully with other companies. It will also strengthen the company and reinforce the affiliation of employees towards the company in which they work. ... These activities, such as the yoga training that takes around half an hour per day, are conducted by the administration and have a significant impact on the staff ... which leads to a sense of self comfort.” Majid (Private 2).

In regard to intrinsic motivation, employees in the private sector mentioned celebrations and events organized by the HRM such as employee recognition activities and, farewell events:

“Some activities conducted by HRM department, such as an email congratulating me about some achievement ... or even condolences, have a big effect on employee morale and employees feel that the company cares about them, which will increase their work performance.” Sajeda (Private 1)

Six of the eight public sector employees interviewed said the following about RM practices: salaries are being paid at the end of the month; annual increments usually given at the end of the year; Mohammad from (Public 2) said:

“It is important for the employee to understand their position on the salary scale, so they will be able to determine when they will get promoted.”

Three of the eight employees interviewed at NGOs said the following about RM practices: salaries are received monthly; every year we receive some kind of annual increment calculated in the new contract we sign yearly.

In summary, analysis of the interview data makes clear that private organizations use more RM practices that involve a strategic element such connecting rewards to the organizational objectives and performance, which reflects a more professional understanding of the RM function consistent with the literature; while RM in the public-sector organizations and NGOs mostly reflects a more basic approach of remuneration with no indicators of a strategic dimension.

Manager perspectives

Role of HRM

As can be seen from Table 1 too, managers across the three sectors expressed alike views about the role of HRM in their organization. Mostly, from the managers' perspective the role of HRM is seen to include: increasing harmony and belonging of employees towards the organisation; having job descriptions for all jobs within the organization hierarchy; developing the PM system and talent acquisition practices; showing employees that their organization appreciates high performers; and strengthening institutional commitment of all employees. The following quote from one manager is illustrative of the general view:

“The operations of the circle include R&S process, and contracting. Then the employee enters into an induction program about the organization mission and their work. Then we provide them with an idea about our RM system and the benefits they will receive. Then we explain the PM process and how it is important to increase performance. Then we explain the aspects of employment relations ..., then we continue informing them about T&D programs we offer. Finally, we explain to them that the role of HR will continue with the employee until the end of their service, or contractual period with the organization.” Ratib (Private 4)

In regards to operational matters, managers across the three employing sectors mentioned that the role of HRM comprises: dealing with employees' vacations, leaves, and contracts; updating employees job description; managing job rotation; administering employees' attendance, and health insurance matters. For instance, Mohammad (NGO 1) said:

“The employee considers this department is the organizer of their relationship with the management of the organization ... from the contracting procedures, all through their daily work and development, up till their end of service stage.”

In summary, managers generally demonstrated a sophisticated understanding of the scope of HRM, as an activity which includes a strategic function in planning, co-ordination, and implementation in most of the major areas of HRM practices, such as PM, R&S, and T&D for example. These data suggest that the perceptions of managers about the role of HRM in their organizations align with the role of HRM as theorised in the literature.

R&S

Of the seven private sector managers interviewed (see table 1), four stated that R&S practices in their organisations include: recruitment and hiring of competent individuals to help departments accomplish their objectives; contracting with new employees; job analysis; using best practices in R&S to attract the best candidate for the organization; employees' career planning and development; and employee retention plans. A private sector manager, Nagham (Private 1), summarised R&S as including:

“sourcing, hiring, selection, and testing of candidates until they sign the contract”. Two of the four public sector managers and the two NGO managers interviewed said that their R&S practices include: recruitment and testing; recruitment of competent candidates with skills and qualifications that match jobs requirements; and recruitment planning. A public sector manager, Enas (Public 2) identified the purpose simply as:

*“R&S of competencies to meet the needs of the departments to carry out their tasks ...
... [and] in order to do their jobs at best.”*

In summary, analysis of the interview data conducted with managers also makes clear that private organizations use R&S practices, such as recruitment planning, more strategically reflecting a more professional understanding of the R&S function consistent with the literature; however, R&S in NGOs mostly reflects a more basic approach with no indicators of a strategic dimension.

T&D

Six of seven private sector managers and directors interviewed used T&D practices at their organisations that involve: providing an orientation program for new employees about the organization and their duties; T&D activities such as training programs, workshops, and participation in related conferences, and T&D budgets in order to develop employees working at all levels. Hazim (Private 1) said:

“Based on employees’ performance appraisal results, the HR department develop the organisation’s annual training program. I found that T&D practices helped me personally to develop myself and to get promoted to this position.”

Three of four public sector managers interviewed also mentioned that their T&D practices include: regulating the training budget and procedures to ensure a comprehensive training plan; and, providing employees with the necessary training based on the annual employees’ evaluation. Ahmed (Public 1) said:

“We train and develop employees believing that will increase their skills and in turn increase the organization’s performance.”

One of the two NGO managers interviewed said indicated his/her organization’s T&D practices were quite basic in that when an employee signs the contract and joins the organization they are simply provided with an induction package about the organization.

In summary, managers’ perceptions about T&D suggested that such practices appear to be more planned, constructed based on employees’ evaluation results, and linked to the organization’s future skills needs in the private sector and as per the literature on T&D; while public sector organizations and NGOs are still using basic T&D approaches with no indicators of a strategic aspect.

PM

Four of seven managers/directors in private sectors indicated the following about PM practices at their organisations include: managing the evaluation process of semi-annual performance based on prior objectives determined by the manager and the employee; providing incentives, annual increments, and/or bonuses based on the results of employee evaluations. For instance, a private sector manager, Nagam (Private 1) said:

“Institutional development includes performance assessment that is done twice a year; the employee is self-evaluated and then evaluated by his supervisor. By monitoring performance evaluation results, we make sure that all the staff are in the system.”

A public sector manager, Iren (Public 2) expressed a common view about the purpose of PM:

“PM helps in enhancing employee performance and belonging to the organization because employee feels better when they’re being appreciated for the efforts they do.”

The two NGOs managers also said the following about the purpose of their PM practices; e.g. Mohammad (NGO 1) said:

“... Spreading the idea of justice among employees through management of institutional performance. For example, when an employee feels that there is some kind of justice among the employees, s/he relaxes more and thus perform better.”

In summary, analysis of the interview data conducted with managers also makes clear that private organizations use more PM practices that involve a strategic element such as planned semi-annual PA for employees based on predetermined objectives that are consistent with the literature. Overall, the public and NGO sector managers revealed a more basic operationally-focussed approach to PM with no indicators of a strategic dimension.

RM

Five of the seven managers/directors interviewed in the private sector organizations said the following about RM practices at their organisations: RM is based on performance appraisal results employees which are used to determine the allocation of financial incentives and annual increments; financial rewards are given at the end of the year and can include paying employees one, two, or even three extra months of salary or, as in the case of sales employees, a commission can be paid that could be double their total annual salary; non-financial rewards are also provided to employees, e.g. certificates of recognition or ‘best employee of the month’ awards, which were perceived to have a positive effect on employees feelings. Hazim (Private 3) said about intrinsic motivation:

“We release the employee to create, and feel they have contributed something new to their organization, which in my opinion is more important than financial incentive.”

Three of the four public-sector managers interviewed mentioned that their RM practices include: providing materialistic and non-materialistic rewards to employees based on their performance; in a

number of organizations there is a yearly increment provided for employees based on their annual evaluation:

“Rewards enhance the employee’s sense of job security. As well as, the employee feels that there is recognition and motivation provided for them by the organization.” Iren (Public 2)

The two NGOs managers indicated that because their organizations hire most employees on fixed-term contracts, their organizations’ RM practices include providing salaries that are usually higher than market salaries for same qualification and experiences. Mohammad (NGO 1) also alluded to the rewards that the work itself provides:

“If the expectations are clear for the staff, and if the employee completes his duties, the rewards will be also clear for them.”

In summary, analysis of the interview data makes clear that private organizations use more strategic RM practices, such as connecting rewards to the organizational objectives and performance, thus reflecting a more professional understanding of the RM function consistent with the literature; On the other hand, RM in the public-sector organizations and NGOs mostly reflects a more basic approach of remuneration with no indicators of a strategic dimension.

Conclusion

As can be seen from the findings and the discussion presented above, the role of HRM and its practices including R&S, T&D, PM, and RM are practiced at different levels in the private, public, and NGOs in Palestine.

This study contributes to the literature by showing that the majority of employees across the three sectors generally demonstrated an understanding of the broad scope of HRM, i.e. as an activity which goes beyond operational practice and involves a strategic function in planning, co-ordination, and implementation in some areas of HRM practices, such as R&S for example. These data suggest that the perceptions of employees about the role of HRM in their organizations broadly align with the role of HRM as theorised in the literature. In addition, managers generally demonstrated a sophisticated understanding of the scope of HRM, as a set of activities with a strategic dimension in planning, co-ordination, and implementation in the range of HRM practices (i.e. PM, RM, R&S, and T&D). Likewise, these data suggest that the perceptions of managers about the role of HRM in their organizations align with the role of HRM as theorised in the literature evidently.

For each are of HRM practice employees and managers demonstrated different levels of perception in the three sectors. Private sector employees and managers both perceived R&S practices strategically consistent with the literature, particularly in relation to planning practices, and trying to achieve better employee attitude through enhancing employee job satisfaction. T&D practices were also practiced by private organizations at a strategic level consistent with the view expressed in the

literature i.e. they provide some or all of: T&D programs based on evaluation results and linked to career paths; experience and development opportunities; opportunities for employees to continue their education and to develop their skills; and support for specialised training courses outside the country. On the other hand, training opportunities and programs at public sector organization and NGOs are less common because of organisational budget limitations.

Private sector employees and managers perceived PM practices at their organisations from a strategic perspective e.g. appraisal based on prior objectives determined by the manager and the employee consistent with the literature of PM. Public sector and NGOs managers reflected a more basic approach to PM with no indicators of a strategic dimension. Private organizations use RM practices that involve a strategic element such as: connecting rewards to the organizational objectives and performance; providing both financial and non-financial incentives for their employees based on PM feedback, and paying attention to intrinsic motivation needs with employee recognition programs for example. The private sector approach reflects a more professional understanding of the RM function consistent with the literature. On the other hand, RM practices perceived by employees and managers in the public-sector organizations and NGOs mostly demonstrated a more basic approach to RM focused narrowly on remuneration with no indicators of a strategic dimension.

In conclusion, the findings presented here suggest Palestinian employees and managers working in the private sector are more aware about strategic HRM practices; while public-sector and NGO employees and managers demonstrated a less developed and generally minimal perception about strategic HRM practices and how they are connected to performance.

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Appendix 1: Study context: Palestine

Geography

Palestine is situated in the ME on the eastern coast of the Mediterranean Sea (see Figures 1 and 2 below).

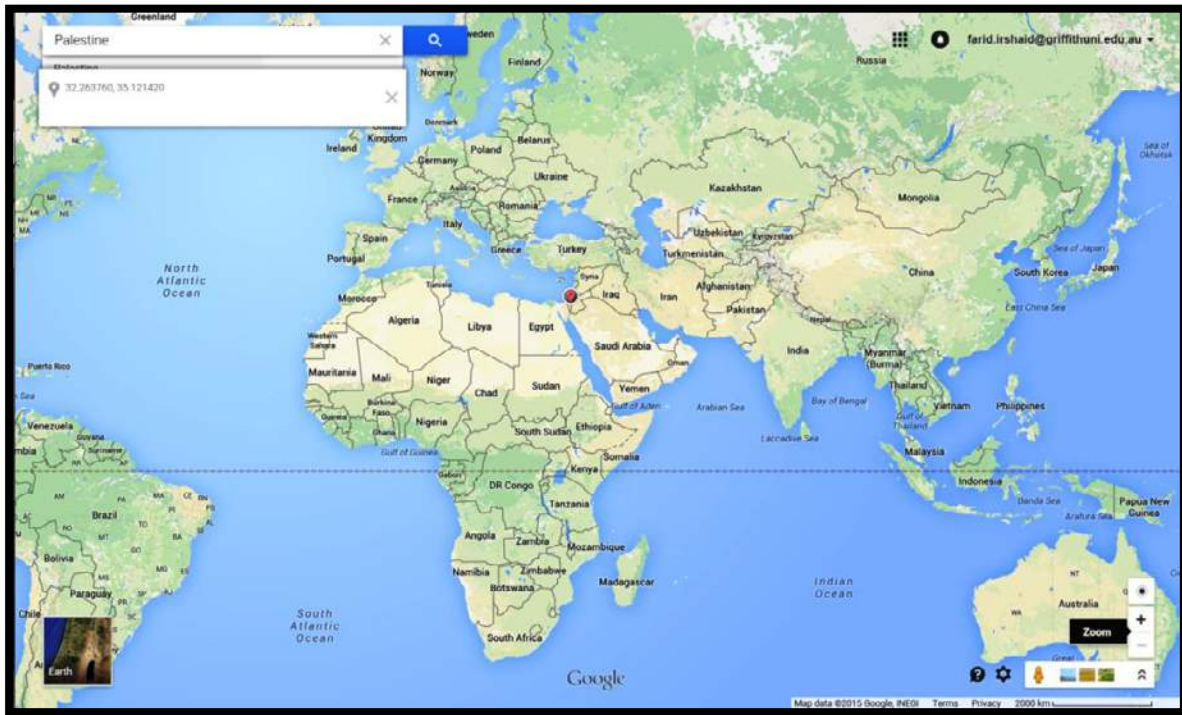


Figure 1.1: Location of Palestine in the world (Google, 2016)

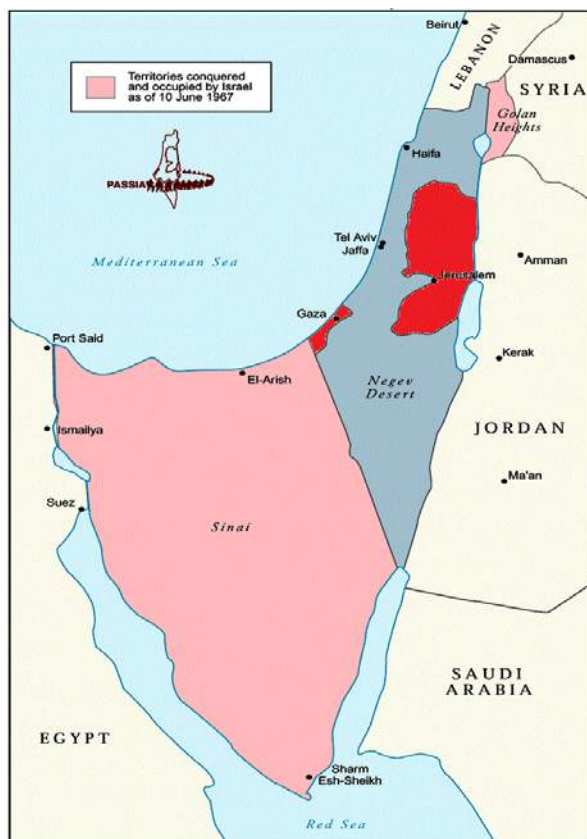


Figure 1.2: Palestine - shown in red the west bank of the Jordan River and Gaza strip occupied after the 1967 war (PASSIA, 2007).

History and politics

Palestine is a part of the Arab region called ‘Bilad al-Sham’ (Hanley, 2008), which has been known historically as ‘the Fertile Crescent’ because its rich soils make it suitable for growing various crops and producing high quality yields (Brown, Jones, Powell, & Allaby, 2009). Further, being the land of three major world religions - Judaism, Christianity, and Islam - makes Palestine an area of special interest to many nations (Parkes, 1949), and thus the source of many conflicts to this day.

In the twentieth century, Palestinian territory was occupied by Israelis in two waves; the first after WWII, and the second following the 1967 war which put all the historical land of Palestine under Israeli occupation (Al-Madhoun & Analoui, 2003). However, under the ‘Oslo Accord’ agreement concluded in 1993 between the Palestinian Liberation Organisation (PLO) and the Israel government, the latter committed to relinquishing Palestinian territory occupied after 1967 war (see Figure 1.2).

With the return in 1994 of land abutting the west bank of the Jordan River including East Jerusalem, and the Gaza strip on the border with Egypt, part of the agreement was fulfilled (Michels, 1994); thus providing a location for the establishment of Palestinian institutions for an independent and liveable state.¹ The ‘Oslo Accord’ also provided for Palestinian interim self-government resulting in establishment of the Palestinian National Authority (PNA), the body responsible for the administration of Palestinian territory under its control. This in turn led to the creation of a civil service system to administer the state and service the daily life of residents (Shaath, 1993). A peak management body – the General Personnel Council (GPC), headquartered in Ramallah city near the capital Jerusalem – is charged with the responsibility for managing the HRM function for the civil service, which now has a total of approximately 90,000 employees (PCBS., 2014).

Culture

Palestinians total approximately 12 million people (PCBS., 2014) being Arab Muslims and Christians, with around 5.8 million still living in the country. The rest were expelled by the occupation and are now found all over the world as immigrants or citizens of other countries. The Palestinian culture reflects the long historical interaction of the Palestinian people with their soil and with those people of a much larger Arabic world which been associated throughout history with Palestinians (Abu-Lughod, 1985; Tamari, 2008). Evidence for this interaction is found in the distinctive form of ‘Palestinian Arabic’ spoken by many Palestinians today, a language which embodies a cultural tendency towards moderate rather than extreme expression (Abu-Lughod (1985); as well as in availability of employment in service industries and professional occupations in neighbouring Arabic countries (Tamari, 1980).

¹ After the assassination of the Israeli Prime Minister Yitzhak Rabin in Tel Aviv in 1995 by a radical Israeli, the peace process slowed down and eventually came to a halt in 2000, thus precluding full completion of the agreed land transfer (Shlaim, 2005). Indeed, most of the transferred land has subsequently become subject to Israeli rule again. Palestinian hopes for ending the occupation were revived in 2014 when the United Nations General Assembly voted overwhelmingly to accord Palestine ‘Non-Member Observer State’ status in the United Nations (Kaczorowska, 2015).

For most Palestinians, a turbulent political history and the consequent social turmoil have resulted in hard work being seen as the most appropriate means through which survival and self-esteem can be achieved (Abboushi, 1990). Although, studies have also found that many Palestinians follow a Western-style value system that makes them more competitive in modern type of jobs see (Bassiouni & Ben-Ami, 2009; Weaver, Gillespie, & Al-Jarbawi, 1985), Palestinians does have distinct cultural practices which will likely impact on what they think PsyCap means and whether they think HRM affects PsyCap state. In addition, social change following on from the two ‘Intifada uprisings’ of recent years has produced an enlarged role for women in Palestinian society, with higher workforce participation and greater involvement in a more diverse range of work (Fleischmann, 2003; Giacaman, 1993).

Business and economy

The Palestinian economy is dominated by services across a wide range of areas, including: accommodation and food services; real estate; scientific and technical activities; professional, administrative and support services; education, health and social work; and, arts, entertainment and recreation (PASSIA, 2009). In terms of overall economic statistics, in 2013 the Palestine GDP was valued at \$7,054.3 million (USD), GDP per capita was \$1,691.9 (USD); not surprisingly given that the industrial sectors of the Palestinian economy are still in the early stages of development and its agricultural sector suffers from a lack of restricted access to natural resources. The public sector is the largest employer overall (PCBS., 2014).

Table 1: HRM practices mentioned by employees and managers

HRM	Employees (n=38)			Managers (n=13)		
	Private (n=22)	Public (n=8)	NGOs (n=8)	Private (n=7)	Public (n=4)	NGOs (n=2)
Role of HR:						
<i>Strategic</i>	14	4	2	3	1	1
<i>Operational</i>	3	4	6	2	0	1
R&S	11	7	2	4	2	2
T&D	10	6	2	6	3	2
PM	9	3	5	4	2	2
RM	16	6	2	5	2	2

Note: Not all employees or managers in all sectors mentioned specific issues.

How HPWS enhance Manager's Innovative Behaviors? The mediating roles of
Manager Ambidexterity
Competitive Session

**How HPWS enhance Manager's Innovative Behaviors? The mediating roles of
Manager Ambidexterity**

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How HPWS enhance Manager's Innovative Behaviors? The mediating roles of Manager Ambidexterity

ABSTRACT

The purpose of this study is to test the effect of HPWS on individual innovative behavior and mediation role of manager's ambidexterity between HPWS and innovative behavior with multilevel research design. Dyad data with 1HR manager and 5 line managers each firm gathered from 53 firms in Taiwan. The result showed that HPWS has a positive impact to individual innovative behavior and the manager's ambidexterity partially mediated the positive relationship between HPWS and individual innovative behavior of managers. The contribution and implications discussed.

Keywords:

High-Performance Work System (HPWS); Ambidexterity; Innovation Behaviors

INTRODUCTION

In the past two decades, scholars and practitioners generally agreed that employees' individual innovative behavior is important to keep the competitive advantage in firm--especially in current

business operation context with high competition, rapid change and global challenges environment (Hirst, Knippenberg & Zhou, 2009; Nadkari & Herrmann, 2010; Baron & Tang, 2011; Veenendaal & Bondarouk, 2015). Scholars have produced a wealth of knowledge about the factors that facilitate employees' individual innovative behavior (Anderson, De Dreu, & Nijstad, 2004; Damanpour, 1991). Shared vision and innovative organizational culture (Miron, Erez, & Naveh, 2004; Naveh & Erez, 2004), emphasis on exploration rather than exploitation, investment in R&D (Zahra & George, 2002; Cohen & Levinthal, 1990), team diversity (Gibson & Gibbs, 2006), individual task and monetary rewards (Amabile, 2000; Eisenberger & Rhoades, 2001) are some of those mentioned that can improve innovative behavior. However, because of its variety antecedents and the black box of innovation process, there still have questions of why and how the individual innovative behavior can be stimulated and initiated remains interesting to researchers.

Scholars have drawn upon the ability-motivation-opportunity (AMO) model and suggested that employees' performance is a function of three essential components: ability, motivation, and opportunity to perform. Extending this logic, HR systems designed to maximize employee performance by enhancing employees' these three components to contribute (Jiang, Lepak, Hu, and Baer, 2012). The implementation of high-performance work systems (HPWS), a set of HR practices involving selection, training, performance appraisal, and compensation designed to enhance employee effectiveness and benefit to the organization. HPWS stresses on the point to enhance the individual ability that motivate ones engagement and provide opportunity for individual through the systemic HRM practices.

Ambidexterity have been recognized as an ability to balance both exploitative activities which simultaneously exploiting existing competencies and explorative activities which exploring new opportunities. (Raisch, Birkinshaw, Probst & Tushman, 2009; Kobarg, Wollersheim, Welpé & Spörrle, 2017). Researches on ambidexterity indicate that the implementation of HPWS is an important antecedent to facilitate ambidexterity evenly on organization level, team level and individual level also (Patel et al., 2013, Mom, Foure and Jansen, 2015, Chang, 2016). Most of the scholars on ambidexterity innovation will focus on organizational level, however, scholars have increasingly argued that ambidexterity may also root in the ambidextrous behaviors of their employee individuals.

In this study, we argue that the individual ambidexterity is at least even important than from organization in whole. Managers play the role to facilitate team member to learn new knowledge, ability and skill to contribute organizational performance. We design a multilevel research framework with sample of managers in the organization for the nest phenomenon between individuals and organizations. With sample of 53 firms joined in our survey, the HR manager of each firm described his own HPWS as organizational variable and 5 line managers each demonstrated their ambidexterity ability and innovative behavior. This study aimed to understand the relationships among HPWS, ambidexterity and innovative behavior. First, we examined the relationship between the organizational HPWS and individual innovation behavior. Second, we develop a mediated mechanism with managers' ambidexterity to understand the black box between HPWS and individual innovation behavior.

THEORY AND HYPOTHESES

HPWS and Individual Innovative Behavior

Individual Innovative Behavior

Scott & Bruce (1994) defined individual innovative behavior under the multistage process perspective of innovation. The process that included starting the recognition toward problems, production of solutions and ideas, seeking for sponsorship and champion their ideas and the last stage, innovative individuals complete the ideas by simply producing “a prototype or model of the innovation ... that can be touched or experienced, that can now be diffused, mass-produced, turned to productive use, or institutionalized” (Kanter, 1988). Amabile (1983) adopted the perspective of sociology and proposed the componential theory of creativity, which divided individual creativity into three components, including expertise, creative thinking and intrinsic task motivation. Social environment, which poses strong impact towards such components, form as componential theory of organizational creativity (Amabile, 1988), which including components such as organization motivation to innovate, resource and management practice.

Individually speaking, innovation begins with the activity with employees who come up with novel ideas, and the ideas often result from solving incongruities and discontinuities encountered at work (Kanter, 1988). Employees intend to revise himself or working environment through innovation

to improve their work effectively and attain to expected result. For instance, demand-ability fit, performance enhancement, job satisfaction, reduced stress level, better interpersonal relationships, well-being and personal growth (Janssen, Van de Vliert, & West, 2004).

High Performance Work System (HPWS)

Scholars had been proved that High performance work systems (HPWS) are not only conductively promote organizational performances (Delaney & Huselid, 1996; Fey et al., 2000; Hoque, 1999; Guthrie, 2001), but also to have effect on employees' performance, behaviors, commitment, degree of participation, employees' knowledge and skills (Huselid, 1995) and degree of empowerment (Kochan & Osterman, 1994).

Scholars holding different views about HPWS (Pfeffer, 1994; Becker & Gerhart, 1996). Most of Scholars described it as "a system of HRM practices designed to enhance employees' skills, commitment, and productivity in such a way that employees become a source of sustainable competitive advantage" (Lawler, 1992, 1996; Levine, 1995; Pfeffer, 1998; cited in Datta et al., 2005: 136). We reorganized the factors that thought to be included the categorized factors like: (1) recruitment and selection (2) training (3) internal promotion (4) compensation (5) reward (6) teamwork (7) information sharing (8) employee participation (9) employment security (10) communication and other HPWS practices.

In this study, we adopted the eight domains of HPWS from Sun et al. (2007) for the reason that the domains were specified from extensive literature review and containing significant factors from past major literature as mentioned above. The domains that included selective staffing, extensive training, internal mobility, employment security, clear job description, result oriented appraisal, incentive reward and participation.

The relationship between HPWS and individual innovative behavior

Since the importance of innovation is widely recognized, and the success of business was proved to be achievable by individual innovation. With gaining attention to the field of individual innovative behaviors, antecedents such as leadership, work group, team member exchange, individual attitude (Scott & Bruce, 1994) has been widely examined. Yet very little attention has drawn to the relationship between HPWS and individual innovative behavior.

Some scholars believed the core of HPWS is the AMO three dimensions structure- Ability, Motivation, Opportunity (Appelbaum, Bailey, Berg, Kaleberg, 2000). That is, HPWS stresses on the point to enhance the individual ability that motivate ones engagement and provide opportunity for individual through the systemic HRM practices. Thus, we assume, for instance, the process of recruitment, organizations focus on whether candidates owns corresponding capability and knowledge needed in their job also; extensive training, which is being emphasized by HPWS, devoted to individual development and cultivation of certain required capability and skills, making sure individuals are competent for their job. Moreover, HPWS can engage individuals to innovate by both aspect of intrinsic and extrinsic motivation under the systemic HR activities as following. Career security allow individuals to innovate without worries and concerns; information-sharing mechanism facilitate the process of innovation; result-oriented appraisal and reward system encourages them to realize individual innovation. Teams and decentralized decision-making practices and measures endow them with the opportunities to be involved in the challenge tasks and give full play to their creativity; flexible and wide-range job design as well as job rotation also break the limitation of their career and encourage them to perform innovative behavior in the workplace.

Firms adopted HPWS with different HRM practices systemically, will create an innovation-friendly context, in which individual will have enough ability, motivation, and opportunity to perform innovative behavior. Following this logic, we propose

Hypothesis 1: The adoption of HPWS will positive facilitate manager's individual innovative behavior.

The Mediation role of Manager's Ambidexterity

Manager's ambidexterity

Ambidexterity had recognized as an ability to balance both exploitative activities and explorative activities (Kobarg, Wollersheim, Welpé & Spörrle, 2017). In the organizational level, the concept of organizational ambidexterity it means that it is the organizational capability that enables organizations to gain competitive advantage effectively in existing market while creating advantage and innovating in the up-coming market challenge (Andriopoulos, Lewis, 2009; Benner, Tushman, 2003; Duncan, 1976; Gibson, Birkinshaw, 2004; Patel et al., 2012; Tushman, O'Reilly, 1996). Organizational

ambidexterity is originated from individual ambidexterity (Kang & Snell, 2009; Patel et al., 2012; Prieto & Santana, 2012). The concept of ambidexterity not only apply to organizational level but also the level of individual as mentioned above, and it called “individual ambidexterity”. Individual ambidexterity is the capability of an individual to execute both activities, in this case, explorative and exploitative activities swiftly and simultaneously (Lubatkin et al., 2006). The manager’s ambidexterity defined as a manager who is able to combine both explorative and exploitative activities within a certain period of time (O’Reilly & Tushman, 2004; Mom, Van Den Bosch & Volberda, 2009). From the past studies, manager’s ambidexterity summed few common traits. First, managers need to engage in resource allocation to make sure resources well distribution between existing business and the new one. Second, they need to be able to recognize various and disparate knowledge of different fields within new and existing business and facilitate internal knowledge transfer among units (O’Reilly & Tushman, 2004). Mom & Van Den Bosch & Volberda (2009) compiled three characteristics for manager’s ambidexterity, including hosting contradiction, dealing with multiple tasks and continuing refine and renew their knowledge, skills, and expertise. Those are one of the ability for manager.

The relationship between HPWS and manager’s ambidexterity

Research between HPWS and individual ambidexterity just emerged to conduct, we argues that there is a causal relationship between them that based on two points summarizes form literature reviews. First, many scholars proffered the concept that an context can be built through HRM system(Gibson & Birkinshaw, 2004; Kang & Snell, 2009; Patel et al., 2012).Which, from the contextual perspective, is beneficial to individual ambidexterity (Gibson & Birkinshaw,2004). HRM practices is one of the critical antecedent of the establishment of ambidextrous context (Gibson & Birkinshaw, 2004; Kang & Snell, 2009; Patel et al., 2012). From which we inferred that HPWS have influence to manager’s ambidexterity; Second, since manager’s ambidexterity is seen as an ability to combine both explorative and exploitative activity. We argues that HPWS not only play as the role of creating an ambidextrous context, but also as a supporting role toward manager’s ambidexterity. HRM practices provide and strengthen the ability, motivation, and opportunity required. We propose our second hypothesis following the logic we previously proposed:

Hypothesis 2: There is a positive relationship between HPWS and manager’s ambidexterity.

The relationship between manager's ambidexterity and individual innovative behaviors

Woodman et al. (1993) proposed the interactionist model of creative behavior to elaborate the factors that will influence individual innovative behavior. Several factors was proposed and proved that both cognitive and non-cognitive aspect was examined and proved that be related to individual innovative behavior. Cognitive factors such as knowledge, cognitive skills, cognitive styles and preference; non-cognitive factor such as personality. Creative or innovative behavior is influenced by antecedents such as cognitive style and ability (e.g., divergent thinking, ideational fluency), personality factors (e.g., self-esteem, locus of control), relevant knowledge, motivation, social influences (e.g., social facilitation, social rewards), and contextual influences (e.g., physical environment, task and time constraints). The manager's ambidexterity is one of individual abilities and one of antecedents of individual innovative behavior. Thus, we propose our hypothesis as follow:

Hypothesis 3: Manager's ambidexterity will positive affects their individual innovative behaviors.

The mediation effect of Manager's ambidexterity between Manager's ambidexterity and individual innovative behaviors.

We assume our hypothesis base on the relevant capability and characteristics that an ambidextrous manager holds. Ambidextrous manager tend to foster and renew their knowledge, skills and proficiency. They motivated to engage in various learning activities to obtain information and knowledge required (Mom et al. 2009), which enables themselves to have corresponding capability to engage in individual innovative behavior. Also, ambidextrous managers strive to deal with complex cognitive process, such as divergent and ambivalent thinking (Mom et al. 2009). Such cognitive style and ability deemed as a critical and beneficial factor toward innovative behavior. We suggest that there is a relationship between manager's ambidexterity and manager's innovative behavior. Moreover, in line with our previous, we also presume a mediating effect of manager's ambidexterity within the relationship between HPWS and individual innovative behavior (manager). Thus, we propose our hypothesis as follow:

Hypothesis 4: Manager's ambidexterity strengthened the positive relationship of HPWS and individual innovative behavior of managers.

Figure 1 shows the research framework. HPWS expected to impact the managers’ individual innovative behaviors and manager’s ambidexterity play the mediation role between HPWS and individual innovative behaviors.

 Insert Figure 1 about here.

METHODS

We demonstrated dyad data for 1HR manager and 5 line managers and collecting 53 sample companies and 265 managers from the firm of small medium sized enterprises (SMEs) in Taiwan. For the issue of common method variance (CMV), we design separation approach of data collecting by two different questionnaires with different contents for HR managers and line managers. Most of the companies established 11 to 20 years and employed 251 to 2000 employees in a variety of industry category, including manufacturing (17%), wholesale and retail (15%), transportation(11%), hotels(9%) and others(48%).

265 managers are male of 54.7% in gender, 31 to 40 years old of 46.8% in age, undergraduate degree of 52.1% in education and 72.1% are married. Most of the respondents (95%) with ‘manager’ job title.

Measures

High Performance Work System

The scale was originally developed by Sun et al.(2007), which contained 27 items to measures eight domains with five-point Likert scale, from 1, strongly disagree, to 5, strongly agree and the corresponding Cronbach’s alpha were 0.97 respectively.

Manager’s Ambidexterity

We adopted the scale developed by Richard, Phillip & Patrick (2011). The original scale employed with seven-point Likert scale. However, an empirical study indicated that after data transformation, the means, variances, and kurtosis of five-level, seven-level Likert scale are of no obvious deviation (Dawes, J.,2008). Thus, we modifies the scale as a five- point scale in order to stay consistent with other scales. The scale divided into two dimensions with 5 items included in each and

10 items in total. the corresponding Cronbach’s alpha were 0.93.

Individual Innovative Behavior

Scale developed by Scott & Bruce (1994) that adopted in this study. The scale contains six items and translated into Chinese afterwards. The scale was measured in five-point Likert scale, from 1, strongly disagree, to 5, strongly agree. The corresponding Cronbach’s alpha were 0.87.

RESULTS

Means, standard deviations, reliabilities, and correlations among the variables are in Table I. The hypothesized model yielded good fit to the data, $\chi^2/df=1.943$, RMSEA= 0.09, CFI = 0.916, NFI =0.854, IFI = 0.916 and NNFI = 0.910, shows that goodness-of-fit indexes of the factor-models were within the anticipated scope and it is safe to conclude that this is a good measurement model.

 Insert Table 1 about here.

We employed multilevel hierarchical modeling to test the hypothesis by SPSS 21.0 and HLM to put each hypothesis in trial. First, we test the main effects among independent variables (HPWS) on meditative variable (manager’s ambidexterity) and dependent variable (manager’s innovation behavior) by following steps and conducted ‘mean-as-outcome regression model’ of HLM to examine, the results are presented in Table 2.

To test Hypothesis 1, the result shown as Model 2 in Table 2 that indicated the manager’s innovative behavior is significantly associated with HPWS ($\gamma_{03} = 0.903, p < 0.001$), Hypothesis 1 is supported. HPWS will positive influence manager’s innovative behavior. To test Hypothesis 2, The result shown as Model 1 in Table 2 that indicated manager’s ambidexterity is significantly associated with HPWS ($\gamma_{03} = 5.930, p < 0.001$), Hypothesis 2 is supported. HPWS positive influence manager’s ambidexterity. To test Hypothesis 3, figure out the mediating role of ambidexterity between HPWS and innovative behavior, we have to exam the relationship between ambidexterity and innovative behavior. The result shown as Model 3 in Table 2 that indicated the manager’s innovative behavior is significantly associated with ambidexterity ($\gamma_{10} = 0.139, p < 0.001$). Hypothesis 3 is supported. Manager’s ambidexterity has positive influence innovative behavior. Finally, we examine the mediating effect of ambidexterity between the HPWS and innovative behavior. The result showed in

Model 4 of Table 2. Compare the coefficient of HPWS in Model 2 and Model 4, we find the coefficient reduced (from 0.903 to 0.501) and less significant (p-value from < 0.001 to >0.003).

Although the p-value of manager’s ambidexterity in Model 4 is no significant, we can conclude that manager’s ambidexterity acts a partial mediation between HPWS and innovative behavior.

 Insert Table 2 about here.

DISCUSSIONS

In this study, we developed a multilevel approach to examine that HPWS impact on innovative behaviors and the mediate role of ambidexterity for individual level, since scholars have paid more attention on organizational level before. Results based on randomly selected 53 SME firms in Taiwan that 53HR managers and 265 line managers supported this prediction. Furthermore, we found that this macrolevel to microlevel relationship indeed depended on variability in two mesolevel organizational characteristics, lending support to a multilevel combinational approach to employees’ individual innovative behaviors. The research result and conclusions are as follows.

The result shows that HPWS will positive facilitate manager’s individual innovative behavior. To conclude, research over the past had examined the cross-level relationship between HPWS and individual innovative behavior, especially those are focus on manager’s innovative behavior are scarce. From the viewpoint of individual innovative behavior, despite the fact that studies related to such concept is abundant, little studies had investigate organizational level factors such as management measures, organizational climates and so on. Aiming at filling this gap, this study proved the cross-level relationship between HPWS and manager’s innovative behavior. That is, we found that by implementing HPWS, business can motivate managers to perform and engage in their innovative behavior. And we find the result for the mediation role of manager’s ambidexterity. It provides an insight to such relationship for two points. First, based on AMO theory (Appelbaum, Bailey, Berg & Kaleberg, 2000), HPWS is able to provide certain ability, motives, and opportunity that is needed in the workplace. Since manager’s ambidexterity is seen as a capability, we believed that when companies implementing HPWS within organization, it will support managers to engage in ambidextrous activities. Second, Gibson & Birkinshaw(2004) proposed the concept of contextual

ambidexterity, which means that an organizational context can be built to encourage individual to distribute their time and vitality reasonably toward the needs of alignment and adaptability, that is seen to be contradictory, in other words, engage in ambidextrous activities. Under this perspective, scholar also proposed that HRM practices can create an ambidextrous context (Gibson & Birkinshaw, 2004; Kang & Snell, 2009). In line with this, we proposed that the implementation of HPWS encourage as well as support managers to engage in ambidextrous behaviors.

The result indicates that manager's ambidexterity have a positive significant effect to manager's innovative behavior. Inferring from this, ambidextrous managers are more likely to engage in innovative behavior for the reason that they are capable of hosting contradiction, dealing with multiple tasks and constantly refine and renew their skills, knowledge, and expertise (Mom et al., 2009), which allows them to have the cognitive ability, relevant knowledge and capability to perform innovative behaviors (Woodman et al., 1993).

The mediating effect of manager's ambidexterity is examined first to have satisfied three conditions. Then HLM was conducted and partial mediation effect was proven afterwards. Thus, the hypothesis is partially valid. To conclude, similar to previous logic, we propose that while HPWS, an external factor, can create an beneficial context for innovative behaviors, manager's ambidexterity, an internal factor, is also an critical factor for themselves to perform innovative behavior.

Theoretical Contributions and Practical Implications

Based on findings, we provide practical suggestions to companies and managers in the aspect of manager's innovative behavior and HR practices. Under the dynamic environment nowadays, innovation is a vital issue for enterprises. The foundation of innovation is "people" and innovative behaviors are the basis of innovation. Especially managers in the organization are extremely crucial for the reason that they are empowered to make essential decision and are of influential position within business. But how to trigger manager's innovative behaviors is the key mechanism to unpack the black box. According to the findings of this study, we propose our suggestions as the followings:

Companies provide the appropriate context and encourage manager to engage in innovative

behavior by implementing HPWS. To exemplify, first, both extensive training, formal and informal education allows manager's to gain domain- relevant skills, and research shown that is one of the major components to creative performance (Amabile.,1983). Skills and abilities of the manager's can be seen as cognitive pathways for executing an task or dealing with an problem. That is, the more capable and skilled they are, the more they tend to perform outside the box, to seek for new method or novel solutions; Second, reward system can encourage manager's to engage in innovative behavior by providing incentives to an innovative outcomes, which is the result of innovative behaviors. A concept called receptivity beliefs was mentioned in an related study suggesting that behaviors with positive consequences build up receptivity beliefs for that specific behavior, which make it more likely to happen in the future (Ford,1996) .

We suggest that companies ought to stress on both factors like information sharing and decentralize decision-making in HPWS. When managers are allowed to make decisions, they will have the power to make decisions, for example, time arrangement and the ways to solves the problems. Thus, adopting HPWS will create a context, which is beneficial to manager's ambidexterity. Also, by information sharing mechanism, managers are more likely to access to different information and knowledge, allows them to discover new opportunities or learn novel things. That is, to be more likely to engage in both exploitative and explorative activities.

Limitations & Future Research

Add Others Related Research Variables or Possible Factors

Since related studies are scarce, and we only discussed the effects of HPWS, Individual innovative behavior, and manager's ambidexterity in this study. We suggest that related variables can be employed through literature review and investigate in future research, such as organizational climate, to perfect the research structure.

The Objectiveness of Data

Despite the fact that all of the variables are testified by EFA and are with certain validity in this study, the scale of individual innovative behavior is of self-evaluation from managers themselves. However, peer or evaluation of subordinates can also be employed to make that data more subjective. Therefor, we suggest that the improvement can be made in future research to

measure more accurately as well as deepens the discussion of the relationships.

CONCLUSIONS

This research aims at study whether HPWS poses an influence toward manager's innovative behavior. Furthermore, we strive to provide extra explanation of the relationship by adding the mediating effect of manager's ambidexterity. We are trying to deliver a different scope of research field while providing a practical suggestion to business, in order to maximize their profit and to keep competitive advantage. This study used a multilevel to assess how firms can use their HR strategies (i.e., HPWS) to promote employees' innovative behavior that focus on managers individuals to influence their team menemployees. Through the study, we not only advanced conceptual knowledge on the relationship between HPWS and creativity but also provided concrete, practical suggestions for how firms can prioritize their limited resources and optimize the impact of such costly resource allocation decisions so as to wisely manage and develop their talents.

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Figure 1. Research Framework

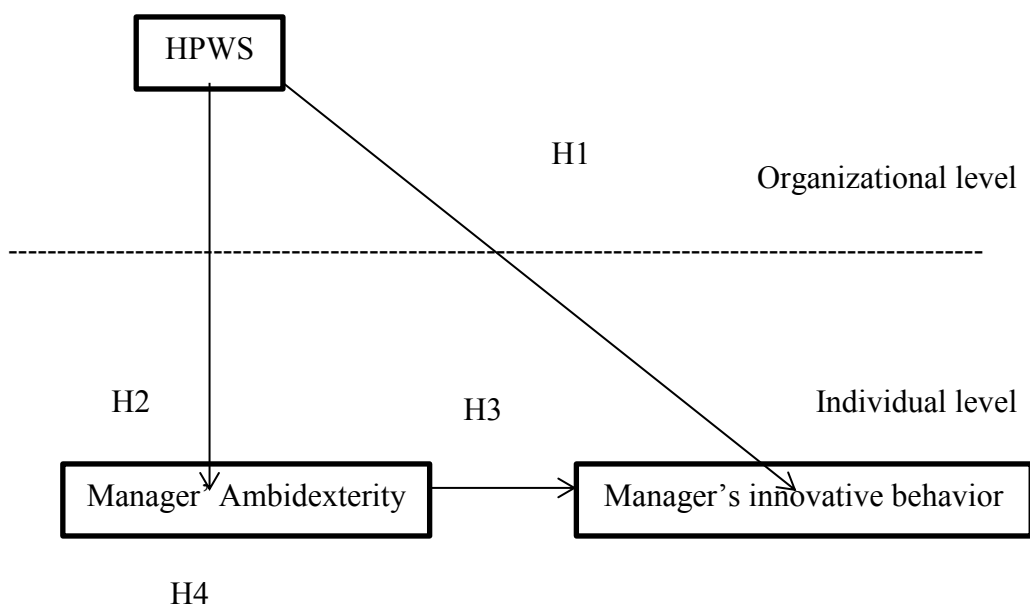


Table 1 Descriptive statistics and correlation of interested study variables

		Mean	S.D.	1	2	3	4	5
Organization Level (N=53)								
1	Est. Years ^a	3.13	0.90					
2	Co. Scale ^b	2.62	1.06	0.68**				
3	HPWS	2.49	0.89	0.23	0.18	(.97)		
Individual Level (n=265)								
4	Ambidexterity ^c	13.00	5.70				(.93)	
5	Innovative Behavior	3.53	0.92				0.87**	(.87)

^a Est. Tears: 1= 5 yrs or less.; 2=6-10 yrs.; 3= 11-15 yrs.; 4=16-20 yrs.; 5=21 above.
^b Co. Scale: 1= employ 250 or less; 2=251-500; 3=501-1000; 4=1001-1500; 5=1501-2000; 6=2001-3000; 7=3001 or above.
^c Ambidexterity = product of exploration and exploitation.
 () Alpha value.

Table 2 The effect of HPWS and ambidexterity of manager to innovative behavior

Variables	MANAGER'S INNOVATIVE BEHAVIOR			
	AMBIDEXTERTY Model 1	Model 2	Model 3	Model 4
Organizational Level				
For INTERCEPT1, β_0				
INTRCPT2, γ_{00}	13.003***	3.527***	3.526***	3.527***
Est. Years, γ_{01}	0.355	0.040	0.007	0.016
Co. SCALE, γ_{02}	-0.510	-0.038	0.037	-0.003
HPWS, γ_{03}	5.930***	0.903***		0.501**
Individual Level				
For AMBIDEXTERITY sloop, β_1				
INTRCPT2, γ_{10}			0.139***	0.068
σ^2	4.203	0.200	0.208	0.208
τ_{00}	0.941***	0.002	0.000	0.000

* p< 0.05; ** p<0.01; *** p< 0.001

Entrepreneurship, Start-ups and Small Business

Competitive session

**Getting by with help from the family: The impact of family-to-business support
on entrepreneurial stress and creativity of informal sector women micro-
entrepreneurs in Sri Lanka**

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Entrepreneurship, Start-ups and Small Business

Competitive session

Getting by with help from the family: The impact of family-to-business support on entrepreneurial stress and creativity of informal sector women micro-entrepreneurs in Sri Lanka

ABSTRACT:

Using the Job Demands-Resources Model, this study examines the family-to-business support as a job resource that moderates the relationship between work demands and entrepreneurial stress in women micro-entrepreneurs in the informal sector in Sri Lanka. The study also examines how reduced entrepreneurial stress can foster entrepreneurial creativity in this subset of entrepreneurs. Findings from 476 survey instruments show that work demands lead to heightened levels of stress in women micro-entrepreneurs and that family-to-business support moderates this relationship. Additionally, reduced stress resulting from the moderating effects of family-to-business support resulted in increased entrepreneurial creativity.

Keywords: Creativity, Informal sector, Stress, Micro-enterprises, Women entrepreneurs, Work demands

Entrepreneurship is considered as one of the most stressful occupations worldwide (Cardon & Patel, 2015). Entrepreneurs must work long hours, mostly alone and with limited resources in high risk situations and must bear the brunt of their poor decisions, all of which heighten their levels of stress (Baron, Franklin & Hmieleski, 2016). These factors are further exacerbated for women entrepreneurs operating informal sector micro-businesses in developing country contexts who must face ‘triple disadvantages’. First, women micro-entrepreneurs in developing countries choose entrepreneurship as a necessity, rather than a choice, to generate survival income for their families (Xheneti, Madden, & Karki, 2017). Second, given their small scale, they remain at subsistence levels, often ‘hidden’ from formal institutional structures, and ignored by the government (Muñoz & Dimov, 2014). Third, apart from the burden of normal entrepreneurial activities, women micro-entrepreneurs in developing countries face additional obstacles due to their marginal role in society (De Vita, Mari, & Poggesi, 2014) and social expectations requiring them to perform carer roles within the family (de Arruda & Levrini, 2015).

In examining entrepreneurial stress, Cardon and Patel (2015) concluded that future research should examine potential stress-buffering resources that can assist entrepreneurs. At the same time, Jaskiewicz and colleagues (2017) argued that while the undeniable impact of families on human behaviour is well-documented, ‘management research is yet to fully embrace how aspects of families (e.g., family-member relationships, family structures, and family events) influence entrepreneurs..... and their organizations’ (p 309). In order to address these calls, the present study examines whether a supportive family environment assists informal sector women micro-entrepreneurs to deal with the demands of their work by reducing their entrepreneurial stress. In turn we argue that stress reduction heightens levels of creativity exhibited by these entrepreneurs. Social support (which includes family support) has been theoretically and empirically related to reduced stress and greater mental and physical health in general (Powell & Eddleston, 2013) and in particular amongst women entrepreneurs compared to their male counterparts (Semerci, 2016). Despite calls to include the effects of family on entrepreneurial activities (Aldrich & Cliff, 2003; Edelman, Manolova, Shirokova, & Tsukanova, 2016; Jaskiewicz, Combs, Shanine, & Kacmar, 2017), limited attention has been given

to the role of family support in buffering entrepreneurs from the negative effects of their work demands and how this can foster entrepreneurial creativity.

In this paper we examine whether family-to-business support reduces the negative effects of informal sector women micro-entrepreneurs' work demands on their entrepreneurial stress and creativity in a developing country context, i.e., Sri Lanka, by drawing upon the Job Demands-Resources Model (JD-R Model: Bakker, Demerouti, De Boer, & Schaufeli, 2003). In doing so we emphasize the importance of family-to-business support as a job resource available to informal sector women micro-entrepreneurs to combat entrepreneurial stress. The study utilized matched survey data obtained from 476 women micro-entrepreneurs in the informal sector and their respective case officers in local government. The paper makes a number of important contributions. First, we respond to calls by researchers to identify resources that buffer entrepreneurs' stress and to better utilise resources offered by families within entrepreneurial endeavours. In particular, using the tenets of the JD-R model, the study examines family-to-business support as a critical job resource that can moderate the positive effects of women micro-entrepreneurs' high work demands on their stress. Entrepreneurs' work and family domains are more inter-related than in the case of formal employment as entrepreneurs can easily transfer or share resources between the two domains (Powell & Eddleston, 2013). Thus it makes sense to examine how support from the family can be used to mitigate women micro-entrepreneurs stress from high work demands. Second we examine how we might foster higher levels of creativity amongst informal sector women micro-entrepreneurs, especially those facing high levels of stress induced by significant work demands. 'Compared to other types of economic activities, entrepreneurship typically requires creative thinking' (Lu et al., 2017, p. 1092). Creativity is all the more important for women micro-entrepreneurs for achieving long-term firm sustainability as they face significant performance and survival issues relating to their ventures (Bertulfo, 2011). Third, we test our model in the informal sector in a developing country context. Compared to the formal sector, informal sectors within developing countries are dominated by women entrepreneurs (Bertulfo, 2011). Being excluded from formal support systems, these informal entrepreneurs stay embedded locally in family and community networks (Assudani, 2009;

Viswanathan, Echambadi, Venugopal, & Sridharan, 2014) and rely on them for support and resources (Viswanathan, Sridharan, Ritchie, Venugopal, & Jung, 2012). Thus testing this model within this specific context can inform our understanding of how family support, the most readily available resource for informal sector women micro-entrepreneurs, aids them to manage stress and increase creativity. These findings can in turn inform policy formulation to assist this group of entrepreneurs to better utilize their existing family ties.

The paper is organized as follows. In the first section of the paper we review the literature relating to work demands, entrepreneurial stress, family-to-business support and entrepreneurial creativity and develop hypotheses. In the second section of the paper we present the methodology and findings. In the final section of the paper we discuss the findings, and highlight limitations and suggestions for future research.

WOMEN MICRO-ENTREPRENEURS IN THE INFORMAL SECTOR

The informal sector refers to a ‘diversified set of economic activities, enterprises, jobs, and workers that are not regulated or protected by the state’ (Chen 2012, p. 8). Informal sector activities account for nearly 60% of global economic activity, with around half of the world’s population and the majority of the poor being part of the informal economy or dependent on it (World Bank, 2016). The informal sector contributes significantly to income and employment generation, poverty alleviation and regional development in developing countries. As such entrepreneurial activity in the informal sector has attracted growing interest amongst scholars (Sutter, Webb, Kistruck, Ketchen Jr, & Ireland, 2017; Webb, Bruton, Tihanyi, & Ireland, 2013).

A comparatively higher number of women enter the informal sector so as to escape poverty or ‘involuntary exclusion’ from formal labour markets (Xheneti et al., 2017) as necessity-based entrepreneurship is more common in developing countries (Warnecke, 2016). Micro-entrepreneurs typically have low educational attainment, little to no managerial experience, and a lack of access to formal financing and business networks (Lindvert, Patel, & Wincent, 2017). These entrepreneurs typically work without any brand capital and usually experience low public visibility. Interestingly,

although excluded from formal support systems, these entrepreneurs ‘use available resources to create alternatives for the objects and systems they lacked’ (Viswanathan et al., 2012, p. 170). For instance, these entrepreneurs mainly operate in and are embedded in dense networks in their local community and relying on these informal ties has become a common business strategy for them (Viswanathan et al., 2012). Their transactions are mainly based on mutual trust and word of mouth (Sutter et al. 2017) with mutual interdependence (Johnson & Johnson 1989) and continuance commitment (Viswanathan et al., 2012) being important tools in their survival kit. Thus social networks are critical ingredients for informal sector women micro-entrepreneurs’ survival.

JOB DEMANDS-RESOURCES (JD-R) MODEL

Work typically involves two sets of distinct variables, i.e., job demands and job resources (Schaufeli & Bakker, 2004). The JD-R model postulates that these job demands and job resources differentially predict employee well-being at work (Bakker & Demerouti, 2007). Job demands are the ‘physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort and are therefore associated with certain physiological and/or psychological costs’ (Schaufeli & Bakker, 2004, p. 296). For example, job demands can include working under strict deadlines (Carlson et al., 2017), high work pressure, emotional demands and poor environmental conditions (Bakker, Demerouti, & Euwema, 2005). Job resources refer to the physical, psychological social or organizational aspects of the job that are (1) functional in achieving work goals; (2) reduce job demands and the associated physiological and psychological costs; or (3) stimulate personal growth and development (Bakker, Demerouti, & Verbeke, 2004, p. 86).

The JD-R model posits that employee job stress and burnout occur through an energy-draining effect due to the existence of excessive job demands and low job resources (Bakker, Demerouti, & Euwema, 2005) while ‘high levels of job resources are related to positive work outcomes through a motivational process’ (Hu, Schaufeli, & Taris, 2011, p. 182). Additionally, the model posits a moderating effect where the existence of job resources buffer the negative effects on employee health and well-being from excessive job demands at work. In this study, we focus on the

moderating effect of family-to-business support (a job resource) on informal sector women micro-entrepreneurs' work demands (a job demand) and entrepreneurial stress.

HYPOTHESES DEVELOPMENT

Work demands and entrepreneurial stress

The work demands of entrepreneurs compared to salaried-employees are high (Dijkhuizen Gorgievski, van Veldhoven, & Schalk, 2016). Hence entrepreneurs face a number of job demands that increase their levels of stress. Women micro-entrepreneurs in the informal sector in developing countries are no less different. Such entrepreneurs, being the sole owners of their businesses with little to no outside help, must make critical business decisions as well as run the daily business operations. Unlike formal sector entrepreneurs, they typically engage in precarious work with low and unstable earnings and with high risks of falling in to poverty (Bertulfo, 2011). Additionally, women micro-entrepreneurs in developing country informal sectors face gendered constraints in the form of 'social norms, codes of behaviour and practices in specific sociocultural contexts and the barriers to women's sustainable economic activity' (Xheneti et al., 2017, p. 2). Given their dual-roles, this subset of entrepreneurs typically operate home-based businesses so they can complete their housework duties while simultaneously running their businesses. They have little or no access to formal childcare. As such, given the long-hours these women must spend in unpaid housework, they face pressures to find time for their businesses and typically earn less than their male counterparts engaging in similar types of informal activities (Bertulfo, 2011). These work demands act as job demands that heighten their levels of entrepreneurial stress. Thus we develop our first hypothesis as follows:

H1: Informal sector women micro-entrepreneurs' work demands are positively related to their level of entrepreneurial stress

Family-to-business support as a moderator

Family-to-business support is defined as 'social support received from family members for one's entrepreneurial activities' (Powell & Eddleston, 2013, p. 265). Such support can be received from both immediate family members (i.e. spouses, children) as well as other family members and

can take the form of emotional sustenance (i.e., behaviors and attitudes that show care and concern for the employee) and instrumental assistance (i.e., behaviors and attitudes that show the family's willingness to share household activities and responsibilities) (King, Mattimore, King, & Adams, 1995). Micro-entrepreneurs in the informal sector are embedded in informal social networks (Nguyen & Nordman, 2017) out of which family ties play an important role. Family ties represent the closest and easiest job resources women micro-entrepreneurs in developing country informal sectors can draw on and access as they are intricately intertwined with their lives and home-based business domains (Powell & Eddleston, 2013). Thus family acts as a job resource for these women micro-entrepreneurs to draw on in times of increased work demands. For example, women micro-entrepreneurs can draw upon family instrumental support in helping to oversee some business activities or helping with housework. Older children or parents can be called into look after younger children while the woman micro-entrepreneur engages in business activities. Families can also provide the emotional support, understanding and caring when the entrepreneur is experiencing high stress. Thus family-to-business support can be a job resource that moderates the adverse effects of work demands on women micro-entrepreneurs.

H2: Family-to-business support moderates the relationship between informal sector women micro-entrepreneurs' work demands and entrepreneurial stress such that family-to-business support weakens the positive relationship between work demands and entrepreneurial stress

Entrepreneurial stress and creativity

Creativity relates to 'the cognitive and behavioral processes applied when attempting to generate novel ideas' (Hughes, Lee, Tian, Newman, & Legood, in press, p. 3). Creativity is vital for the long-term success of any organization (Anderson, Potočnik, & Zhou, 2014; Lu et al., 2017). While moderate levels of stress can increase creativity, we hypothesise that the high levels of stress experienced by women micro-entrepreneurs leads to a reduction in their creativity. This is because high levels of stress and the accompanying feelings of strain and negative emotions can interrupt women micro-entrepreneurs' ability to cognitively and behaviourally engage in novel idea generation leading to a decline in their creativity. Thus we formulate the following hypothesis.

H3: Informal sector women micro-entrepreneurs’ stress is negatively related to their entrepreneurial creativity

We further hypothesize that the women micro-entrepreneurs’ work demands can result in reduced creativity. This can occur when the high work demands experienced by these entrepreneurs can limit their time and energy in engaging in creative thinking. Additionally, the high levels of stress due to women micro-entrepreneurs’ work demands can also increase (mediate) this negative relationship between work demands and creativity.

H4: Informal sector women micro-entrepreneurs’ work demands are negatively related to their level of entrepreneurial creativity

H5: Informal sector women micro-entrepreneurs’ stress mediates the relationship between their work demands and entrepreneurial creativity such that this negative relationship is strengthened

H6: The mediating role of informal sector women micro-entrepreneurs’ stress on the relationship between work demand and entrepreneurial creativity is moderated by family support in such a way that mediated relationship is weaker when women micro-entrepreneurs have higher levels of family-to-business support

Insert Figure 1 about here

METHODOLOGY

Data collection was carried out through a survey design in Sri Lanka during June – August 2015. Assistance from divisional secretaries were sought to identify the sampling frame for the study as formal business registries on informal sector micro-entrepreneurs were lacking in Sri Lanka. Such entrepreneurs are significantly dependent on their divisional secretariat to fulfil basic requirements of operating a business (e.g. financing, procurement of raw materials, networking) and thus the divisional secretariat possesses significant inside knowledge about each micro-entrepreneur residing within their division. We sourced our data through 15 such divisional secretariats covering the northern, eastern, southern, and western parts of Sri Lanka. A total of 476 women micro-

entrepreneurs participated in the study. To reduce errors associated with respondents' comprehension of questionnaire items, local graduates employed within each divisional secretariat were trained on formal survey taking techniques and employed to assist each woman micro-entrepreneur to complete the survey. An experienced researcher from the research team supervised the administration of surveys in each divisional secretariat. This approach is consistent with previous research undertaken on informal entrepreneurship in a developing country context (Bullough, Renko, & Myatt, 2014).

In order to gather both self- and other-reported data to increase empirical robustness, two separate survey questionnaires were designed: one for women micro-entrepreneurs and another for government case officers in charge of managing women micro-entrepreneurs. The survey questionnaires for the case officers were distributed in print form via post. Through this procedure, a total of 321 surveys (i.e. some officers were responsible for more than one woman micro-entrepreneur in their division) were collected. The surveys completed by case officers were matched with the surveys completed by the corresponding entrepreneurs from each division. Both these questionnaires were initially written in English and subsequently translated into Sinhala and Tamil, the primary local languages used by our study sample. An experienced translator registered within the Department of Official Languages, Sri Lanka was used to translate both surveys. Next, the Sinhala and Tamil versions of both surveys were translated back into English to ensure that items used in both surveys carried the same meaning in all three languages.

The following measures were used in the survey questionnaires.

Work Demands: Work demands were self-rated by women micro-entrepreneurs using an 8-item measure adopted from Cousins et al. (2004). A 5-point scale was used for each item, varying from 1 = never to 5 = always. Sample items include “I am pressured to work long hours”, “I have unachievable deadlines”, “I am unable to take sufficient breaks”, and “I have unrealistic time pressures”.

Entrepreneurial stress: The level of entrepreneurial stress was also self-rated by women micro-entrepreneurs. We adopted the 10-item measure by Cohen and colleagues (1983), with 5-point scale for each item, varying from 1 = never) to 5 = very often). Sample items included “In the last month,

how often have you been upset because of something that happened unexpectedly?”, and “In the last month, how often have you felt that you were unable to control the important things in your life?”.

Family-to-business support: The latent construct of family-to-business support was measured using a 4-item self-report measure developed specially for entrepreneurs by Powell and Eddleston (2013). We captured the level of family-to-business support using 7-point scale for each item where 1= strongly disagree, 7= strongly agree. Sample items included “When I’m frustrated by my business, someone in my family tries to understand”, and “Family members often go above and beyond what is normally expected in order to help my business succeed”.

Entrepreneurial creativity: Entrepreneurial creativity was rated by the women micro-entrepreneurs’ case officers on the basis of a 4-item measure developed by Baer and Oldham (2006). Case officers reported on a 7-point scale (1= strongly disagree, 7= strongly agree) the extent of agreement/disagreement to certain statements. Sample items included “This micro-entrepreneur suggests many creative ideas that might improve working conditions in their business”, and “This micro-entrepreneur often comes up with creative solutions to problems experienced in their business”.

Control variables: We controlled for demographic variables of the informal sector women micro-entrepreneurs including age, level of education, and the business location of micro-entrepreneurs. In addition, we also controlled for the length of the relationship between the micro-entrepreneur and her case officers and firm age. The age of entrepreneurs was recorded as a categorical variable (30 years<=1, 30-40 years=2, 41-50 years=3, and >50 years=4). Education was measured using a dummy variables where 1= GCE A/L or above and 0 otherwise. The location of the business was also measured using a dummy variable where 1 captured enterprises operating in Colombo (capital of Sri Lanka) district and 0 otherwise. The length of the link between women micro-entrepreneurs and case officers and firm age were captured in years.

RESULTS

Table 1 presents descriptive statistics for each of the main variables in the study, correlation coefficients between them and Cronbach alpha values. Women micro-entrepreneurs’ stress was significantly associated with work demands, family-to-business support, and creativity. In addition, entrepreneurial creativity was significantly associated with family-to-business support. However, all

the correlation coefficients are less than 0.5, indicating a weak association between the main study variables. This suggests that the variables to be used in subsequent regression analyses are unlikely to be suffering from multi-collinearity. In addition, the Variance Inflation Factor (VIF) of the main regression analysis (where the dependent variable was entrepreneurial creativity) was 1.08 which is well below the threshold of 10. The Cronbach’s alpha values for all latent constructs were higher than 0.6, suggesting strong reliability of variables in the study.

Insert Table 1 about here

Confirmatory factor analysis

To determine construct validity of variables depicted in the conceptual model (Figure 1), a confirmatory factor analysis was conducted. A number of statistics were used to determine goodness of fit covering both absolute fit and relative fit. The goodness of fit statistics suggest that the model fit with the data reasonably well. The root mean square error of approximation (RMSEA) was 0.067 [90% confidence interval=0.062-0.072]. Models with a RMSEA less than 0.07 are considered to be of good fit (Steiger, 2007). The relative chi-square (χ^2 / df) =1055.79/403=2.62 was also good. According to Kline (2005), a ratio of 3:1 or less is considered to be of good fit. However, the comparative fit index (CFI) of 0.842 was relatively weak falling under the recommended threshold of 0.9 (Kline, 2005). The majority of goodness-of-fit indices suggest adequate discriminant and convergent validity between variables in the model.

The factor loading values are greater than the recommended threshold of 0.4 (Kline, 2005) and statistically significant at the 1% error level for all the latent constructs except for three items of the latent variable “perceived social stress”. The average standardized-factor loading for the latent constructs work demands, entrepreneurial stress, family-to-business support, and entrepreneurial creativity were 0.52, 0.49, 0.81, and 0.91, respectively.

Results of hypotheses testing

To test all hypotheses, we employed ordinary least squares regression with the path-analytic conditional process modelling (PROCESS) macro for SPSS introduced by Hayes (2013). The advantage of the PROCESS macro is that it allows us to test for direct, indirect, and conditional

indirect effects in moderated-mediation models. It also calculates bootstrap indirect and conditional indirect effects along with their confidence intervals at a given error level.

Insert Table 2 about here

Insert Table 3 about here

We tested Hypothesis 1, 3, 4, and 5 using mediated-regression analyses with bias-corrected-bootstrap-mediated effects recommended by Preacher and Hayes (2008). In Tables 2 and 3 we present the results of regression analyses and bootstrapping process. As can be seen in Table 1, work demands were positively related to women micro entrepreneurs' entrepreneurial stress (H1: $\beta = 0.765$, $P < 0.001$) while entrepreneurial stress was negatively related to entrepreneurial creativity (H3: $\beta = -0.152$, $P < 0.001$).

We further examined whether micro entrepreneurs' stress fully or partially mediate the relationship between work demands and entrepreneurial creativity (H5). As can be observed in Table 2, there is a negative direct relationship between work demands and entrepreneurial creativity, but is not statistically significant (H4: $\beta = -0.021$, $P > 0.1$). Thus, work demands do not directly influence entrepreneurial creativity, only indirectly through entrepreneurial stress, supporting an inference of full mediation (H5).

Hypothesis 2 and 6, was tested using Model 8 of Hayes's PROCESS macro. Model 8 allows us to examine the moderating effects of family-to-business support on the relationship between work demands and entrepreneurial creativity through the mediator, entrepreneurial stress. First of all, in the PROCESS Macro, the effects of the moderator (family-to-business support) on the relationship between the independent variable (work demands), on the mediator (entrepreneurial stress) are examined (H2). As highlighted in Table 2, the interaction term (work demands x family-to-business support) is negative and statistically significant ($\beta = -0.024$, $P < 0.001$). This suggests that the mediating effects of micro-entrepreneurs' stress on the relationship between work demands and entrepreneurial creativity is moderated by family-to-business support, in line with Hypothesis 6. In other words, the effects of work demands on entrepreneurial stress is weaker if women micro-entrepreneurs have higher level of family-to-business support.

Having found the statistically significant interaction term, we further calculated the moderated or conditional indirect effect of work demands on entrepreneurial creativity via entrepreneurial stress at three levels of the moderator, family-to-business support (low, moderate, and high). We used bias-corrected bootstrapping using 5,000 resamples. According to Table 3, the conditional indirect effect of work demand on entrepreneurial creativity via entrepreneurial stress is statistically significant at low and moderate levels of family-to-business support (95% confidence intervals do not include zero (0)), whereas it is not statistically significant at high levels of family-to-business support (95% confidence interval includes zero (0)). The results are graphically presented in Figure 2.

/Insert Figure 2 About Here

Our findings demonstrate that levels of micro entrepreneurs' stress gradually increase as work demands increase. However, as per Figure 2, family-to-business support moderates the relationship between work demands and entrepreneurial creativity in such a way that the negative effects of work demands on entrepreneurial creativity are stronger for those with lower levels of family-to-business support.

DISCUSSION

In response to prior calls made by researchers (i.e., Cardon & Patel, 2015; Jaskiewicz et al., 2017), the study examined how family-to-business support impacts entrepreneurial stress induced by high work demands of women micro-entrepreneurs operating in the informal sector in a developing country context. Findings from the study make a number of theoretical and empirical contributions. First the study makes a theoretical contribution by testing the tenets of the JD-R Model in a subset of entrepreneurs that has not been hitherto examined, i.e., informal sector women micro-entrepreneurs in a developing country context. Findings from this study are consistent with the tenets of the JD-R model. As posited by this model, the work demands of informal sector women micro-entrepreneurs acted as a job demand that led to heightened levels of entrepreneurial stress. Furthermore, family-to-business support acted as a job resource that moderated the relationship between women micro-entrepreneurs' work demands and stress.

Second the study tests the hypothesized model and contributes empirical findings on the relationship between women micro-entrepreneurs' work demands, stress, family-to-business support and creativity. Findings show that there is a negative relationship between women micro-entrepreneurs' work demands and stress and that this relationship is moderated by their family-to-business support. This may be because in the absence of other forms of formal support (Powell & Eddleston, 2013), women micro-entrepreneurs in the informal sector rely on their close family ties for support at times of high work demands and high stress. Interestingly, the findings show that family-to-business support moderates the relationship between work demands and entrepreneurial creativity in such a way that the negative effects of work demands on entrepreneurial creativity are stronger for those with lower levels of family-to-business support.

Policy implications arising from this study point towards better educating women micro-entrepreneurs in developing country informal sectors, the benefits they can gain in stress reduction through the support from their families. Thus programs can be conducted that train women micro-entrepreneurs to effectively utilize and manage their existing family ties as a job resource for mitigating entrepreneurial stress.

LIMITATIONS AND FUTURE RESEARCH

This study has a number of strengths, i.e., the large data set and data obtained from own rated and other rated sources. It is also not without limitations. The study utilized a cross sectional design and future studies would benefit from employing a longitudinal design where the changes in work demands, family-to-business support, entrepreneurial stress and creativity can be mapped over time. This study is also confined to the informal sector in Sri Lanka and hence it is difficult to make generalizations to all other countries. Future research should aim for cross-country research that look at these important relationships in informal sectors of developed and developing countries. Future research can also use a gendered perspective to examine the differences in these relationships between women micro-entrepreneurs and men micro-entrepreneurs in the informal sector.

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Figure 1: A model of women micro-entrepreneurs’ work demands, family-to-business support, entrepreneurial stress and creativity

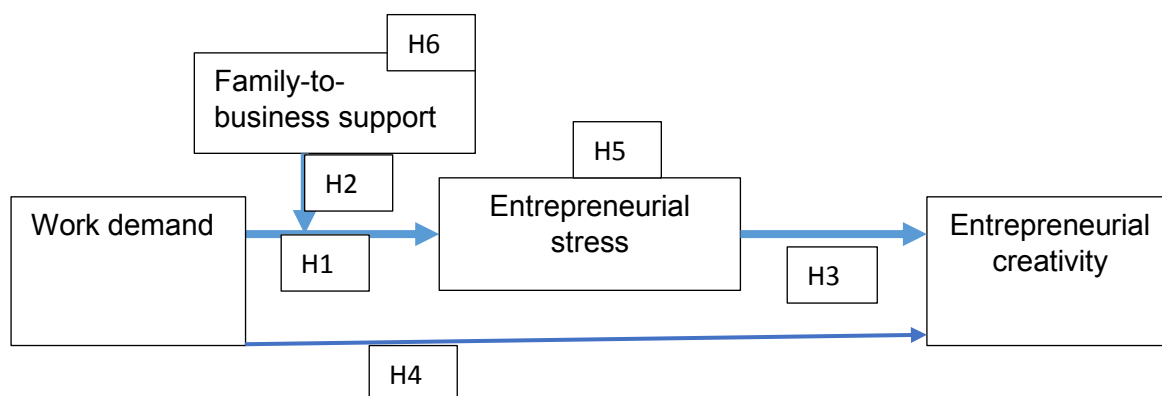


Figure 2: Conditional effects of work demand on entrepreneurial stress by family-to-business support

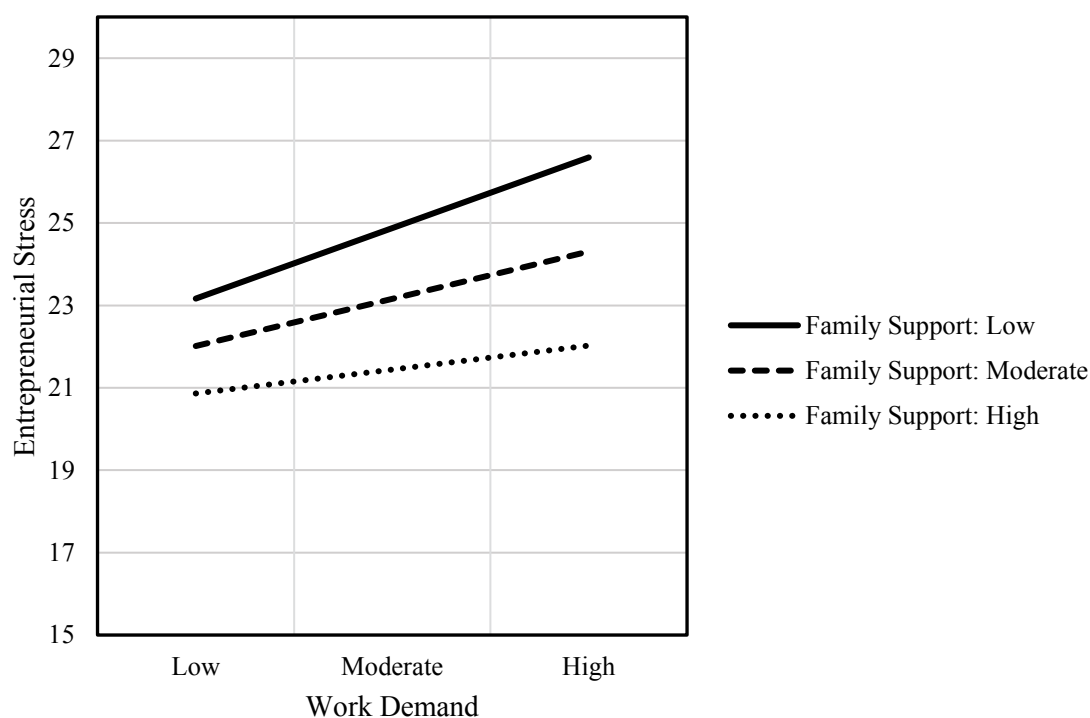


Table 1: Descriptive statistics and correlation coefficients between main study variables

	Mean	STD	Work demand	Entrepreneurial stress	Creativity	Family-to-business support
Work demand	21.25	5.61	(0.75)			
Entrepreneurial stress	23.14	4.94	0.22***	(0.78)		

Creativity	21.72	4.81	-0.04	-0.18***	(0.94)	
Family-to-business support	23.41	4.47	0.04	-0.34***	0.12**	(0.87)

Note: **p < .05, ***p < .01
Cronbach’s Alpha values are in parentheses

Table 2: Regression results

	Model 01 (Entrepreneurial stress)	Model 02 (Entrepreneurial creativity)
	β	β
<i>Variables of Interest</i>		
Work demand	0.765*** (0.217)	-0.021 (0.231)
Family-to-business support	0.117 (0.197)	0.019 (0.206)
Work demand x Family-to-business support	-0.024*** (0.009)	0.001 (0.01)
Entrepreneurial stress		-0.152*** (0.056)
<i>Control Variables</i>		
Living in Colombo	-1.339*** (0.504)	-0.582 (0.526)
Level of education	-0.791* (0.532)	1.373** (0.558)
Age	0.468 (0.290)	0.219 (0.305)
Link with the case officer: Duration	0.021 (0.056)	0.099* (0.059)
Firm age	-0.010 (0.032)	-0.077** (0.034)
R ²	0.215***	0.078***
n	359	359

Note: Standard errors are in parentheses

*p < .10.

**p < .05.

***p < .01.

Table 3: Conditional indirect effects

	Entrepreneurial creativity				
	Family-to-business support	Bootstrap effect	Bootstrap standard error	Bootstrap LL 95% CI	Bootstrap UL 95% CI
Indirect effect: Work demand via entrepreneurial stress on creativity	Low	-0.0484	0.0231	-0.0974	-0.0064
	Moderate	-0.0324	0.0156	-0.0653	-0.0045
	High	-0.0164	0.0122	-0.0448	+0.0026

Note: Bootstrap sample size = 5,000. CI, confidence interval; LL, lower limit; and UL, upper limit

03. Gender, Diversity and Indigeneity
Competitive session

Review and Recommendations: Challenges of Indigenous research in Vietnam

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03. Gender, Diversity and Indigeneity Competitive session

Review and Recommendations: Challenges of Indigenous research in Vietnam

ABSTRACT: *This paper provides critical insights into contextual challenges of researching Indigenous people in the Vietnamese public-sector organizations. Our review on the challenges of Indigenous Research in Vietnam is based on both a literature review of international Indigenous research and our recent study from which we identify and discuss the issues of political sensitivity, data access, availability and consistency of quantitative data, and characteristics of Indigenous participants. We offer recommendations accordingly. This paper aims to benefit directly those who are interested in researching the Vietnamese Indigenous people in future. Further, it contributes to the global conversation on the challenges of conducting Indigenous research, particularly in reaching out to Indigenous populations and obtaining reliable data in order to holistically capture Indigenous voice and experiences.*

Key words: Indigenous research, participation and inclusion, Vietnam

INTRODUCTION

Evidence suggests that research into Indigenous people needs to be culturally sensitive (Burnette, Sanders, Butcher, & Rand, 2014; Chilisa, 2012; Louis, 2007). Indigenous people often have their own belief systems relating to the ontological assumption on the nature of reality, and their own epistemology on how reality is understood (Chilisa, 2012). To ensure that Indigenous research is carried out in a sympathetically, respectful and ethically manners, Indigenous voice should be included in a process in which researchers embrace ‘Indigenous knowledges, languages, metaphors, worldviews, experiences, and philosophies’ (Chilisa, 2012, p. 101).

Furthermore, the importance of historical, political, economic and social context needs to be acknowledged (Burnette et al., 2014; Louis, 2007; Rousseau & Fried, 2001; Tsui, 2004). Most Indigenous research is conducted in Western countries such as North America, New Zealand and Australia, where Indigenous communities are viewed as marginalized groups due to their suffering from dispossession and the consequences of colonization (Burnette et al., 2014; Chilisa, 2012; Tsui, 2004). In non-Western countries the situation is often quite different for example Indigenous people might not be recognized as such officially by their governments (IWGIA, 2018; Tsui, 2004). For example, according

to *The Indigenous World* (2018) published by International Work Group for Indigenous Affairs (IWGIA), countries such as China, Vietnam, Laos do not recognize their ethnic minorities as Indigenous people. In Communist or former Communist countries, Indigenous organizations can be seen as a challenge to government power and authority leading to the stifling of Indigenous voice and even threats of physical violence to those who draw attention to Indigenous issues (Belousov et al., 2007; Tsai, 2010). Hence, an understanding of such a unique context, including the historical political development, is essential for Indigenous research (Louis, 2007).

Accordingly, this paper explores the challenges of researching the participation and involvement of Indigenous people in Vietnamese public sector organisations. In Vietnam Indigenous people are recognized as a marginalized group by the Vietnamese government, but not identified fully as Indigenous people largely because of historical and political reasons (IWGIA, 2018; Nhandan, 2013). In fact, the term ‘Indigenous people’ is often used interchangeably with ‘ethnic minority people’ who are living in the mountainous areas (IWGIA, 2018). As such context, the Indigenous people in this study refer to the hill tribe or Montagnard people who are recognised as the first peoples in the region of Central Highlands of the country (Gupta, 2005).

Also, although Indigenous representation in Vietnamese public organizations has increased, there is limited research on Indigenous people in the workplace (NAFOSTED, 2018). Most previous research on Indigenous issues focuses mainly on social and cultural issues (Huong, 2016; Nguyen, Teo, Grover, & Nguyen, 2017; Van Gramberg, Teicher, & Nguyen, 2013), and we argue that the political environment on their workplace experience which may contribute to the limitation of workplace-based research on Indigenous people is still unexplored. In this context, this paper focuses on the challenges of Indigenous research in Vietnam from the perspective of a Vietnamese Indigenous researcher and two researchers trained in Western research methods to understand the uniqueness of contextual barriers of Indigenous research in Vietnam as a Communist country. In addition, the current state of the global research on Indigenous people, which conduct mainly in the Western countries emphasises the cultural and historical sensitivities as the Indigenous people in such countries are suffering from dispossession and the consequences of colonization (Burnette et al., 2014; Chilisa, 2012; Tsui, 2004). Therefore, the

aim of this paper is to contribute to broadening the current knowledge of contextual factors on Indigenous research worldwide by sharing our insight into the challenges in Indigenous research in Vietnam which we hope will benefit Indigenous employees and future researchers.

THE RESEARCH CONTEXT

The project on which this paper is drawn was a study of Indigenous employee voice and inclusion in public organisations in three locations in the Central Highlands region of Vietnam. The aims of the study were to explore organizational responses to government policies on Indigenous voice, Indigenous employees' experience of participation and involvement, and Indigenous perception of inclusion into organizational decision making.

The Central Highlands region is the home of more than 20 ethnic groups in which the Kinh people (mainstream ethnic group) account for seventy per cent of the region's population. Some of the ethnic minority groups in this region identify themselves as the Indigenous people of this land. However, the Vietnamese government uses the term 'ethnic minority' rather than Indigenous, even though the government supports the United Nation Declaration on the Rights of Indigenous Peoples (Bank, 2009; IWGIA, 2018). According to the Nhandan [people] Newspaper (2013) (which is recognised as the official voice of the party, state and people of Vietnam), the term 'Indigenous people' was no longer used in Vietnam due to historical and political tensions. However, international organizations such as the IWGIA, the World Directory of Minorities and Indigenous Peoples, and Human Rights Watch use the term 'Indigenous people' interchangeably with 'ethnic minority people' in reference to the Indigenous population of the Central Highlands region of Vietnam.

In line with Indigenous people worldwide, Indigenous people in Vietnam face a number of challenges in the workplace. They are less likely to speak the dominant and official language of the country, which leads them to be more marginalized from their non-Indigenous colleagues (Bank, 2009; Baulch, Chuyen, Haughton, & Haughton, 2007); and they are subjected to racial prejudice in the workplace undermining their Indigenous participation (Bank, 2009; Dang, 2012; Molini & Wan, 2008). As Badiani et al. (2012) report, Indigenous employees are often labelled or perceived as 'different' by mainstream employees and are stereotyped as 'lacking in knowledge' by their managers, even if they are highly

qualified. In such prejudiced environments, Indigenous voices are often overlooked and undetermined leading to workplace conflict and reduced productivity and engagement of both Indigenous and non-Indigenous employees. Moreover, according to the World Directory of Minorities and Indigenous Peoples (2018), in 2001 and 2004 violent conflict took place in this region between Indigenous and non-Indigenous people as a result of conflict over land rights and religion. Such conflicts may further escalate group conflicts and break relationships and trust among Indigenous and non-Indigenous employees in the workplace.

The Government of Vietnam has made efforts in fostering Indigenous participation and involvement in public sector organizations to alleviate some of these problems. These policies have included increasing the number of Indigenous students at universities, prioritized recruitment of Indigenous workers into public sector organizations and prioritized appointment of Indigenous workers to managerial and leadership positions (IWGIA, 2018). Consequently, there is an upward trend in Indigenous labor market participation (Dang, 2010; UNDP, 2012) in which public-sector organisations provide most of the job opportunities for Indigenous people (Cling, Razafindrakoto, & Roubaud, 2014). As a result, the Vietnamese government claims that they take their international responsibilities on the United Nations Millennium Declaration seriously (for freedom, equality, solidarity, tolerance, respect for nature, and shared responsibility) (UNDP, 2010; Gupta, 2005; IWGIA, 2018), even though they do not acknowledge the conflict that occurred between Indigenous and non-Indigenous people in the Central Highlands region (Gupta, 2005). However, according to Kozel (2014), these policies were ‘well begun but not yet done’ and in particular there is concern that until Indigenous voice is captured successfully in the workplace, progress will not be achieved.

It is important to note that this paper does not focus on reporting the findings in relation to the research question of the overall study but rather we explore the research process and the challenges involved in carrying out Indigenous research in Vietnam even where a local Indigenous researcher is a Chief Investigator.

RESEARCHING INDIGENOUS COMMUNITIES

Indigenous research is rooted historically in Western countries, such as Australia, that have a history of colonisation (Burnette et al., 2014). Key themes emerging from this research tradition include the challenges related to cultural issues and cultural competence which can impede non-Indigenous researchers from gaining access to Indigenous communities due to lack of trust and limited relationships (Broken Nose, 1992; Burnette et al., 2014; Gone, 2007; Resnicow, Baranowski, Ahluwalia, & Braithwaite, 1999; Tervalon & Murray-Garcia, 1998; Weaver, 1997). Also, the Indigenous people are viewed as marginalised groups and it is hard to obtain this population due to their perceived fear of career consequences if they are identified (Trau, Härtel, & Härtel, 2013). In addition, a lack of communication and understanding between researchers and their research subjects prevents non-Indigenous researchers from gaining deep insight into Indigenous issues (Poupart, Baker, & Horse, 2009; Salois, Holkup, Tripp-Reimer, & Weinert, 2006). Furthermore, Indigenous communities have perceived and reported that there has been over-research on Indigenous issues yet this research provided little direct benefits to their communities (Burnette et al., 2014). Further, Indigenous communities often claim that their voice is being excluded from the research process, and they perceive exploitation (Louis, 2007). Lack of empathy, understanding and knowledge of the historical impact and harm of colonisation on Indigenous communities increase the difficulties, for example, research questions are not being addressed adequately, and lack of access and limited information due to the perceptions of the Indigenous communities (Gone, 2007; Poupart et al., 2009).

Indigenous research in non-Western countries brings other unique challenges due to different cultural and historical contexts (Tsai, 2010; Tsui, 2004). These can include political sensitivity from governments, for example, Tsai's (2010) survey in a village in rural China faced opposition from local government officials who hindered the research process by restricting access to Indigenous people and providing biased outcome statistics to meet government expectations. Similarly, Belousov et al. (2007) reported physical threats to fieldworkers when they conducted research on the shipping industry in Russia. Both examples clearly indicate that the political context may limit access, participation and information; and, as a result, research in Indigenous issues in non-Western contexts may have not been able to fully capture the voice and experience of their Indigenous participants.

In relation to successful Indigenous research, recommendations include considering cultural problems and seeking guidance from relevant cultural insiders (Weaver, 1997; Gone, 2007; Louis, 2007; Burnette et al., 2014), building authentic relationships (Bull, 2010), developing community-based participatory research (Poupart et al., 2009), working with relevant ‘gatekeepers’ of research (Weaver, 1997; Tsai, 2010; Belousov et al., 2007); and advocating Indigenous knowledge systems and including Indigenous voice in the research process (Louis, 2007). In this paper, we explore some of these challenges in the context of the Central Highlands and offer some recommendations.

THE PROCESS AND CHALLENGES OF INDIGENOUS RESEARCH IN VIETNAM

Our review of challenges of Indigenous research is based on our experience in approaching and interviewing of three case study organizations with Indigenous employees, located in the Central Highlands. They had similar sizes with the presence of a trade union. One organization was located in an urban area and the others in rural areas. All three organizations were responsible for public administration, policy and services, for example in relation to education, healthcare, cultural and social affairs and infrastructure. As for most organisational research, the first challenge was to gain access to data from organisations. Initially, an informal recommendation through a telephone conversation with a senior leader from the Vietnamese university, where the lead researcher worked as an academic leader and lecturer, that senior managers of these three public organizations should be contacted. These calls, based on personal network relationships and their recommendations, requested the permission (through verbal agreement) from the senior leadership for access to their organisations as case study sites. The conversations also requested support for publicizing the project to all their staff in the workplace. Gaining such permission and support from senior managers of the public organisations by the respected Vietnamese university official was essential as local governments often have doubt about overseas researchers as ‘lực lượng thù địch’ [political enemies], and ‘phản động’ [reactionaries]. In this situation, personal recommendations and relationships are essential in gaining access and permission. Moreover, these senior leaders also play the role of ‘gatekeeper’ in accessing Indigenous people and the fact that the investigator who would be carrying out the fieldwork was an Indigenous person was crucial in

gaining access because they perceived that it may be good attention and no harm to Indigenous participants.

The second challenge was in relation to the availability and consistency of hard data. In case study 1, we found two Indigenous senior managers and two Indigenous heads of departments. However, there were no definite statistics on the numbers of Indigenous employees working in this organisation. According to one Indigenous senior manager, there were 20 Indigenous employees, whereas the other reported 24. The information from the organisation's website only showed six Indigenous employees, while a report from local media indicated 94 Indigenous employees including Indigenous teachers, doctors and Indigenous employees working in Community Agencies and Services (Kontum, 2014). Further, there was also some confusion on the percentage of Indigenous employee working in each organization. In the second case study, 25 per cent of their employees were Indigenous and approximately 29 per cent of managerial positions were occupied by Indigenous people (Donggiang, 2017). Similarly, the third case study, the organisation is comprised of 77 Indigenous staff occupying about 31 per cent of managerial positions in departments (Taygiang, 2015). Moreover, it was difficult to gain access to secondary documents from the three cases as the government staff viewed this information as a 'state secret' and felt that it would risk their careers if these documents were provided to an interviewer who had an affiliation with an overseas university. Most of the government staff asked the interviewer to provide them with the written permission from the Ministry of Foreign Affairs before they would engage with him since the information relating to Indigenous issues is often shrouded in secrecy. Only secondary documents posted on the website were free to collect, but as stated earlier, the accuracy of these statistics on Indigenous employment is questionable.

The third challenge was in relation to finding participants to be interviewed. The study utilized a snowball sampling strategy to obtain names and contact details of participants. Following suggestions from the senior managers who were supportive of the research, the researcher approached the participants confidentially. The interviewer commenced with the senior managers (who gave permission to conduct the project) for the first interviews – in this way modelling the process. Winning confidence from the senior managers led to the provision of names and contact details of line managers

and Indigenous employees working in the organizations. Approaching the first interviewee in the Case Study site was always the most difficult and time-consuming because the Indigenous employees in particular were often suspicious of the research, believing the interviewer to be a ‘spy’. However, once they recognized that the interviewer was Indigenous, they became more willing to become involved.

Not all invitations were accepted. This was particularly the case with non-Indigenous managers. For example, in case study 1, the first non-Indigenous line manager who was approached declined the interview but gave the interviewer the details of his friends’ contacts as he explained that he had no idea on the Indigenous issue. A second non-Indigenous line manager was also invited to the project, but again he declined to be interviewed and introduced another Indigenous line manager instead. He expresses that he was not in the right position to talk about the government policy for the Indigenous people. In case study 3, both Indigenous and non-Indigenous senior managers declined to answer the interviews, but they encouraged their line managers to participate. Only two non-Indigenous managers were interviewed, and they were very positive on their response to the Indigenous voice and participation in their departments.

The fourth challenge related to the interview process with Indigenous employees as they were very shy to talk with strangers. The researcher contacted them individually to join the interviews after receiving their contact details. In total, this investigator approached 31 participants including 12 managers, and 19 Indigenous employees. Some participants were reluctant to participate the interviews as they were nervous about the risk to their career development by getting involved since they were not allowed to talk to investigator from overseas university about the Indigenous issues.

Most interviews with Indigenous employees were conducted in their own home and coffee shops and some of the interviews were conducted in an Indigenous language. The Indigenous employees were more likely to answer the interviews by their own language as one of them expressed that she perceived comfortably and easily to discuss the problems in their own language.

Observations obtained from case study 2 suggested that most of the Indigenous interviewees seemed to be nervous when they discussed discrimination against them. Indigenous managers in particular took great reluctance to use the phrase ‘brother Kinh’ in relation to their non-Indigenous subordinates. In

case study 1, one non-Indigenous person told the interviewer that Indigenous people in the region had protested violently in the past against the land rights claims of the non-Indigenous communities in the Central Highlands region. He claimed that, due to these protests, they were often seen as overseas enemies of the party (the Vietnamese Communist Party). However, he argued that, the government took this problem seriously and invested large amounts of money into improving Indigenous people's lives, and giving them priority in obtaining employment in public agencies.

The Indigenous researcher also won the trust from the Indigenous employees that he interviewed and they shared with him that they did not like to be called by the term that is commonly used - 'dân tộc' [ethnicity] as they perceived that this term was offensive, discriminatory and separating them from the mainstream Vietnamese community. Instead, they preferred to be called with the term 'đồng bào' [compatriot] or their own ethnic group's names such as Giarai, Xedang, or Bana. Finally, another challenge was involving and interviewing non-Indigenous employees. We invited twelve non-Indigenous employees across three organization case studies, but none of them accepted the invitation since they were afraid that their managers may not be pleased about what they were talking to the interviewer.

DISCUSSION

The nature of Indigenous research in Vietnam reflects its unique context in which Indigenous and non-Indigenous people were more likely to be silent over Indigenous issues as they perceive commenting on these problems could put their careers and lives at risk. In general, these challenges stem from the impact of its unique political, social, economic and historical contexts.

Like Indigenous research worldwide, Indigenous research in Vietnam is challenged by the impact of the political, social, economic and historical context. First, we argue that the political and historical context leads to Indigenous people's fear and lack of trust in when interviewed by an Indigenous investigator. This finding is consistent with literature suggesting that political sensitivity is a major challenge of Indigenous research in transitional countries (Tsui, 2004). Also, it underpins the statements from the international reports that suggest that Indigenous people are considered as political vulnerable and untrustworthy because of their protests in the past against the government (Gupta, 2005; World

Directory of Minorities and Indigenous Peoples, 2018). In this situation, researchers need to seek the support from senior leaders in public organizations, particularly those Indigenous senior managers not only who play a role as ‘gatekeeper’ of Indigenous research in public organizations’ workplace but who also can exert power and influence (Weaver, 1997; Tsai, 2010; Belousov et al., 2007).

Second, the difficulty in accessing documentation may reflect by the lack of research culture and awareness among Indigenous and non-Indigenous people in Vietnam. Also, this finding suggests that government employees perceived political sensitivity relating to Indigenous research and they prevent researchers from approaching the documents. Moreover, even though they deliver the documents to researchers with consistent statistics, which have been identified by Tsai (2010) when the author conducted research in China and make it difficult for researchers to draw conclusions. It may be essential to build authentic relationship with Indigenous managers and include their voice in research process so that they can support researchers to gain reliable documents (Bull, 2010; Louis, 2007). Also, it may be because Vietnamese statistics in general are problematic because officials want to please their superiors rather than providing accurate information to the public.

Third, in consistence with other research, the issues of privacy and confidentiality should be considered when conducting Indigenous research in Vietnam such as selecting appropriate venues for interviews (Chilisa, 2012; Burnette et al., 2014; Louis, 2007). It is argued that researcher should be proactive in asking their Indigenous participants on the interview locations where they feel comfortably since, as mentioned earlier, Indigenous participants are often concerned with sharing their perspectives on sensitive political issues which may put them at risk to their career if they are identified (Trau et al., 2013).

Fourth, we argue that capturing Indigenous voice should be through language and sensitivity (Burnette et al., 2014; Louis, 2007). Indigenous language should be spoken in the interviews if possible, in a respectful and ethical manner in order to capture the Indigenous participants’ perspectives (Louis, 2007). Also, it is recommended that researchers should connect with Indigenous co-author, learn their cultures, and respect their norms; for example, avoiding using the term ‘Dan toc’ when talking to Indigenous participants or any terms that may be offensive to Indigenous participants. More

importantly, researcher should play as an ‘insider’ of the context, immerse themselves in Indigenous communities during conducting research from which researchers could establish the trusting relations with their research subjects (Broken Nose, 1992; Bull, 2010; Burnette et al., 2014; Gone, 2007; Resnicow et al., 1999; Tervalon & Murray-Garcia, 1998; Weaver, 1997).

Another unique challenge of Indigenous research in Vietnam is that the Indigenous people’s shyness. This may be as a result of their historical isolation and marginalization from the country’s social and economic development (Trau et al., 2013; Dang, 2010; Badiani et al., 2012). This matter impedes the Indigenous involvement in the interviews with strangers. This also brings challenges to the interviewer in understanding and gaining into the Indigenous perspectives in the research issues. In such contexts, swith the Indigenous people.

CONCLUSION

This paper has presented contextual challenges of Indigenous research in Vietnam including political, cultural and historical sensitivities. The political issues are the most prominently sensitive stemmed from the local governments who often consider Indigenous issues inherent in politics. It is suggested that researchers should have political sensitivity, cultural competence, and the supports from gatekeeper and cultural insiders to conduct the research relating Indigenous people in Vietnam.

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Stream: Public Sector Management and Not-for-Profit (12)
Competitive Session

Four Domains of Public Value Creation: A Core Typology

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Stream: Public Sector Management and Not-for-Profit (12)
Competitive Session

FOUR ARENAS OF PUBLIC VALUE CREATION: A CORE TYPOLOGY

ABSTRACT

The public management literature has failed to capture the arenas of operation of the public sector manager in one holistic framework, thus inhibiting the development of a more complete theory of leadership which drives public value. This paper develops a core typology of arenas of public value creation, based on the locus of interaction (internal or external to the government organization) and the public value purpose (trading or policy development). Four arenas are described, illustrating that public sector managers in complex policy areas traverse all forms of institutional structure including market, hierarchy and hybrid. The typology developed and discussed is an attempt to provide more precision in characterising the nature of policy leadership and, building on the public value work of Moore (1995; 2013; 2014), enable theorising on the role and nature of leadership in driving public value.

Keywords: Collaborations and networking; culture; governance; policy

“At a practical level, public value aims must be achievable. Public managers must know how to mobilise their resources to create, organize and operate a market to meet the declared objectives...This may require the public manager to be both persuasive in making the case for mobilising the resources of partner agencies, and expert in regulating the performance of contracted bodies.” (Moore, 2014, p 9)

Moore usefully links the concept of the achievability of public value aims with the leadership skill of the public manager, which he also calls the strategic ‘system’ manager. Also useful is highlighting that different skills are required to mobilise resources in different arenas of operation and

value creation. That is, while working in the shared power environment of a policy partnership may require the system manager to be skilled in the arts of influence and persuasion, achieving ends with contracted bodies to deliver specified services requires the ability to apply the ‘harder’ skills of enforcing performance clauses or regulating.

A senior manager with responsibility for developing a policy response to the shortage of safe and affordable housing, for example, will find herself at an agent within a public value system, managing the performance of her own direct reports, coordinating or ‘harmonising’ policy initiatives with other areas across government, such as disability and other social services, managing design and construct contracts for housing stock, and working as part of cross-sectoral policy networks to develop new policy approaches social housing and to lobby for resources and policy change.

While the public sector leadership literature has long identified that achieving outcomes requires the public manager to be skilled in working across boundaries (Williams, 2002), frameworks are required which allow analysis of how leadership skills, practices and mindsets need to adjust according to the dynamics of the different arenas in which the systems manager must operate. This paper argues that the literature needs to transcend the NPM focus of efficiency and the NPG focus on leading through plurality to view the terrain of the policy manager from a systems perspective.

This paper proposes a core typology of value creation arenas in the public sector, in order to enable this form of analysis. The typology explicates four arenas from identification of the *locus* of the interaction as internal or external, and the *purpose* of the public value creation as trading or policy collaboration. In so doing, the paper aims to extend the public value work of Mark Moore (1995, 2013) by exploring further the concept of public value ‘achievability’ or operational capability by further examination of requisite leadership skills and capability as one of its core factors.

INSTITUTIONAL STRUCTURES AND TYPOLOGIES IN ORGANIZATIONAL THEORY

Typologies, as multidimensional classifications of entities (Blau and Scott, 1962) serve the purpose in theory development of generating analytical tools to stimulate thinking (Mills and Margulies, 1980) and hypothesis generation.

This paper seeks to provide such a classification of the arenas of production of a system manager in the public sector, delivering public value outcomes in complex policy areas. As such, it builds on previous typological work in organizational theory extending from the seminal work of Coase (1991) with his concept of ‘institutional structures of production’ and Williamson’s (1985) work which systematized market, hierarchy and hybrid forms for securing transactions, with hybrids being those ‘middle kind’ of institutional structures, neither market nor hierarchy, such as supply-chain clusters, networks, relational contracts and cooperatives.

Menard (2004) sought to provide a theoretical underpinning for the hybrid, providing a classification structure around what had previously been thought to be a heterogeneous collection of forms lacking the regularity for theorizing. Menard (2004, p351) observes that (hybrids) “rely on partners who maintain distinct property rights and remain independent residual claimants” and classified the field on the different mechanisms adopted to manage issues arising from pooling resources, contracting and competing. He notes that in organizing activities to produce rents through interfirm coordination and cooperation, the risk of opportunism is always present and tensions can emerge from on how rents are divided. Hybrid forms have added complexity in coordinating tasks, information and decisions across often multiple organizational boundaries. It follows that key decisions arising are choice of partners, governance arrangements for coordination across firms and developing adequate information systems to ensure information symmetry (Menard, 2004).

Alliances, defined by Gulati (1998) as “voluntary arrangements between firms involving

exchange, sharing, or co-development of products, technologies, or services” are a variety of the hybrid form, and thus give rise to these distinctive challenges. However, alliance themselves take a multiplicity of forms from tightly structured and controlled equity joint ventures, to loose arrangements for coordination and sharing. Theory development has benefitted from the typological work of Grandori and Soda (1995) who distinguished ten organizational coordination mechanisms to sustaining and regulating inter-firm cooperation. Similarly, Gulati (1998) typified alliances structures on tight-loose principles according to how much they shared equity and employed hierarchical forms of control.

Helpful for the purposes of this paper is the work of Rangan and Yoshino (1996) whose typology has the purpose of supporting managers within alliances. They propose that “an alliance-seeking firm acts in two dimensions, cooperation and competition, which generally play out as cooperation and conflict. Successful alliances optimize along both dimensions” (Rangan and Yoshino, 1996, p7). They distinguish two dimensions: conflict potential and the extent of organizational interaction with a classification of low or high giving rise to four types, each with their distinctive managerial concerns. They state that “to capture the full potential of alliance-based strategy requires careful and disciplined thinking on the part of a company's senior management. An understanding of the typology of alliances and familiarity with the road map to forging alliances can usefully guide that thinking” (Rangan and Yoshino, 1996, p13).

Organizational theory that has distinguished and classified the structures of market, hierarchy and various hybrids organizational forms and their distinguishing dynamics and tensions have predominantly come from the business sector. The public management literature has addressed the strategic intent of government in moving away from traditional hierarchies into more inter-organizational forms for policy development and service delivery. Much of the New Public Management literature (Hood, 1991) addresses concerns of efficiency and examines the move away from hierarchical structures to more market forms of delivery. Osborne (2009) representing the later

New Public Governance movement, shifts the focus to more plural, networked forms of delivery and governance of processes rather than contracts.

Studies have examined the risk to the public from the difficulties of integration across multiple contributing organizations (e.g. Kettl, 2001; Rhodes, 1997, 1998). A theme in this conceptual work is a shift away from seeing government in a central controlling position, to notions of power sharing, exploring issues of accountability and fragmentation.

The attendant managerial challenges of this more plural policy world have been captured by Williams (2002) who characterises the public policy manager as ‘boundary spanner.’ He typifies types of organization as modern and post-modern, with their respective concerns as intra and inter-organizational. The modern organization, he proposes, is structured around bureaucracy and rules, and is suited to a skills-based technocratic form of management. The post-modern organisation by contrast, is characterised by a decision-making framework of negotiation and consensus, and is suited to a more relational forms of management.

With others in the public management literature, Williams (2002) proposes that complex ‘wicked’ policy challenges are more suited to forms of organisation and governance that promote collaboration, partnership and networking, and to managers who have a relational style designed to build social capital (p106). However, this paper holds that the systems manager as conceived by Mark Moore (2014) must marshal resources from a number of different arenas, traversing market, hierarchy and different varieties and intensities of hybrid organizational structures. In proposing a core typology of these arenas of public sector value creation, the paper is underpinned by a more realist perspective. While collaborative and partnering approaches are certainly part of the repertoire of a systems manager, they have perhaps been overemphasised in the public management literature. With Rangan and Yoshino (1996) the paper argues that the extent to which public sector system managers understand the distinguishing features of each part of the terrain, its inherent dynamics and tensions, and practice the

disciplined thinking and ability to adjust styles accordingly, represents the organizational capability to achieve public value ends.

FOUR ARENAS OF PUBLIC VALUE CREATION: A CORE TYPOLOGY

The example provided in the introduction has our system manager working across four arenas to deliver outcomes in the complex policy arena of social housing. These four can be mapped across two analytical dimensions, which arise when we examine where and why our system managers ‘marshal resources’ (Moore, 2014) to achieve public value ends.

These resources are found both **internally**, with government’s own technology, knowledge, employees and budget, and also **externally**, leveraging the capabilities of suppliers and partners from across different levels of government and in different sectors. Thus the typology identifies *locus of interaction* as the first dimension.

The system manager also marshals resources for different value-creating purposes. She oversees the **delivery of public services**, both programmed (BAU) and project-related. The manager also seeks to develop policy, both through coordinating internally and integrating with other levels of government and across sectors. The second dimension of the typology is then *public value purpose*. These two dimensions and the four arenas are presented in Figure One.

Figure One about here

In the top left is the internal service delivery arena, which is the focus of much, if not most, of organisational theory. Using the example of our system manager in social housing, in this arena the manager will be managing her own staff employed by the government department to deliver agreed policy outputs as specified in their role descriptions, and governed by the legitimate authority of the manager as provided by the organisation, as well as more broadly by industrial agreements and law. As

characterised in Table One below, the manager in this arena will largely have a logic of efficiency and productivity, managing the performance of staff against agreed indicators. As the organisational and leadership literature suggests, high performance may be achieved through a range of styles and practices, but in general the requirement of the leader in this arena will be the setting of direction and encouraging staff to follow.

The external service delivery arena, in the bottom left quadrant, are contracts with third party suppliers, which may be governed by traditional ‘hard dollar’ contracts, or relational contracts, a more flexible framework based on social norms and jointly defined objectives. In our example, here our social housing system manager may have gone to the market for the design and construct of units of social housing stock. Her concern as a manager, and as contract principal, would be to ensure value through the procurement process, and then to achieve value through monitoring the achievement of agreed delivery milestones and managing contractual risk. If traditional contract, failure to deliver can be managed through enforcing contractual provision through commercial and legal means. If a relational contract, her first escalation would be to a joint governance board: power relations here being more equal. However the dynamic of principal and contractor remain in both forms.

The internal policy coordination arena, in the top right quadrant, requires the systems manager to marshal resources by working toward initiatives that align or ‘join-up’ (Bellamy and Raab, 2005) complementary policy areas inside government. Complex policy ends are held to require inter-dependent approaches, achieved by reducing fragmentation of effort, ensuring all actors in a system can share knowledge, information and resources, and thereby contribute to more efficient and effective implementation and service delivery (Mulgan, 2005). As Table One suggests, these processes are achieved through cross-cutting governance mechanisms such as intra-government Steering Groups and Committees, as well as more informally by information-sharing networks. However the challenges of these whole-of-government efforts are well documented (e.g. Bakvis and Juillet, 2004) with cultures of protection and risk aversion within government departments arising from vertical reporting and reward structures (Bakvis, 2002). Our system manager in this arena loses immediate control over the ability to

design and achieve policy outcomes, as power bases are many and varied across the policy arena (Kingdon, 1995). Her concern will be to work toward consensus on key policy and strategy initiatives that will then form a common platform for joint action. Authoritarian or top-down leadership approaches will not be effective in this arena: our system manager must draw from the repertoire of alliance building, developing social and relational capital to marshal when critical for acting on windows of policy opportunity (Kingdon, 1995).

In our final arena (bottom right) our system manager is working toward policy integration among multiple actors with an ability to contribute to policy solutions in housing. This may include governments at different levels, with different regulatory powers over where, for example, budgets for housing are directed (Federal governments) and where social housing can be constructed (local government). She may be working with universities for research and evaluation of policy initiatives, and with the housing development industry to leverage private sector investment in social housing. She may be working with the community sector to provide support services to residents of social housing. Increasingly, our system manager will be called on to work directly with interest groups from the broader community of potential users of social housing as we privilege the idea of citizen's outcome preferences and co-design (Halligan, Buick, and O'Flynn, 2011). In this inter-organisational arena, power relationships and interests are even more decentralised and diffuse than in our policy co-ordination intra-government arena.

Here the mechanism is governance rather than government. As Stoker (1998) defines, governance refers to "development of governing styles in which boundaries between and within public and private sectors have become blurred. The essence of governance is its focus on governing mechanisms which do not rest on recourse to the authority and sanctions of government...it's an interaction of a multiplicity of governing and each other influencing actors" (Stoker, 1998: 17). Formal mechanisms which might be implemented include Memoranda of Understanding, Deeds of Cooperation or social sanction as a member of a policy network

Our system manager may employ a number of practices for strategizing and decision making in fragmented, plural environments (Denis, Langley and Rouleau, 2007), and like a diplomat in the geo-political arena, work to find where there are natural confluence of interests and therefore policy opportunities. The metaphor of the diplomat is also useful as an indicator of leadership style in this arena: it will be facilitative and relational, rather than the directive style accepted in more unitary contexts (Williams, 2002).

Table One about here

TYOLOGY AS PUBLIC VALUE SYSTEM

In mapping the terrain of the public policy manager, the typology is not intended to suggest four discrete and separate arenas. The social housing manager used as illustration for the purposes of this paper would certainly not see her world in that way. Rather the paper proposes that the four arena model be seen as an attempt at bounding a system of operation in which our public policy manager is a purposeful agent. As Moore (2014) would have it, the mission of the public manager, or strategic ‘system’ manager, is to mobilise their resources to ‘create, organise and operate a market to meet the declared objectives’ (p7). The question for our manager as part of a public value system, is how and from where these resources can best be leveraged and what wider implications these choices may have. For a particular set of public value objectives, will hierarchical (in-house) approaches be best? Is there a mature market for a commercial, out-sourced approach? Will we require the concerted efforts of partner organisations from a range of sectors? Will I need to achieve common ground on policy from across government? In choosing an approach, how will this affect the social housing system as a whole?

In viewing the four arenas as a system, there is also the opportunity to see the leadership challenge from as one of systems thinking. As Table One identifies, the four arenas encompass the different institutional structures of hierarchy, market and hybrid each with distinct dynamics and

leadership challenges. As systems theorists Snowden and Boone (2007) would suggest, the adept leader knows how to identify their context and to change their behaviour to match. They encourage leaders to identify problems as simple (clear and known cause and effect relationships) complicated (requiring technical expertise) complex (a situation in constant flux, requiring more experimentation) and chaotic (where no manageable patterns exist). They observe that many leaders lead effectively, but usually in only a few domains, and rarely prepare themselves or their organisations for diverse, or ‘unordered’ contexts (para 32). By explicitly identifying the range of arenas of operation of the public systems manager, the typology foregrounds the need for capability across all problem types, and to be adaptive across the whole system.

Leadership adaptiveness is also framed by Heifetz, Grashow and Linsky (2009). As with the model of Snowden and Boone (2007), adaptive leaders can recognise the nature of the problem and whether this is technical, with known tools and frameworks for resolution, or whether they are faced with an adaptive challenge, one with legitimate but competing perspectives, and where there must be deep stakeholder engagement to find a way forward. Adaptive challenges are often those termed ‘wicked problems’ in public policy language; systems problems with no ready answers.

Our conception of leadership for public value therefore transcends the NPM (Hood, 1991) thinking of efficiency in service delivery through monitoring of market contracts, and New Public Governance (Osborne, 2006) with its emphasis on the hybrid world of decentred governance and leading through pluralism and networks. The approach in this paper, as explicated in the four arena typology, is ‘both-and’: the systems manager must traverse and be effective in both market and hierarchical structures, and additionally must be adept in what Williams (2002) calls ‘post-modern’ leadership in order to be effective in a range of hybrid arrangements to achieve policy goals.

Theoretical Contribution and Implications.

Theoretically, the typology is intended to make three contributions. Firstly, by identifying the two dimensions of locus of intervention and public value purpose the typology can become the

analytical tool that may stimulate further research propositions as to how and where public value can best be created, creating some variables and a common language. Secondly by proposing by delineating the four arenas as a system, the paper invites further systems views of public value creation, extending the current focus on the ‘wicked policy problems.’ Thirdly, the paper seeks to extend the conception of operational capability of Mark Moore (1985), to bring leadership capability, in particular the adaptive leadership capacity of public sector leaders, into the calculus of the achievability of public policy outcomes. This may stimulate further, and more directed, research into the nature of leadership for public value creation.

Practical Contribution and Implications.

The public value work of Mark Moore (1985) has met with a strong reception in the public sector, forming the basis of many leadership development programs. The four arenas model is intended to provide an additional thinking frame to add to this work. The paper also invites further attention to the systems thinking capacity of public sector leaders and also commends the work of adaptive leadership (Heifetz, Grashow and Linsky 2009) as a model to guide the leader within a systems view.

CONCLUSION

This paper proposed and discussed a four-arena typology of public value creation. Our two dimensions are locus of interaction (internal or external to the public sector organisation) and public value purpose (trading or policy coordination and integration). These dimensions give rise to four arenas: Service delivery by employed staff, service delivery by third party suppliers, policy coordination with intra-government partners, and policy integration with cross-government and cross-sectoral stakeholders and partners. Each domain is characterised according to its underpinning institutional structure (market, hierarchy or hybrid) its governance mechanisms, managerial concerns, and the leadership style most suited to achieving ends. By capturing these elements in one construct, the paper enables development of more complete theorising of leadership which drives public value.

The public sector literature has evolved from emphasis on hierarchy through the Public Administration paradigm, to emphasis on efficiency through New Public Management, and to current emphasis through New Public Governance on leading in horizontal, dispersed power and pluralist network arrangements. This paper argues that each paradigm remains relevant and has value, but each is partial in achieving a full understanding of the agency and leadership challenges of the public systems manager. By seeing the whole system in one view, theories of leadership for public value can embrace more holistic theorising.

The typology and discussion presented is an attempt to order and extend this important area of leadership development practice and research.

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Figure 1
Arenas of Public Value Creation: Typology

Locus of interaction	Internal	Service delivery by employed staff	Policy coordination with intra-government partners
	External	Service Delivery through third party suppliers	Policy integration with different levels of government, community groups, NGOs, universities and the private sector
		Trading	Policy Integration

Public Value Purpose

Table 1 Characterising the Four Arenas of Public Value Creation

	Internal Service Delivery	External Service Delivery	Internal Policy Coordination	External Policy Integration
Institutional Structure	Hierarchy	Market/Hybrid (where relational contract)	Hierarchy/Hybrid	Non-hierarchical /Hybrid
Governance Mechanism	Industrial employment arrangements Hierarchical authority	Traditional and Relational Contracts	‘Joined-up Government’ Steering Groups and Committee Structures	MOUs, Deeds of Cooperation, and Network Governance
Managerial Concerns	Efficiency and productivity	Contractual performance; Managing risk Trust building (where relational contract)	Achieving consensus from diffuse organisational interests and power bases	Strategizing and decision making in fragmented, pluralistic environments
Leadership style	Sets Direction Evokes followership	Enforces and monitors, negotiates and regulates	Relational, building support alliances	Diplomatic, facilitative and relational

ANZAM 201810. Organisational Behaviour and Interpersonal Behaviour
Interactive Session**The relationship between fairness and deviant behaviour:****Do entitlement perceptions matter.**

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10. Organisational Behaviour and Interpersonal Behaviour

Interactive session

The relationship between fairness and deviant behaviour:**Do entitlement perceptions matter.****ABSTRACT:**

Deviant behaviours among employees cause organisations a wide range of issues from creating a toxic environment to loss of productivity. Previous research has demonstrated a link between organisational justice and deviant workplace behaviours. One aspect that warrants investigation beyond this previously established relationship is the mediating role of entitlement perceptions. To address this research gap, we developed a theoretical model for understanding how organisational justice influences entitlement perceptions and how entitlement perceptions in turn influence deviant workplace behaviours. In our model, we further propose that incivility moderates these relationships. Implications for theory and practice are discussed.

Keywords: Organisational justice, Deviant Behaviour, Workplace Incivility, Employee Entitlement.

The relationship between fairness and deviant behaviour:

Do entitlement perceptions matter.

There is extensive research to show that organisational justice has a massive impact on the behaviour of its employees (Greenberg, 1990; Greenberg & Cropanzano, 1993). Specifically, several studies in organizational justice (perceptions of fairness and evaluations regarding the appropriateness of workplace outcomes as processes; see Le Roy, Bastounis, & Poussard, 2012; Van den Bos, Vermunt, & Wilke, 1997) demonstrate a link between poor perceptions of organisational justice and deviant behaviour at work (Aquino, Lewis, & Bradfield, 1999; Colquitt, 2001; Crawshaw, Cropanzano, Bell, & Nadisic, (2013). On this basis, we argue that better understanding factors that may impact on the relationship between organisational justice and deviant behaviour at work may contribute to an organisation's outcomes and performance.

In general, considerations of fairness and justice are crucial in determining how people judge the legitimacy and professionalism of their employer. This is important because perceptions of inequity and poor procedural injustice are associated with employee theft (Greenberg, 1990; Greenberg & Cropanzano, 1993) and vandalism (DeMore, Fisher, & Baron, 1988; Fisher & Baron, 1982). These acts may be a means by which to "get even" with the organisation or an attempt to retaliate against specific individuals who have mistreated them (Bies & Shapiro, 1987; Fisher & Baron, 1982; Greenberg, 1990; Greenberg & Cropanzano, 1993). In this regard, workplace deviance has been defined as voluntary behaviour that violates significant organisational norms and, in so doing, threatens the well-being of the organisation or its members, or both (Robinson & Bennett, 1995). Workplace deviance refers to voluntary behaviour, in that employees either lack the motivation to conform to or become motivated to violate, normative expectations of the social context (Kaplan, 1975). Organizational norms consist of basic moral standards as well as other traditional community standards, including those prescribed by formal and informal organisational policies, rules, and procedures (Feldman, 1984). The question remains, however, if there are additional factors that may either explain the relationship between organisational justice and deviant behaviours.

A recent factor that has captured the interest of researchers is workplace entitlement (Fisk, 2010; Harvey & Dasborough, 2015). Although psychological entitlement (individuals seeing themselves as important and deserving) has a significant history in psychology, several researchers argue for specific studies of excessive entitlement in the workplace as they argue it may have a major effect on work environments (Jordan, Ramsay, & Westerlaken, 2017; O'Leary-Kelly, Rosen, & Hochwarter, 2017). More recently, arguments have emerged for entitlement to be perceived as a latent activated trait and invoked by contextual factors in the workplace environment (Jordan et al., 2017). If this argument is correct, then organisational justice (which has a major role in establishing a context for many organisations) may play a role in the activation of latent perceptions of entitlement. We now outline a model suggesting that employee entitlement may mediate the relationship between organisational justice and deviant behaviour.

Theoretical model and proposition development

We outline the theoretical model in Figure 1. In developing this model, we use two theoretical frameworks to underpin our arguments: Social Exchange Theory (reference) and Affective Events Theory (AET; Weiss & Cropanzano, 1996). The first theory, Social Exchange Theory (Blau, 1964 acknowledged in Emerson, 1976), is based on the assumption that in any relationship there are expectations of fair exchanges for these relationships to be considered as healthy and felt as worthwhile for the actors. Social Exchange Theory is directly applicable to our model as organisational justice functions are a significant factor in exchanges between employees and the organisation. On this basis, when the organisation is perceived as an unfair organisation, the lack of a fair exchange may provide employees with the justification for deviant behaviours in the workplace. Our second theoretical framework is AET. Using AET, we note that decisions in the organisation are an outcome of the affective reactions of the actors. Weiss and Cropanzano (1996, p. 11) argue that “things happen to people in work settings and people often react emotionally to these events. These affective experiences have direct influences on behaviours and attitudes”. Applying this to our model,

we argue that reactions to justice in the organisation result in an affective reaction which may result in affect driven decisions (deviance).

Moving to an examination of the variables in our model, our independent variable is organisational justice perception among employees. We argue that poor organisational justice can lead to deviant behaviours in the workplace. Our model proposes that entitlement perceptions mediate this relationship. Furthermore, we posit that a moderating variable impacts on this relationship. Specifically, we argue that an employee experiencing incivility from co-workers or the organisation towards oneself in the workplace leads to employees increasing their deviant behaviours. In the following sections, we outline our model in more detail.

Insert Figure 1 about here

Organisational justice and deviant workplace behaviours

Organisational justice consists of three factors: distributive justice (Deutsch, 1975; Leventhal, 1976); procedural justice (Leventhal, 1976, 1980; Leventhal, Karuza, & Fry, 1980; Thibaut & Walker, 1975); and interactional justice (Bies & Shapiro, 1987). Several findings have found a direct relationship between justice perceptions and organisational behaviour (Niehoff & Moorman, 1993; Strom, Sears & Kelly, 2014). In our model, we have chosen to use all the subfactors of organisational justice (Colquitt, 2001). *Distributive justice* examines the equity of the allocation of the resources invested in the process of achieving a specific outcome (e.g., realising optimal productivity; Adams, 1965; Leventhal, 1976). This factor considers the justice perception that participants have on how resources are distributed at work (Colquitt, 2001). *Procedural justice* assesses the process used to distribute resources via process control (e.g., the ability to voice personal views and arguments during a procedure) and decision control (e.g., the ability to influence the actual outcome itself; Thibaut & Walker, 1975). *Interactional justice* refers to how well individuals are treated in the organisation (Colquitt, 2001). Bies and Moag (1986) were the first researchers to uncover this aspect of organisational justice, which was later found to consist of two independent subfactors (e.g., Bies, Shapiro, & Cummings, 1988; Greenberg, 1994; Shapiro, Buttner, & Barry, 1994), namely

interpersonal and informational justice (Greenberg & Cropanzano, 1993). The former consists of respect and propriety for employees, while the latter addresses justification and truthfulness (Colquitt, 2001), or perceived adequacy of explanations (Shapiro et al., 1994) in relation to the information provided to employees.

Deviant workplace behaviours consist of voluntary behaviours that violate organisational norms and threatens the well-being of the organisation and its members (Robinson & Bennett, 1995). Workplace deviance, as Kaplan (1975) defines it, is conducted by employees that either lack motivation to conform to, or are motivated to violate, normative expectations of the social context. There are arguments that this behaviour can be assessed on a continuum on the severity of the deviance committed, from minor deviances, such as “chucking a sickie” to more serious deviances, such as illegal substance use at work (Robinson & Bennett, 1997).

Past research has found a significant negative relationship between organisational justice’s three subfactors distributive, procedural, and interactional justice and workplace deviance (Aquino et al., 1999), as such, we propose:

Proposition 1: Poor organisational justice will increase the potential for deviant workplace behaviours among employees.

Organisational justice and expressed employee entitlement

Employee entitlement has its origin in the narcissism literature and is a factor that contributes to a formal diagnosis of clinical and subclinical narcissism (American Psychiatric Association, 2013). Since the turn of the millennia, however, several researchers have researched it as a stable standalone, psychological trait (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004; Naumann, Minsky, & Sturman, 2002). With the development of the Psychological Entitlement Scale (PES; Campbell *et al.*, 2004), several researchers have expanded our understanding of psychological entitlement issues in the workplace. Most notably entitlement has been described as a pernicious and challenging problem to understand in the workplace (Fisk, 2010). Harvey and Dasborough (2015), and Jordan et al. (2017), all find there to be significant gaps in the literature on excessive entitlement in a workplace context

and consider this trait to be worth investigating in relation to a broad range of antecedents and outcomes. Fisk (2010) argued that entitled employees contribute to the rise of “Idiosyncratic-deals”, and an incongruent perspective on rewards and remunerations between the individual employees and employers. Highly entitled employees expect unreasonable rewards for their input, especially when compared to that of their colleagues, and Fisk (2010), moreover, proposed that excessive levels of entitlement predict participation in harmful counterproductive work behaviours (CWB). Similarly, Harvey and Dasborough (2015) addressing job-induced entitlement theorised that having an annual pay rise, regardless of performance assessment, may contribute to an entitlement mentality in employees. We have chosen to use the definition of excessive entitled used in Langerud and Jordan (2018, p. 3) and define “employee entitlement as an excessive self-regard linked to a belief in the right to privileged treatment at work without consideration of all the factors involved in determining rewards and remuneration in that context”.

Having a strongly espoused to and adhered to organisational justice processes will arguably lower the sense of entitlement among employees since good procedural justice establishes clear expectations of what is expected of the employee and what those employees are eligible for in terms of rewards and benefits in the immediate environment. If justice processes are absent and consequently, a higher role ambiguity is prevalent in the organisation, then excessively entitled employees may prioritise to do day-to-day tasks that are beneficial to them and their perceived self-importance, as opposed to tedious and monotonous tasks. Moreover, the relationship between the entitled employee and their superiors will be affected by this ambiguity, as entitled see themselves deserving of preferential treatment, normally located to those who are in management roles or holds crucial roles to the organisational performance. We, therefore, find it reasonable to argue that:

Proposition 2: Poor organisational justice will increase the sense of entitlement among employees.

Entitlement and its relationship with deviant workplace behaviours

Workplace deviance is behaviour that reflects the intention of the employee to violate organisational norms and intend to harm either colleagues or the organisation, or both (Bennett & Robinson, 2000). Robinson and Bennett (1995) developed a widely accepted typology of workplace deviance, which categorises workplace deviance into organisational and interpersonal deviance. Organisational deviance is directed towards the organisation (e.g., arrive late to work without permission, take property from work without permission) and interpersonal deviance is directed towards other individuals (e.g., curse at someone at work, publicly embarrass someone at work). More recent findings suggest that there are two levels to the interpersonal deviance aspect, towards peers and supervisors (Mitchell & Ambrose, 2007). Findings revealed in this study found that if individuals held a higher negative reciprocity belief towards their organisation and their immediate supervisor, then interpersonal deviance would be amplified (Mitchell & Ambrose, 2007). Entitled employees may find the reciprocity relationship with the organisation troublesome as a default since they are expecting rewards without the consideration of their responsibilities to the organisation. As such, it is reasonable to assume that highly entitled employees may seek to balance this relationship to gain more for themselves through workplace deviance. This deviance makes take the form of taking time off or using organisational resources for personal business or even stealing as compensation for not having their expectations of rewards met (Fisk, 2010; Jordan *et al.*, 2017). We, therefore, propose that:

Preposition 3: High unmet employee entitlement perceptions will increase the potential for deviant behaviours among employees.

Entitlement as a mediator between organisational justice and workplace deviance

Appelbaum, Iaconi, and Matousek (2007) found that some deviant behaviour was an outcome of an organisational culture of toxicity, deceit and untruthfulness. They argued for management to challenge this culture, by addressing the specific behaviours and adhering to the norms and regulations that would oppose these. As previously mentioned, Bennett and Robinson (2000) reported a negative correlation between organisational justice and deviance; we suggest this relationship may

be mediated by entitlement perceptions. Mo and Shi (2017) found that when employees perceive their supervisors are untrustworthy, then this can lead to workplace deviance as an outlet for their dissatisfaction. As noted earlier highly entitled employees may experience a discrepancy between their expectations of what the organisation provides and what the employee believes they are deserving. If this is so, then organisational justice processes have the innate capacity to clarify the self-image of entitled employees and what they can expect from the organisation. Organisational justice attempts to maintain a fair and just workplace environment where there are clear and fair expectations and responsibilities. In this context, employees with excessive entitlement perceptions may see clearly the link between their contribution and their rewards. Being held accountable and corrected by superiors in a just organisation will potentially minimise their expectations and ameliorate any deviant organisational behaviour which may emerge from perceived unfairness.

Therefore, we find it reasonable to suggest that:

Proposition 4: Employee entitlement will mediate the relationship between organisational justice and deviant workplace behaviours so that higher levels of entitlement will increase the intention for employees to commit deviant workplace behaviours.

Incivility moderating entitlement on workplace deviance

We expect the relationship between employee entitlement and deviant workplace behaviours is strengthened when high levels of workplace incivility are presented in the work context. Workplace incivility is defined as a “low-intensity deviant behaviour with ambiguous intent to harm the target, in violation of workplace norms of mutual respect. Uncivil behaviours are characteristically rude and discourteous, displaying a lack of regard for others” (Andersson & Pearson, 1999, p. 457). The relationship between workplace incivility and employee entitlement is an unknown area for researchers. Our examination of the literature suggests that there are no studies that investigate this relationship in the workplace. In developing our propositions, we draw on studies conducted in the higher education sector, namely academic entitlement and student incivility.

In this context, Blau and Andersson (2005) found that distributive justice predicted instigated incivility. Moreover, Caza and Cortina (2007) found that top-down incivility differs from lateral incivility, whereas greater incivility is perceived when superiors, rather than their peers, are involved in instigating incivility. In a workplace environment where the organisation is communicating an obligation to high standards of organisational justice, incivility may create a perception that there is a lack of appreciation for the effort committed to work tasks assigned. This may be exacerbated if the level of reward employees expect for this effort (in terms of appreciation or gratitude) is met with incivility. Studies are supporting this by finding that witnessing incivility relates to negative citizenship behaviour and evokes negative emotions for co-workers (Schilpzand, De Pater Irene, & Erez, 2014). Studies have found that employees' that are psychologically entitled will have a more significant emotional exhaustion response to abuse from supervisors, and more likely than non-entitled employees to continue the cycle of abuse towards co-workers (Wheeler, Halbesleben, & Whitman, 2013). Therefore, we argue that there is a reasonable argument to make that on the relationship between employee entitlement perceptions and deviance in the workplace is affected by the perception of how well the organisation deals with incivility.

Proposition 5: Workplace incivility will moderate the relationship between employee entitlement and workplace deviance.

Limitations

Numerous factors affect how employees' organisational justice perceptions lead to deviant workplace behaviours. Since the nature of the study focusses on the individual level, numerous group and organisational variables that can contribute to this relationship are not discussed here. Specifically, we note the latent potential of the leader-member exchange that managers enact towards their employees also have an enabling effect on the behavioural responses of the employee. Therefore, we acknowledge that there are potentials for relationships not considered in this paper, although, the study will further extend our knowledge on the extensive literature on justice and deviant behaviour relationship, as well as, the growing body of entitlement research.

Implications for theory

The model that we propose holds promise for a greater understanding of how high entitlement and perceived incivility may affect the relationship between organisational justice perceptions and deviant behaviour. We argue that these variables may lead to individuals enhancing their deviant behaviours as a consequence of an unfair equity relationship in the organisation. The model we outline provides a theoretical framework to assess both how entitlement perceptions are established in the workplace, and the potential for deviant behaviour to emerge as outcome variable of employee entitlement. For future research, our model brings a better understanding of the individual entitled employees and how organisations potentially create these perceptions from a lack of basic justice procedures.

Implications for practice

Other than the theoretical contributions, our model has a specific consequence for organisations. Our model provides HR professionals and managers with an increased understanding of factors that may contribute to deviant behaviours among their workforce. The variables in our model demonstrate how organisational culture affects the intentions to commit to these deviant behaviours among employees. Perceiving incivility towards oneself and having elevated entitlement perceptions may exacerbate deviant behaviours at work. All of these may have harmful aspects that an organisation should work towards managing when they appear. Our model gives insights into how these bad apples interact, and the ameliorating potential for organisational justice in this relationship.

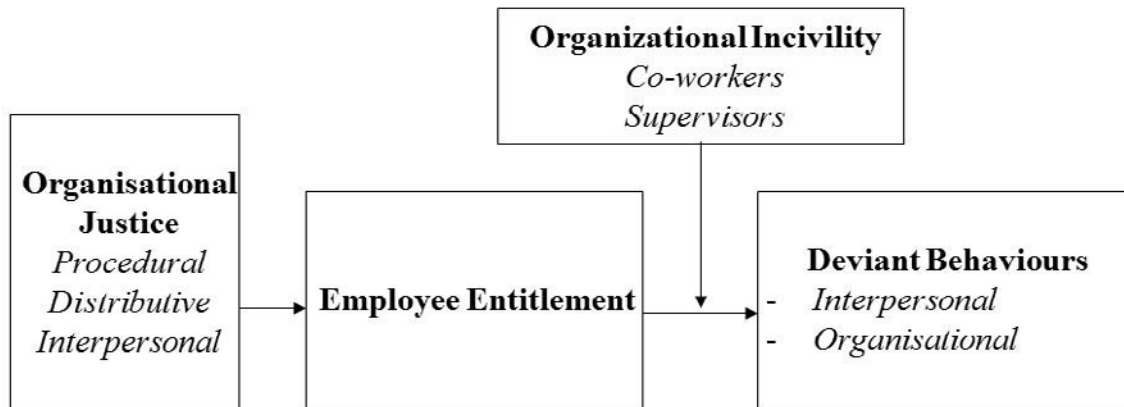
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Figure 1 – A model of organizational justice, entitlement perceptions and deviant behaviours.



Stream 15. Technology, Innovation and Supply Chain Management
Competitive Session

**Challenges in forecasting uncertain product demand in supply chain: A
systematic literature review**

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Stream 15. Technology, Innovation and Supply Chain Management Competitive Session

Challenges in forecasting uncertain product demand in supply chain: A systematic literature review

ABSTRACT: *Forecasting for uncertain product demand in supply chain is challenging and statistical models alone cannot overcome the challenges faced. Our overall objective is to explore the challenges faced in forecasting uncertain product demand and examine extant literature by synthesizing the results of studies that have empirically investigated this complex phenomenon. We performed a Systematic Literature Review (SLR) following the well-known guidelines of the evidence-based paradigm which resulted in selecting 66 empirical studies. Our results are presented into two categories of internal and external challenges: 24 of the 66 studies express internal challenges, whilst 13 studies report external challenges, and 8 studies cover both internal and external challenges. We also present significant gaps identified in the research literature.*

Keywords: Information systems, Operations management, Supply chain management

Supply chains are known to be large, complex and often unpredictable as they include four essential functions: sales, distribution, production, and procurement (Arshinder, Kanda, & Deshmukh, 2008). Operational management of supply chains requires methods and tools to enable organisations to better understand how unexpected disruptions occur and what impacts they will have on the flow of goods to meet customer demands (Qi, Huo, Wang, & Yeung, 2017). Supply chain visibility provides opportunities for managers not only to plan efficiently but also to react appropriately to the accurate information (Ali, Babai, Boylan, & Syntetos, 2017). Traditionally supply chains had a ‘make-to-stock’ paradigm which in many cases have been replaced by ‘make-to-order’ where the final part of manufacturing a product is performed after a customer order is received. This make-to-order model is particularly suited in organisations that produce customised products. Organisations need to decide on the number of components they source or stock keeping units (SKU) they manufacture before the customer demands it in the next sales. This problem is known as *uncertain demand forecast* and has widely been studied in economics and supply chain management (Kempf, Keskinocak, & Uzsoy, 2018). Supply chain management involves the sales and operations planning process (S&OP) which lies at the strategic and tactical level within an organisation. The S&OP involves a combination of people, process and

technology (Noroozi & Wikner, 2017). S&OP is defined as ‘a process to develop tactical plans that provide management the ability to strategically direct its businesses to achieve competitive advantage on a continuous basis by integrating customer-focused marketing plans for new and existing products with management of supply chain’ (Richard E. Crandall 2018, p.149). Several authors (e.g. (Grimson & Pyke, 2007; Noroozi & Wikner, 2017; Oliva & Watson, 2011; Wallace, 2008) have suggested that there are five formal steps that are performed, shown in Figure 1 (Wagner, Ullrich, & Transchel, 2014).

Insert Figure 1 about here

Several papers have been published on the design and methodology approach of S&OP (e.g. (Belalia & Ghaiti, 2016; Jesper & Patrik, 2017; Kjellsdotter, Iskra, Anna, C., & Riikka, 2015; Wagner et al., 2014). Based on these studies, it is suggested that S&OP is not a ‘one-size-fits-all’ process and that there is a need to consider the internal company context, external company context and the specific industry to address the unique S&OP problem (Jesper & Patrik, 2017). In the supply chain context there are integration issues that impact the S&OP process. Integration can be considered both vertical and horizontal, where vertical integration refers to linking the strategic plan, business plan, financial plan and long term objectives to short-term operational planning, whereas horizontal integration is concerned with the “cross-functional” integration considering both inter- and intra-company's activities (Thomé, Scavarda, Fernandez, & Scavarda, 2012; Thomé, Sousa, & Scavarda do Carmo, 2014). In fact, Lapidé (Grimson & Pyke, 2007) states that traditional S&OP is ‘internally focused and technologically challenged’. The S&OP process is considered to be more about employees participating in the process setup rather than just using a set of models or software (Bower, 2012; Grimson & Pyke, 2007; Petropoulos & Kourentzes, 2014). It is more important to have a well-documented and understood S&OP business process than to have a sophisticated software (Grimson & Pyke, 2007).

The forecasting of product demand is part of the demand planning process which is step two of the five steps in the S&OP process. In the literature, statistical methods, like time series or linear regression (Petropoulos & Kourentzes, 2014), “Fuzzy and grey” (Kahraman, Yavuz, & Kaya, 2010), and “Lumpy demand” (Raj Bendore, 2004), are commonly used to estimate the future demand. There are multiple

reviews (e.g. (Jesper & Patrik, 2017; Noroozi & Wikner, 2017; Thomé et al., 2012; Tuomikangas & Kaipia, 2014) of studies in supply chain management and related concepts, however, they are not adequate in the coverage of forecasting uncertain product demand.

BACKGROUND AND MOTIVATION

Supply chains have been known to create value by transforming and transporting goods and services that satisfy the demand of downstream customers (Carbonneau, Laframboise, & Vahidov, 2008); There are many factors in the supply chain that can affect the performance of fulfilling customer demand. Understanding customer demand is one factor that is crucial for sales forecasting and for efficient demand planning in industry (Armstrong, 1994; Louly, Dolgui, & Hnaien, 2008). The accurate replenishment of products during a specific period may be impossible for some products due to the uncertain demand (Kitaeva, Stepanova, Zhukovskaya, & Jakubowska, 2016). There are three major types of uncertainty that arise in this context: uncertainty of the demand forecast, uncertainty in external process and uncertainty in internal supply process (Keskinocak & Uzsoy, 2011). There has been significant research on forecasting demand in the supply chain, ranging from the early work on Croston's influential article (Croston, 1972) which for many years has been neglected but in the last 15 years has seen 245 citations (Scopus accessed May 17, 2018), to the adaptations of Croston's method such as Syntetos-Boylan Approximation (SBA) in 2001 (Syntetos & Boylan, 2001). Alternative approaches have been proposed such as Bootstrapping the use of statistical models such as Auto-Regressive Moving Average (ARMA), Discrete ARMA (DARMA) model and integer-valued ARMA (INARMA). Considerable amount of forecasting literature has focused on forecasting methods but evaluation of forecasting uncertain demand by systematic literature reviews empirically tested is scarce, for example the work of Berbain (Berbain, Bourbonnais, & Vallin, 2011) and Syntetos (Syntetos, Babai, Boylan, Kolassa, & Nikolopoulos, 2016). None of the previously conducted reviews are following the EBSE guidelines (Kitchenham, Budgen, & Brereton, 2015). An SLR based on these guidelines follows a rigorous and reliable procedure for search and selection of the sample studies in review. It is a methodical and thorough process of collecting and

collating acceptable quality published empirical studies based on a rigorous protocol to reduce bias and provide transparency to the process. This review process is formally documented and hence repeatable. With this gap in mind, our systematic literature review (SLR) is conducted, one which is exploratory in nature. We looked in more detail at previous work in the area of forecasting product demand in order to develop our research question that would be worthwhile pursuing in an empirical context in the area of supply chain. We were interested to find all the empirical papers published most recently that have investigated and evaluated forecasting uncertain product demand in supply chain. During the planning phase of our SLR, we used the following research question for data extractions:

What are the challenges faced by firms in forecasting uncertain product demand in supply chain?

This paper aims to provide, through a study of extant literature, a focus on the challenges of forecasting uncertain product demand in supply chain. We present a SLR of 66 empirical studies selected within the period 2007–2017. Following the guidelines provided by the Evidence Based Software Engineering (EBSE) (Kitchenham et al., 2015) and the supply chain management (SCM) paradigm (Durach, Kembro, & Wieland, 2017). We opted for the EBSE guidelines to conduct our SLR. The SCM guidelines were not found to be suitable to conduct this study as it assumed knowledge had already been acquired of the research problem in order to develop the initial theoretical framework. Our objective for was to explore and analyse the diverse literature to investigate and increase our knowledge of the challenges faced in forecasting uncertain product demand within the S&OP process and present our findings in supply chain.

METHODOLOGY

EBSE guidelines propose three main phases of SLR (Kitchenham et al., 2015), planning, execution, and reporting and disseminating results. During the planning phase we developed a formal SLR protocol for conducting our SLR. The protocol contained the details of our search strategy guided by the research question, inclusion/exclusion criteria, quality assessment criteria, data extraction strategy, and data synthesis and analysis guidelines. The protocol was tested for evaluating the completeness of our search string, and correctness of our inclusion/ exclusion criteria and data extraction strategy. The protocol was also sent to one external reviewer considered as expert in SLR. Minor recommended changes from the

reviewer related to the research questions were incorporated. During the execution the steps of the protocol were further refined. The planning phase of our review include the two key search strategies – primary and secondary including study selection criteria quality assessment and data extraction.

Primary search strategy

Our primary search strategy had the following steps;

- (1) Derived the major search terms from the research questions.
- (2) Conducted a pilot search using our major terms on Google scholar to identify relevant terms, synonyms and alternative spellings that are used in published literature.
- (3) Derived our search string using Boolean AND/OR operators with our major and alternative terms.
- (4) Selecting relevant A and A* ranking journals and conference proceedings (based on Australian CORE ranking, core.edu.au), grounded in empirical research for searching.
- (5) Citations and abstracts of the results were retrieved and managed using Endnote.

From our research question, we identified the following four major terms to be used for our search process: (1) Forecasting, (2) Product, (3) Demand, and (4) Supply Chain depicted in Table 1.

Insert Table 1 about here

From the major search terms, we identified alternative terms and formulated the following search string.

((‘Forecast*’ OR ‘Predict*’) AND (‘Product*’ OR ‘SKU’ OR ‘Stock Keeping Unit’) AND (‘Demand’ OR ‘Availability’ OR ‘Sales’ OR ‘Stochastic’ OR ‘Noisy’ OR ‘Unknown’ OR ‘Uncertain’) AND (‘Supply Chain’ OR ‘Procurement’ OR ‘Inventory’ OR ‘Order*’, OR ‘Planning’))

The search string was customized for the different online journals used according to the online interface requirements while we kept the logical order of the search consistent. For the primary searches the third author who is considered expert in SCM supplied a list of top ranked SCM Journals. We also applied a limit on the year during this primary search process. We posed the limit between 2007 and 2017 to ensure we capture the most recent works and challenges on forecasting demand in supply chain.

Study selection criteria

Once we obtained all the results using our derived search string, we applied the selection criteria (suggested by the EBSE guidelines available in the appendix), to filter out any irrelevant studies. The studies we were interested in were empirical studies that investigate forecasting uncertain demand in the supply chain and provided answers to our research question. For any differences we had in selecting the appropriate literature the decision of second author (Supervisor) was considered final. The study selection process was carried out in the following two steps:

Step 1: The results from the search were screened to filter papers from any of the following categories;

- Totally irrelevant papers that retrieved due to a poor search execution by search engines.
- All papers that were published before 2007

Step 2: From the papers retrieved in step 1, we further evaluated them to exclude studies that were:

- Not following an empirical research method
- Papers that had a simulation methodology and were not using real dataset from industry
- Literature Reviews, PhD or Masters Theses
- Duplicate studies
- Not relevant to the supply chain.

Secondary search strategy

We devised a secondary search strategy to ensure that we do not miss any of the relevant studies by performing the following two steps.

Step 1: Based on the retrieved and selected results, we scanned and reviewed all references that were cited greater than four times in our included studies. Using this snowballing approach, twelve articles were identified and added. The selected studies were applied with the same inclusion/exclusion criteria. However, in the screening process they were found to be published prior to 2007 and had not provided any new and noteworthy insights that were not included in the selected studies of the last 10 years.

Step 2: Furthermore, from the papers selected we checked the publication profiles of four authors who were cited in our selected studies 10 or more times for their work on forecasting uncertain demand. The authors include: Fildes, R, Syntetos, A. A, Gardner, E. S, and, Cachon, G.P. We scanned all their

published papers (from 2007 onwards) and those that were eligible for consideration were treated with the same two step selection criteria. At the end of the two step secondary search strategy, duplicate papers were discarded and the remaining 14 studies were selected and included in the final list.

Quality assessment

The quality of the selected studies was evaluated based on the research method they have adopted as well as the quality of the data used. Overall, we performed a three-stage quality assessment as follows:

1. Quality of the study – Our objective was to find empirical studies investigating forecasting uncertain product demand to answer our research question. Therefore, the studies that had utilised poorly described research methods or had not used data from industry were filtered out. We reused the quality assessment checklist developed using EBSE guidelines. Appendix B provides the Quality Assessment Checklist that we used for evaluating the papers. The checklist evaluates the studies based on their strength of reporting the details of the empirical method design and execution. The first author (student) applied the quality checklist on the selected studies with discussion and feedback from the second author (supervisor). The quality assessment was not used for scoring or ranking but rather to filter out low quality publications. All the papers that scored more than 50% were included in our review.

2. Quality of the publication outlet – For evaluating the quality of the outlet where the papers have been published, we utilized the ABDC (Australian Business Deans Council) ranking of 2016 (www.abdc.edu.au/master-journal-list.php). ABDC is committed to review and ensure the quality list rankings of journals. The outlets where the selected papers were published may not necessarily indicate the quality of the paper itself. To ensure the quality of the included papers, we already have assessed them through the quality checklist as described above and provided in Appendix B.

3. Assessment of the impact of the paper – To assess the impact of the published papers, we checked their citations through Google Scholar.

Data extraction

Based on our research protocol a spreadsheet was used to extract three types of data; Publication details, Context description, and Findings.

1. Publication details (title, authors, journal information, number of citations of, year of publication).
2. Context description (research method, industry of empirical data, and geographical location).
3. Findings (challenges faced in forecasting unknown demand).

SYSTEMATIC LITERATURE REVIEW EXECUTION

By performing a search on Google scholar using our major terms, we retrieved a total of 303 papers. The papers were scanned for key terms and any relevant new terms were derived. The keyword terms were used to produce a keyword search string. By executing the search string on specific resources, we retried a total of 338 papers in our primary search. Irrelevant papers were filtered out at step 3 of the SLR process depicted in figure 2. We were left with 178 relevant papers. After screening the papers from step 4 where we read the full paper and removed any which did not present an empirical research methodology. A decision was also made that any paper which used simulation with random data did not meet the selection criteria and was excluded. Out of 178 relevant papers, 54 remained, and 2 were excluded based on their low quality when evaluated against our quality assessment checklist (Appendix B). We were left with 52 empirical studies (Appendix A). We then performed step 5 of our SLR process, this included two steps. The first step was to complete a snowball scan on all the references in our selected studies. We retrieved 12 papers, however when applying our study selection criteria, no papers were found to be appropriate. The second step in the selection criteria was checking the profile of highly cited authors and retrieving the relevant papers. We retrieved a further 14 studies that were relevant and not included in our primary search results. After this step we ended up with a total of 66 papers for our final inclusion (Appendix A). Figure 2 presents the whole SLR execution process taken.

Insert Figure 2 about here

Table 2 presents a summary of the finally selected studies.

Insert Table 2 about here

RESULTS

In this section we describe the quality characteristics extracted from the 66 empirical studies.

Quality attributes

Out of the 66 studies, 49 studies are from A* ranked journals, which indicates we have an overall high-quality set of result. All the papers that have been included in our review were those that contained sufficient information about the research method used and hence they scored above 50% in the quality assessment checklist provided in Appendix B. Another measure that was used to assess the quality of publications that we used is the impact they have had on the relevant research community. The number of citations to a paper is considered as an indicator for a good impact. In our results 21 papers had over 50 citations and S11 and S33 had over 150 citations.

Insert Figure 3 about here

Research Methodologies

Our collection of the 66 empirical studies contains 37 experiments, 14 case studies and 15 surveys. Out of 66 studies, 35 used a statistical method. From 2008 to 2017 there is an average of 3 studies using a mathematical method and most are of very high quality and are published in A* ranked journals.

Insert Figure 4 about here

Data Sources

Figure 5 shows the number of empirical papers against conferences/journals for our resulting studies.

Insert Figure 5 about here

It is important to note that 49 of the included studies (22 from Journal of Production Economics, 17 from European journal of Operational research and 8 from Journal of Operations management), are published in the highest ranked outlets with highest impact factors for many years. Our collection of papers covers a wide range of geographic locations. One third of the 66 studies are from the UK.

Insert Figure 6 about here

Challenges faced in forecasting uncertain product demand

The challenges identified are divided into two categories namely, internal and external challenges. In Table 3 we present the factors given in the studies that are considered to be causing internal challenges along with their frequency from our studies. Internal challenges are found to be within an organisations’ internal environment which is made up of employees, management, communication and culture.

Insert Table 3 about here

The external challenges relate to outside factors that can impact an organisation in its ability to forecast demand as presented in Table 4.

Insert Table 4 about here

Looking at the overall results out of the 66 studies, 24 studies express internal challenges faced in forecasting uncertain product demand and they make 83% of the results, whilst 13 papers are reporting external challenges only. From the 37 studies, 8 studies cover both internal and external challenges. We further categorized these two categories of challenges incrementally creating several dimensions. Dimensions are generally categorical data and can also be called a variable (Nickerson, Varshney, & Muntermann, 2013). In this paper we define our dimension as our category which describes the characteristics about the challenges faced in forecasting uncertain product demand. We created 6 dimensions for internal challenges and 5 for external, there was only one common dimension between the two which is “technology”. To give a more comprehensive picture of the results obtained, the frequencies are further mapped against the forecasting challenge adopted to obtain these results. In our SLR we found that many challenges in forecasting demand still exist today, the most prominent problem identified by the internal category are product related and for external it is the environment. Figure 7 shows the percentages of the studies selected that have challenges in these categories.

Insert Figure 7 about here

The most frequent challenge occurring in the product category is the product price changing which impacts the ability to accurately forecast demand. Within the environment category the highest frequent challenge occurring is the seasonality which affects customer purchasing habits and the demand of products. Overall the highest challenge mentioned in the studies is judgmental adjustments which causes bias and reduces the forecast accuracy. Several studies (Fildes & Goodwin, 2007; Fildes, Goodwin, Lawrence, & Nikolopoulos, 2009; Syntetos, Kholidasari, & Naim, 2016) have attempted to address this challenge by asking managers to justify their adjustments which has shown to discourage adjustments made without a factual basis. The comparison of previous judgmental adjustment performance has also

been used in several studies (Fildes & Goodwin, 2007; Franses & Legerstee, 2013; Goodwin, Fildes, Lawrence, & Nikolopoulos, 2007) to try and improve accuracy by allowing forecasters to review previous results of their adjustment to help them understand the demand forecast.

It is important to note that these categories are not all mutually exclusive, where some are overlapping such as in the internal environment, marketing overlaps with operations. The creation of promotions by marketing can impact inventory in operations which creates a strain on uncertain product demand forecasting. The overlaps between these challenges can be due to a lack of vertical or horizontal integration in a firm. There are also external challenges which overlap such as government policy and lead times. The change in government policy may increase lead times of importing products and lead to challenges in forecasting. The identified internal and external challenges inform future researchers of the factors that need be considered in the field. Several of the categories should be given priority for future research such as the product, management and communication for internal challenges and environment and culture for external challenges as they make up most of the challenges in the selected studies.

CONCLUSION

In this paper, we have presented a systematic review of 66 scholarly works that deal with forecasting uncertain product demand in supply chain. Our SLR has painted a rich picture of the complex practices by including many internal and external organisation factors that play their role in the challenges of forecasting demand. Our SLR enabled us to organise and structure these challenges into related themes and identify the most frequent challenges discovered in the literature of the last decade. Our rigorous analysis of the results enabled us to develop a categorized list of internal and external factors that impact forecast accuracy. This list would be able to assist practitioners in their understanding of all the issues related to the design of more effective strategies for forecasting in supply chain domain. Furthermore, the results of our SLR will inform practitioners about various aspects of the internal/external organisation challenges faced and how they can be mitigated.

FUTURE WORK

The main focus of our SLR was to explore forecasting uncertain product demand in supply chain and we found that there is an extremely large body of research literature both empirical and non-empirical available on this topic. However, while analysing the included studies to answer our research question we found some gaps in the empirical literature. Following is a list of concepts that are not explored well within the current empirical literature that provides convincing evidence for open research areas:

1. Judgmental adjustment is the largest contributing factor to the identified challenges. Its aim is to alter and improve the statistical output to make it closer to the actual value. (Petropoulos, Fildes, & Goodwin, 2016). Improving this crucial part of forecasting for uncertain product demand needs to be further explored
2. The combination of solutions such as the use of statistical models, judgmental adjustments and information sharing which mitigate the challenges of forecasting uncertain demand in the literature is not empirically investigated and measured.

We were expecting to find more papers on the problems faced in forecasting uncertain product demand in the literature, but our search results show majority of the work has been done only in the operations and management research community and published mostly in operations management journals.

We are using the findings of this SLR to analyze the results of our own ongoing research on forecasting uncertain product demand. We are currently analyzing a large amount of qualitative data collected from a set of 18 interviews in a very large manufacturing company in Australia. Our preliminary results indicate that there are many challenges faced apart from choosing the most appropriate forecasting technique. Our findings will assist in the future work of developing forecasting models that consider the challenges faced internally within a firm as well as its external environment. This is again a rich area for future research that seems to have been somehow neglected.

Tables and Figures

Table 1 Search Terms and their synonyms.

(1) Forecasting	(2) Product	(3) Demand	(4) Supply Chain
Forecasting;	Product; Products;	Demand;	Supply Chain;
Forecast;	Stock Keeping Unit;	Availability;	Planning;
Predicting;	SKU;	Sales;	Procurement;
Predict;		Stochastic;	Inventory;
		Unknown;	Order; Orders;
		Noisy;	
		Uncertain;	

Table 2 Summary of final selection.

Search	Total number of Studies	Studies
Primary searches	52	S1 -S49, (S64 - S66)
Secondary searches	14	S50 - S63
Total	66	

Table 3 Internal Challenges identified from studies selected.

	Category	Forecasting Challenge	Description	Extracted from the following studies	Freq (N= 66)
Internal	Technology	Fragmented information technology	Sales forecasting information resides on multiple systems maintained by different functional areas, or, in the worst case, by an employee in a personal program on a desktop computer. Fragmented IT resources requires manual intervention that in turn introduces errors in the which degrades the data integrity.	S06, S66	2

	Difficulties analysing information being shared	The lack of capability to analyse information between systems leads to problems in forecast accuracy.	S46, S66	2
	Changes in technology	The changes in technology creates new trends which influence and impact forecast demand.	S50	1
Product	Product price change	The continuous change in the price of products makes the forecasting of the focal product demand difficult and to establish a base demand.	S10, S11, S18, S50, S55	5
	New product introduction	The demand forecasts of new products cannot be based on historical data as it is nonexistent.	S16, S64	2
	Substitute product introduction	The creation of substitute products creates a vacuum of accurately forecasting the demand of the product being substituted.	S19, S50, S64	3
	Product customization	The unforeseen demand for the different variations available for products to be customised make forecasting harder.	S05, S19, S34, S64	4
	Large product range	Product variety is an important characteristic of an organisation however it prevents reliable forecasts and limits visibility of future demand.	S18, S22, S34, S64	4
	Short product lifecycle	The stage at which the product is in its lifecycle adds challenges in knowing the true demand.	S49, S51, S55, S64	4
Marketing	Promotions and advertising activity	Promotions, campaigns and advertising aim to modify customer behaviour. The change in behaviour makes forecasting algorithms inadequate for forecasting since they are based on previous demand patterns.	S11, S18, S50, S51, S52, S55, S62	7

Management	Senior management influence	Senior management may simply ignore the system generated forecast and create their own forecasts or adjust forecasts without consulting the forecasters.	S06, S12, S50	3
	Political influence	Adjustments to the forecast may not be achievable as it may be motivated by political factors such as pressure from executive management.	S06, S50, S60, S61	4
	Management agility	Lack of leadership styles and the ability to adapt the business to the changing business environment impacts the demand forecast.	S03, S06, S46	3
Communication	Judgmental adjustment	The change in forecast by a judgmental adjustment may bring optimism bias or an overreaction to recent signals in the demand.	S11, S12, S31, S44, S50, S51, S60, S61, S62	9
	Communication	Forecasters may have difficulties in articulating what judgmental adjustment needs to be made because of the tacit knowledge involved.	S03, S06, S11	3
Operations	Safety stock	Not having a sense of how much is too much of safety stock.	S22, S66	2
	Inaccurate estimates on inventory level	A lack of estimates on inventory information about total or remaining stock creates challenges in understanding the supply and demand.	S66	1
	Too many forecast techniques	Forecasters tend to 'cycle' between forecasting methods often returning several times to methods that they had already investigated.	S61	1

Table 4 External Challenges identified from studies selected

	Category	Forecasting Challenge	Description	Extracted from the following studies	Freq (N= 66)
External	Culture	trust	Abuse of power between manufacturers and suppliers leads to mistrust which causes a lack of communication and sharing of information.	S32, S40, S59, S64, S66	5
		Exaggeration of demand forecast	Forecasters exaggerate demand to ensure that suppliers give them priority.	S32, S40, S50, S60	4
	Environment	Weather	Unforeseeable natural conditions like bushfires or floods adds additional challenges in forecasting demand.	S50, S66	2
		Holidays	Local or international holidays can impact supplies or demand orders.	S50	1
		Strikes	Industrial strikes at any point of the supply chain impact the demand forecast.	S50	1
		International crisis	An international crisis such as an act of war or civil unrest can adversely impact the forecast.	S50	1
		Change in Government policy / regulation	Changes in policy which impact import/exports can impact a demand forecast or the change in regulation for a product or service.	S50, S66	2
		Unique events	Major events such as the Olympic games can have an impact on the demand forecast.	S50, S55	2

		Seasonality	This refers to a portion of demand fluctuation that occurs by a repeating pattern and cannot be accounted as the base demand.	S14, S29, S34, S64, S66	5
	Suppliers	Lead times	Long or change in lead times of components or products from suppliers can impact on meeting the forecast.	S22, S64, S66	3
		Loss of key players i.e. supplier, manufacturer	The liquidation of a competitor, supplier or manufacturer.	S64	1
	Technology	Social media	The use of social media can have an unseen effect on the forecast demand due to a negative/positive attention.	S64	1
	Competitors	Competitor activities	Competitors promotions, new product launch or product price change can impact the demand forecast.	S18, S50, S55, S64	4

Figure 1 S&OP Process

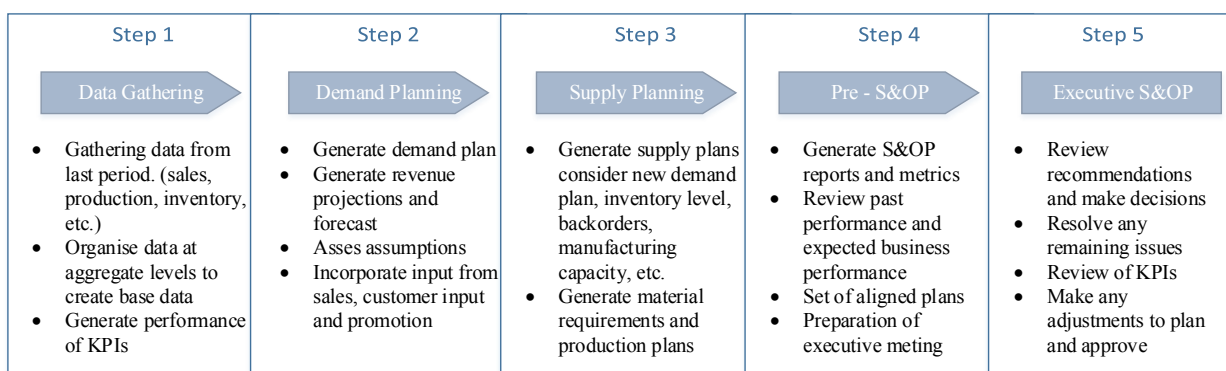


Figure 2 Systematic literature review process executed

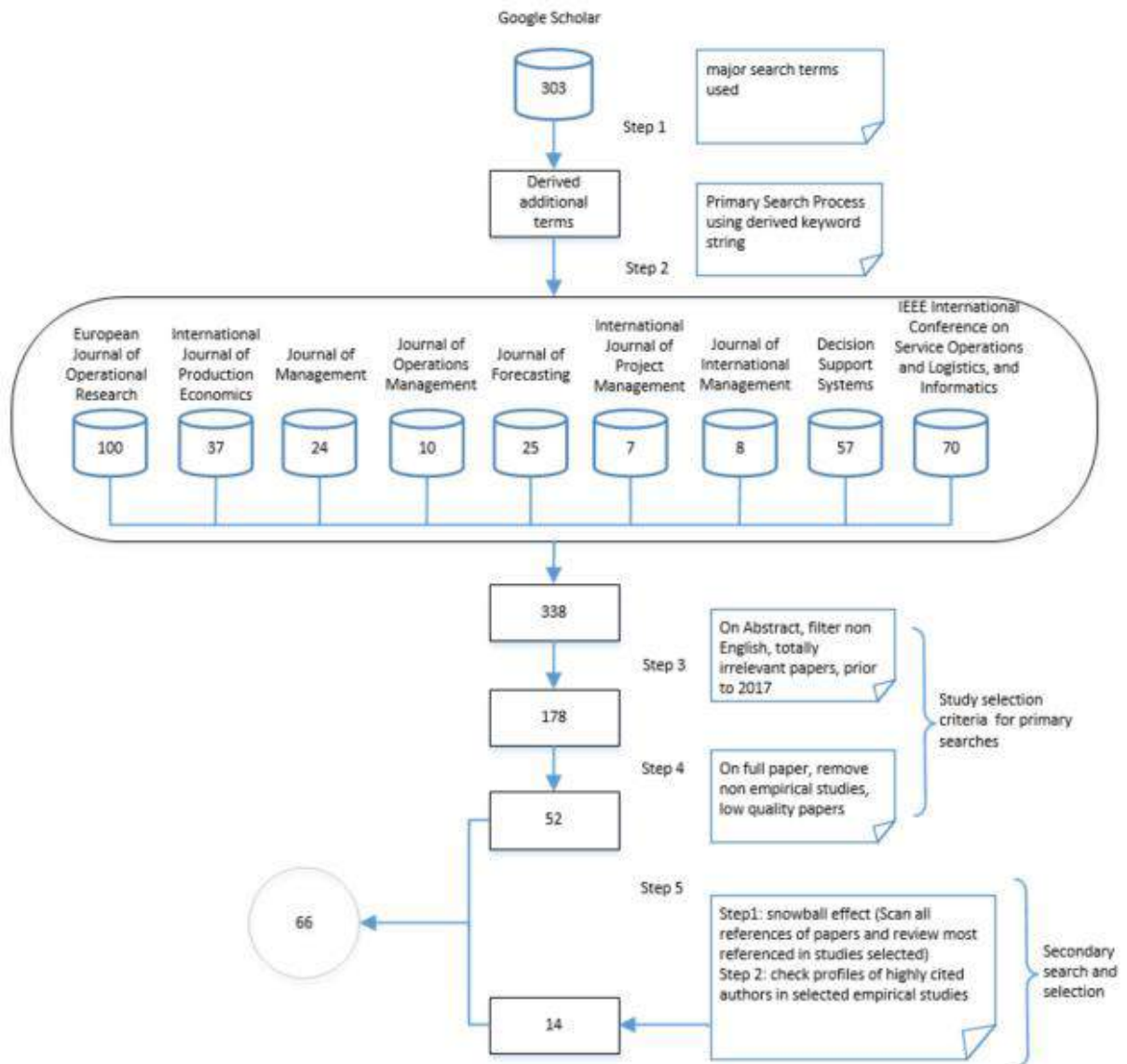


Figure 3 Citation count for resultant studies from Google scholar (as of 5th March 2018)

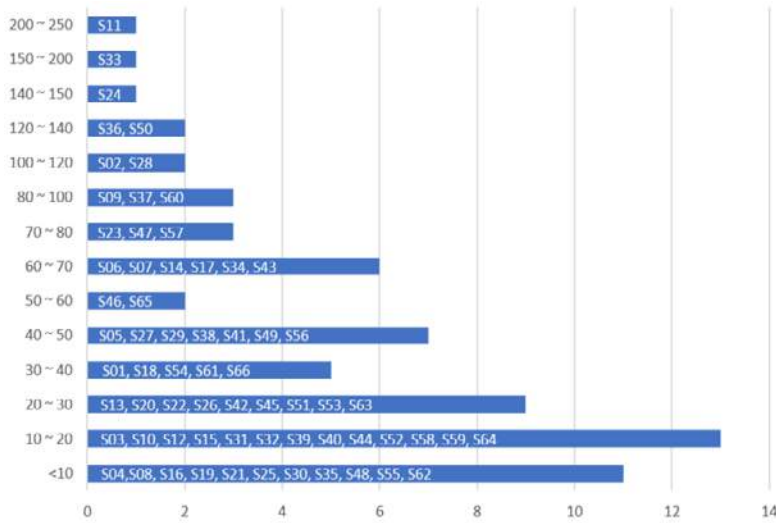


Figure 4 Research methodologies used in resultant studies

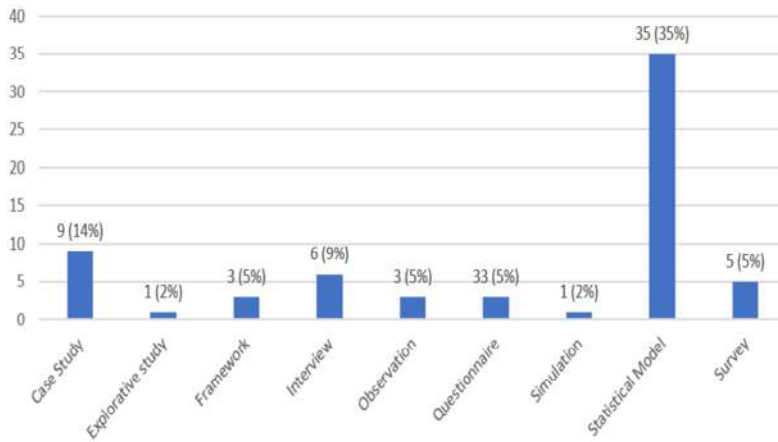


Figure 5 Publication outlet of resultant studies

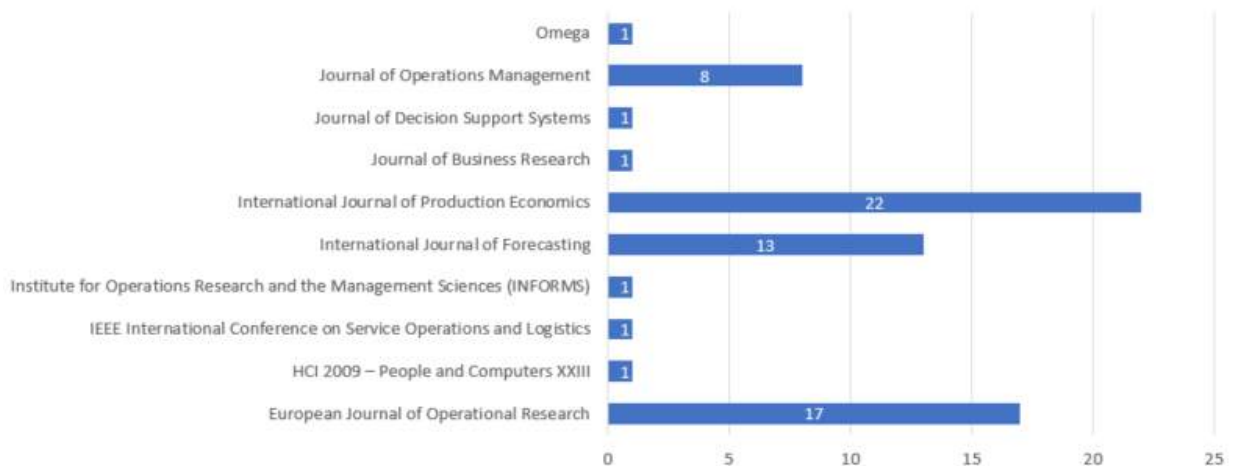


Figure 6 Primary geographic location of resultant studies

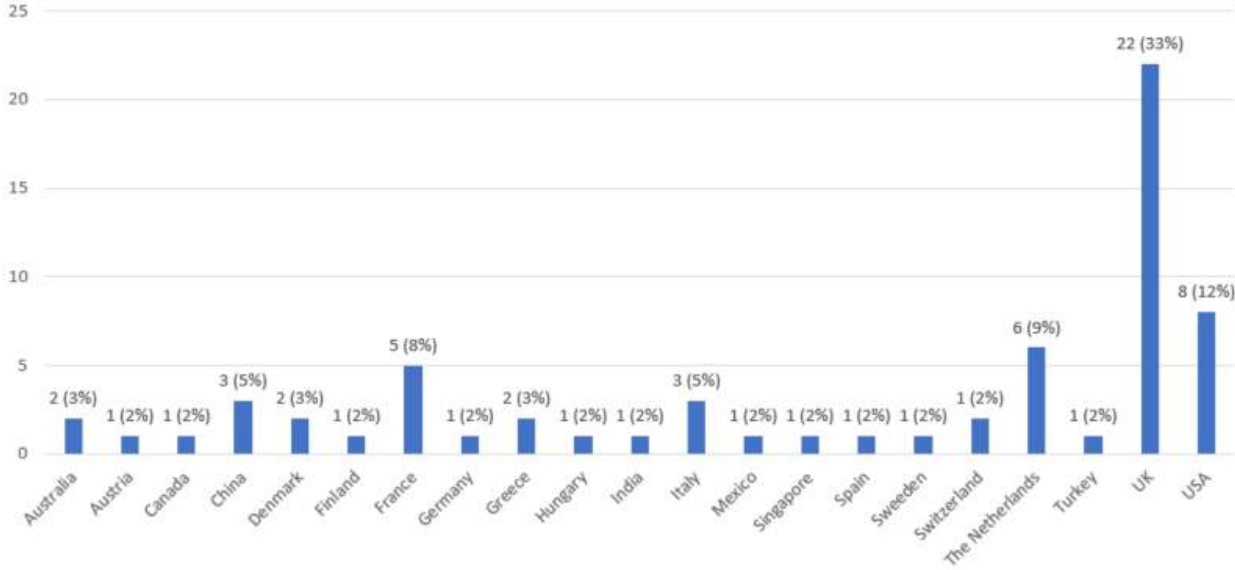
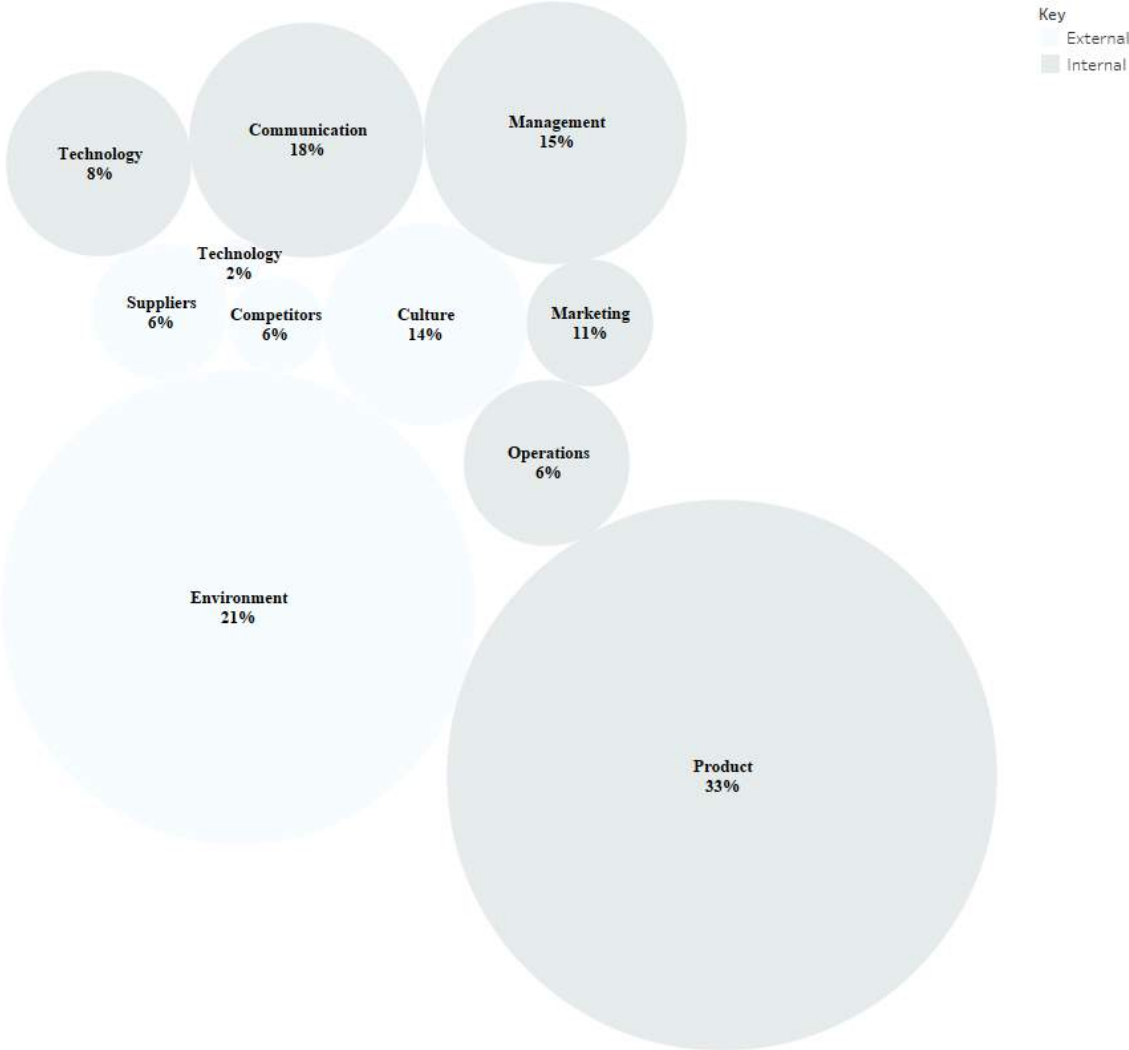


Figure 7 Percentage of studies selected in each category



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Appendix A. Included empirical studies

No	Paper Reference
S01	Ali, M. M., et al. (2012). "Forecast errors and inventory performance under forecast information sharing." <i>International Journal of Forecasting</i> 28(4): 830-841.
S02	Baker, P. (2008). "The design and operation of distribution centres within agile supply chains." <i>International Journal of Production Economics</i> 111(1): 27-41.
S03	Brusset, X. (2016). "Does supply chain visibility enhance agility?" <i>International Journal of Production Economics</i> 171: 46-59.
S04	Chao, G. H. (2013). "Production and availability policies through the Markov Decision Process and myopic methods for contractual and selective orders." <i>European Journal of Operational Research</i> 225(3): 383-392.
S05	Chen-Ritzo, C. H., et al. (2010). "Sales and operations planning in systems with order configuration uncertainty." <i>European Journal of Operational Research</i> 205(3): 604-614.
S06	Davis, D. F. and J. T. Mentzer (2007). "Organizational factors in sales forecasting management." <i>International Journal of Forecasting</i> 23(3): 475-495.
S07	De Vries, J. (2011). "The shaping of inventory systems in health services: A stakeholder analysis." <i>International Journal of Production Economics</i> 133(1): 60-69.
S08	Demeter, K. (2014). "Operating internationally - The impact on operational performance improvement." <i>International Journal of Production Economics</i> 149: 172-182.
S09	Nenes, G., et al. (2010). "Inventory management of multiple items with irregular demand: A case study." <i>European Journal of Operational Research</i> 205(2): 313-324.
S10	Duan, Y., et al. (2015). "Bullwhip effect under substitute products." <i>Journal of Operations Management</i> 36: 75-89.
S11	Fildes, R., et al. (2009). "Effective forecasting and judgmental adjustments: an empirical evaluation and strategies for improvement in supply-chain planning." <i>International Journal of Forecasting</i> 25(1): 3-23.
S12	Franses, P. H. and R. Legerstee (2013). "Do statistical forecasting models for SKU-level data benefit from including past expert knowledge?" <i>International Journal of Forecasting</i> 29(1): 80-87.
S13	Govindan, K. (2015). "The optimal replenishment policy for time-varying stochastic demand under vendor managed inventory." <i>European Journal of Operational Research</i> 242(2): 402-423.
S14	Gylling, M., et al. (2015). "Making decisions on offshore outsourcing and backshoring: A case study in the bicycle industry." <i>International Journal of Production Economics</i> 162: 92-100.
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S16	Hartzel, K. S. and C. A. Wood (2017). "Factors that affect the improvement of demand forecast accuracy through point-of-sale reporting." <i>European Journal of Operational Research</i> 260(1): 171-182.
S17	Hemmelmayr, V., et al. (2010). "Vendor managed inventory for environments with stochastic product usage." <i>European Journal of Operational Research</i> 202(3): 686-695.
S18	Huang, T., et al. (2014). "The value of competitive information in forecasting FMCG retail product sales and the variable selection problem." <i>European Journal of Operational Research</i> 237(2): 738-748.

- S19 Kaipia, R., et al. (2017). "Information sharing for sales and operations planning: Contextualized solutions and mechanisms." *Journal of Operations Management* 52: 15-29.
- S20 Kalchschmidt, M. (2012). "Best practices in demand forecasting: Tests of universalistic, contingency and configurational theories." *International Journal of Production Economics* 140(2): 782-793.
- S21 Krishnan, T. V., et al. (2011). "Modeling the demand and supply in a new B2B-upstream market using a knowledge updating process." *International Journal of Forecasting* 27(4): 1160-1177.
- S22 Laurent Lim, L., et al. (2014). "Reconciling sales and operations management with distant suppliers in the automotive industry: A simulation approach." *International Journal of Production Economics* 151: 20-36.
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- S25 Moser, P., et al. (2017). "Inventory dynamics in process industries: An empirical investigation." *International Journal of Production Economics* 191: 253-266.
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Appendix B

The scoring on the quality assessment checklist was based on three possible answers to the questions; yes = 1, partial = 0.5 and no = 0. If any of the criteria was not applicable on any study then it was excluded from evaluation. The studies that scored less than 50% in the quality assessment were excluded as they were not providing adequate information on the studies research methodology.

Generic Assessment

Q1	Are the aims clearly stated?	Yes/No
Q2	Are the study participants or observational units adequately described?	Yes/No/Partial
Q3	Was the study design appropriate with respect to research aim?	Yes/No/Partial
Q4	Are the data collection methods adequately described?	Yes/No/Partial
Q5	Is the statistical methods used to analyze the data properly described and referenced?	Yes/No
Q6	Are the statistical methods justified by the author?	Yes/No
Q7	Are negative findings presented?	Yes/No/Partial
Q8	Are all the study questions answered?	Yes/No
Q9	Do the researchers explain future implications?	Yes/No

Survey

Q1	Was the denominator (i.e. the population size) reported?	Yes/No
Q2	Did the author justify sample size?	Yes/No
Q3	Is the sample representative of the population to which the results will generalize?	Yes/No
Q4	Have “drop outs” introduced biasness on result limitation?	Yes/No/Partial

Experiment

Q1	Were treatments randomly allocated?	Yes/No
Q2	If there is a control group, are participants similar to the treatment group participants in terms of variables that may affect study outcomes?	Yes/No
Q3	Could lack of blinding introduce bias?	Yes/No
Q4	Are the variables used in the study adequately measured (i.e. are the variables likely to be valid and reliable)?	Yes/No

Case Study

Q1	Is case study context defined?	Yes/No
Q2	Are sufficient raw data presented to provide understanding of the case?	Yes/No
Q3	Is the case study based on theory and linked to existing literature?	Yes/No
Q4	Are ethical issues addressed properly (personal intentions, integrity issues, consent, review board approval)?	Yes/No
Q5	Is a clear Chain of evidence established from observations to conclusions?	Yes/No/Partial

Stream 4 Health management and Organisation
Interactive

Reputation management for public healthcare organisations

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Stream 4 Health management and Organisation

Interactive

REPUTATION MANAGEMENT IN PUBLIC HEALTHCARE ORGANISATIONS**ABSTRACT**

The value of reputation within public healthcare organisations has been largely undefined. Within private organisations many studies have shown reputation to be a valuable resource that has provided organisations with a competitive advantage within their industry and is also likely to be associated with well performing organisations. The purpose of this paper is to unpack the methodological gaps of reputation research within public healthcare organisations and to conceptualise the appropriateness of the resource-based-view theoretical approach for public organisational research.

The paper adopts a critical review of relevant theoretical and empirical literature on reputation. It outlines the complexities inherent with public healthcare organisations and compares and contrasts these with the inherent weaknesses in methodologies executed by existing empirical studies on the concept. The authors contend that to understand the perceptual value of reputation within the public healthcare sector a multi-perspective cultural lens should be adopted.

Key words

Health policy, Healthcare management, Resource Based View, Strategy

Healthcare organisations are struggling to keep up with the increasing demand for healthcare (AIHW, 2017). Increasing problems associated with chronic disease and an ageing population are significantly impacting the Australian health system (AIHW, 2017). In addition, the community continues to expect higher health standards, the latest technologies and improved care (Biggs, 2011). However, despite these challenges public healthcare organisations are required to deliver on the healthcare objectives of the government and maintain performance, efficiency, effectiveness and equity of services (AIHW, 2017). Fulfilling the government mandate and community expectations requires organisations to focus on strategies that improve performance and provide a competitive advantage to the organisation.

The drivers of competitive advantage come not only from the organisation's tangible assets but also from the intangible assets (Schwaiger, 2004; Frombrun, 1996). Reputation is an intangible asset that is essential to the survival or failure of any organisation (Barney, 1991; Fombrun, 1996; Flatt and Kowalczyk, 2008). Therefore, it is critical to understand the value of reputation within public healthcare organisations.

The concept of reputation

Reputation is a cognitive observation about organisations, affecting actions and outcomes (Clardy, 2012). A good reputation can provide an organisation with a number of strategic benefits such as increasing profitability (Roberts, and Dowling, 2002); selling products for premium prices (Quagraine, McCluskey & Loureriro, 2003; Fombrun and Shanley, 1990; Fombrun 1996; Rindova et al. 2005); attracting skilled professionals (Fombrun 1996; Frombrun et al. 2000); increasing competitive advantage (Eckert, 2017; Deephouse, 2000); widening the options available to its managers (Silva and Batista, 2007); and an ability to meet the demands and expectations of its stakeholders (Coombs, 2007; Luoma-aho and Makikangas, 2014), which is essential for public organisations and particularly so for public healthcare organisations (Szymaniec-mlicka, 2015).

Defining reputation is met with some challenges, as there is yet to be an accepted definition (Walker, 2010, Chun, 2005; Gotsi and Wilson, 2001). Without a confirmed and supported definition,

measurement methodologies are questionable and weakened (Walker, 2010). A large number of definitions of reputation have emerged in the literature with Barnett et al. (2006) in review of the literature between 2000 and 2003 finding 49 different versions of organisational reputation. The diversity is largely as a result of the confusion surrounding the terms – identity, image and reputation (Walker, 2010; Clardy, 2012). These terms are often used interchangeably and lack consistency in their use (Clardy, 2012; Walker, 2010). For example Gray and Balmer (1998) define organisational identity as “...distinct characteristics of the organisation...what the organisation is”, thereby ignoring the aspect of employee identification with the organisation (Walker, 2010). Organisational image as “...the mental picture of the company”; and reputation as “...the estimation of the company by its constituents” (pp.695-697). Alternatively, Davis et al (2001) define organisational identity as “...the employees’ view of the company”. Organisational image as “...the view of the company held by external stakeholders”, and reputation as “...a collective term referring to all stakeholder’s view of reputation including identity and image” (pp.113-114). While there is a lack of resolution between these terms, as identified by Clardy (2012) there does appear to be agreement that each of these terms are individually distinguished.

Despite the consistency challenges of a clear definition of reputation, research suggests that reputation is characterised by five attributes: (1.) reputation is based on perceptions; (2.) it is the aggregate perception of all stakeholders; (3.) it is comparative; (4.) it can be positive or negative; (5.) it is relatively stable and enduring (Walker, 2010). All or some of these five attributes have been found to appear in the accepted definitions of reputation in the literature (eg. Weigelt and Camerer, 1988; Fombrun, 1996; Cable and Graham, 2000; Deephouse, 2000; Whetten and Mackey, 2002; Rindova et al., 2005; Rhee and Haunschild, 2006; Walker, 2010).

Fombrun’s (1996) definition of corporate reputation is frequently cited in the literature and contains varying degrees of the five attributes. Walker (2010) built on Fombrun’s (1996) definition by clearly defining the attributes empirically identified since 1996.

“A relatively stable, issue specific aggregate perceptual representation of an organisations past actions and future prospects compared against some standard” (p.370).

The definition of reputation is important in order to align the measurement of the construct with the definitional attributes (Mahon, 2002; Wartick, 2002; Walker, 2010). The construct of organisational reputation suffers from a lack of consistency and this confusion is largely reflected in the range of methods that are used to measure reputation (Clardy, 2012). Reputation has been measured using a number of methods with the most common being Fortune's Most Admired Companies (FMAC) which takes an aggregate perception of executives, directors and financial analysts on one main issue, financial performance rankings (Brown and Perry, 1994; Fryxell and Wang, 1994; Lewellyn, 2002; Walker, 2010). Other measures include, media reputation from various newspaper articles (Deephouse, 2000); and character scale instruments (eg Fombrun et al. (2002) Reputation Quotient Index which is a 20-item instrument measuring emotional appeal, products and services, vision and leadership, workplace environment, social and environmental responsibility and financial performance).

The operationalisation of reputation measurement requires close ties to the definition of the construct (Mahon, 2002; Wartick, 2002; Walker, 2010). The five attributes outlined in the definition each have measurement implications: (1) reputation should examine the perceived reputation and should be measured as stakeholder perceptions and not objective measures such as market share (Fang, 2005); (2) it is the aggregate perception of all stakeholders but needs to be issue specific (for example an organisation may have different reputations for different issues i.e. a good reputation for performance but a bad reputation for employee conditions); (3) reputation is comparative which makes the measurement flexible to be compared with a number of possible standards (eg prior reputation; industry competitors); (4) measurement of reputation can be positive or negative and many empirical studies have examined only organisations that have a good reputation. Studies that examine both have the potential to provide more insight into organisational reputation (Walker 2010); (5) reputation is relatively stable and enduring which highlights some implications for reputation measurement methods when considering longitudinal or cross-sectional studies. Longitudinal research may be more valuable as research has demonstrated organisational reputation is stable, although given the

stability, conclusions from cross-sectional studies are more credible than studies examining unstable or short lived concepts (Walker, 2010).

The five attributes associated with the definition are all important when considering the measurement of organisational reputation (Walker, 2010). Understanding and measuring reputation in public sector organisations requires the distinction between one aggregate perception of reputation and one issue specific aggregate reputation. The distinction between one overall aggregate perception of organisational reputation and the issue specific aggregate reputation perspective and allows for the notion that public organisations can have multiple reputations on different issues. A true reputational measurement can only result from a sampling of representative stakeholders on a conceptually relevant and issue specific set of criteria (Fombrun, 1998). Therefore future research is needed to further define and sculpt this reputational measurement.

Reputation in public organisations

Reputational research in the public organisational arena is sparse and may be largely due to a number of inherent problems that most public organisations face, such as political constraints on reputational management strategies (Waeraas and Byrkjeflot, 2012). While the value of reputation is well defined within the private sector (Fombrun, 2001) the notion of reputation as a valuable resource for public organisations presents some challenges.

Statements conveying a negative image of public organisations have been heard for years with the general perception of public organisations as being too big, wasteful, slow, unreliable and inefficient, and not sufficiently transparent (Waeraas and Byrkjeflot 2012). Bureaucracy by which public organisations are characterised is used often as a derogatory term that makes it easy to forget the values it was originally supposed to embody such as progress, rationality and efficiency (Byrkjeflot and du Gay 2012; Olsen 2005).

Governments and public figures are concerned about citizen's dissatisfaction with public sector services and with the image as a whole (van de Walle 2007). In response, many public organisations are taking matters into their own hands by adopting image-building concepts such as reputation

(Dolnicar and Lazarevski, 2009). Strong reputations serve as a competitive advantage and for public organisations it is a valuable political asset, as it can be used to generate public support, achieve delegated autonomy and discretion from politicians, and to recruit and retain valued employees (Carpenter, 2002).

Reputation in public healthcare organisations

Coming to the realisation that reputational value for public healthcare organisations is multifaceted and involves different stakeholders, the traditional private corporation approach is rapidly paving way for a more performance based model that recognises and involves an additional consequential perspective to consider over and above the input-output relationship. It highlights the constructed effectiveness of key individual stakeholders' perception of an organisations input-output (Green and Griesinger, 1996). For internal stakeholders, the organisations' perceived performance influences their behaviour towards the organisation (Willems, Jegers and Faulk, 2015). In particular, it can influence an organisations ability to attract resources, professionals and also affect employees' commitment to, and decision making for, the organisation (Willems, Jegers and Faulk, 2015). Managing reputation as a resource that potentially affects performance may provide public healthcare organisations with a competitive advantage for funding opportunities, philanthropic donations and the ability to attract high quality professionals (Boyd, Bergh and Ketchen Jr., 2010).

Reputation becomes an asset through processes of accumulation that are based on sustained and consistent practices (Rindova and Martins, 2012). Comparatively, Barney (1991) argues that reputation is built through socially complex processes which makes it valuable, rare, difficult to imitate and non-substitutable (VRIN). Thereby making reputation central to sustaining the organisations competitive advantage. The combination of the VRIN attributes underpins the basis of the resource-based-view of the firm theory, which holds that VRIN resources provide increased performance and competitive advantage for an organisation (Barney, 1991; 2001). In particular, the intangible resource of reputation is thought to differentiate organisations, and helps illustrate changes in their performance and competitive advantage (Boyd, Bergh and Ketchen. Jr., 2010).

Resource-based-view for public sector organisations

The resource-based-view theory has been widely used within the private sector and most of the empirical research has been largely used and appreciated in the management of private organisations (Newbert, 2007; David and Han, 2004; Barney and Arkan, 2001; Deephouse, 2000; Wiklund and Shepherd, 2003; Powell and Dent-Micallef, 1997; Schroeder, Bates and Junttila, 2002). However, the lack of use within public sector organisations does not illustrate a lack of usefulness within this context. Instead it suggests an emerging exploratory field for this theory (Szymaniec-Mlicka, 2014; Klein, Mahoney, McGahan and Pitelis, 2010).

The usefulness of expanding RBV theory in the management of public organisations is the efficiency based explanation of sustainability and performance of RBV that has been valued by some researchers as enabling organisations to survive or even thrive in turbulent environments (Barney and Clark, 2007; Fredericks, 2005; Krupski, 2011). Support in the empirical literature on the use of RBV theory reflects a transforming theory specifically focusing on resources and capabilities that organisation's can exploit for competitive advantage, contestability and performance (Newbert, 2007).

Public organisations and, in particular, public healthcare organisations are externally justified with their existence dependent on the provision of services for public purpose (Bryson, Ackerman & Eden, 2007). They are to some extent politically, economically and socially aligned to satisfying key stakeholders (Moore, 1995; Bryson et al., 2007) and the key to success is identifying, sustaining and growing strategic capabilities to produce the greatest public value at an efficient price (Bryson et al., 2007). To assist public healthcare organisations to meet expectations and create healthcare value and responsiveness, RBV theory is useful as it is likely to assist healthcare leaders in understanding resource value and value creation as being dependant on the efficient and effective use of resources in delivering quality healthcare.

Performance reporting for Australian health services

The performance reporting framework dimensions of effectiveness, efficiency and equity are external motivators for health services. Healthcare organisations are tasked with achieving the government

health objectives and achieving high performance. The performance assessment for Australian Local Hospital Networks (LHN) is important for the allocation of government resources as increased reliance on performance assessments of LHNs by the government has emerged over recent years (Bennett, 2013). As such, the reputation of healthcare organisations has become increasingly important.

The relationship between organisational reputation and value is established by the reliance of healthcare organisations, within Australia, on the allocation of government funding, as they become cognizant of what drives their healthcare organisation's reputation for performance. The challenge is to increase the value of reputation by improving performance by way of effectiveness, efficiency and equity of services. The perception of a healthcare organisation's ability to provide good value healthcare plays a crucial role in the justification of government funding and the attraction of other finite resources (Willems, Jefers and Faulk, 2015). To understand the perception of reputation within healthcare organisations requires a cultural lens.

Previous research on reputation suggests that organisational culture plays an important role in the development and understanding of reputation (Fombrun and Shanley, 1990; Fombrun, 1996; Dukerich and Carter, 2003; Alsop, 2004; Flatt and Kowalczyk, 2008). Culture and reputation are considered intangible assets because they fulfil the elements of being valuable, rare, inimitable and non-substitutable (VRIN) resources (Barney, 1991; Hall, 1993; Fombrun, 1996; Kaplan and Norton, 2004; Flatt and Kowalczyk, 2008). While alone each attribute is a predictor of organisational performance and competitive advantage, less is known about the cultural influences on reputation.

Weigelt and Camerer (1998) suggest that since culture influences organisational performance then it is likely to also influence reputation. However, there is limited empirical evidence that illustrates the suggested influence on reputation (Flatt and Kowalczyk, 2008). A potential relationship between reputation and culture was suggested by Weigelt and Camerer (1998) who advanced that because culture influences strategy implementation and performance then using straightforward logic, culture would also support reputation-building activities, where unwritten rules guide employees in their response to unforeseen and ambiguous situations.

Research suggests that healthcare organisations have been slow to understand the importance of its own culture and the usefulness of strategies that have been adopted by other organisations (Eisenberg, Bowman and Foster, 2001; Parmelli, 2011). The management of culture is increasingly viewed as a vital component in healthcare performance and organisational leaders, teams and individuals are crucial to shaping culture (Schein, 2004). Leaders cultivate the foundation for culture and it can be argued that leaders can create and manage culture, whereby an ultimate act of leadership is to overturn culture when it is flawed (Schein, 2004). Although, a dominant ‘management-centred’ approach is also flawed particularly in public organisations, when emphasis is on resource dimensions rather than on service need (Golenko, 2017). Therefore, understanding the culture from key internal stakeholders will assist with gaining insight into the value of reputation within healthcare organisations.

At the operational (frontline) level, a dominant resource dimension approach is likely to perpetuate ongoing conflict between hierarchical groups (Golenko, 2017). Certainly, the disconnection between subcultures was highlighted as a major factor in the financial, managerial and behavioural failure of the National Health Service Hospital Trust (NHS) (Harrison, Hunter, Marnoch and Politt, 1992). Important discoveries from this case were the disconnect between senior managers and frontline groups, which lead to poor working relationships, low levels of trust, poor reputations and performance (Ravaghi, Mannion and Sajadi, 2015). Subcultural differences between strategic decision makers and operational service providers was possibly the reason for this disconnect between hierarchical levels and professional groups. Cultural disconnect can lead to failure of service improvement initiatives; damage to reputation at organisation and employee level (Bueno, Longo-Somoza, Garcia-Revilla and Leon, 2015); decreased organisational performance; and reduced contestability in renegotiating hospital service agreements (AHHA, 2017).

Managing reputation is an essential role for strategic decision makers who must consider the perceptions of reputation, influenced by subcultural differences, from key stakeholders of the organisation. How internal stakeholders within public healthcare organisations perceive the reputation will influence their behaviour towards it (Davis, Chun, da Silva and Roper, 2004). If a healthcare organisation’s reputation is affected it may lead to a decline in consumer choice, physician

referral and difficulty recruiting and retaining qualified clinical staff (Shahian, Yip, Westcott and Jacobson, 2000; Hibbard et al., 2005). Examining the cultural and subcultural influences on the perceptual value of reputation in healthcare organisations will assist in fully understanding the reputational construct within this context.

Consequently, this paper argues that there is a further need to define and adopt a reputational resource instrument that measures the value that reputation has on public health organisations. To do this, consideration is needed to the cultural and subcultural influences on the reputation of public healthcare organisations in order to complete a comprehensive analysis. While there is a large body of research needed to do this, it is clear that ignoring the value that reputation has on these organisations will result in dire consequences for healthcare organisations in the future. Particularly as they funding surrounding them becomes increasingly complex and competition driven. Therefore, further work is needed in this area in the future.

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**Understanding Entrepreneurial Opportunity from the Muslim Entrepreneurs'
Perspective: A Process Approach**

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Understanding Entrepreneurial Opportunity from the Muslim Entrepreneurs' Perspective: A Process Approach

Abstract

There are approximately 1.6 billion Muslim globally with wide ranging levels of religious commitment and practice that often lead to stereotyping and misunderstanding of Islam. The complex relationship between religious values and cultural values further complicates the explanation for the behaviours of Muslim entrepreneurs. This study examines how Muslim entrepreneurs identify entrepreneurial opportunity. It aims to understand the process that the Muslim entrepreneurs go through in realising opportunities. Three patterns of opportunity realisation process were identified: 1) accidentally found opportunity, 2) actively seeking for opportunity, and 3) spiritually-driven opportunity. This study contributes to the entrepreneurial opportunity literature by demonstrating the importance of non-economic element such as spirituality in the process of venture creation.

Keywords: Entrepreneur, Entrepreneurship, Opportunity identification, Small business

Introduction

According to the Pew Research Centre statistics, Muslims make up 23.2 per cent of the world population and this number is expected to grow to 26.4 per cent by 2030 (Pew Research Center, 2011). The diversity and variations in practice of 1.6 billion Muslim globally often lead to confusion and misunderstanding of Islam and its adherents, in particular the Muslim entrepreneurs. Since religion has an important role in the life of many Muslims, the growing statistics imply an expanding market for Muslim consumers and opportunity for Muslim entrepreneurs. Therefore, studies that integrate Islam and entrepreneurship become particularly important and relevant.

Despite being the centre of entrepreneurship field, entrepreneurial opportunity continues to baffle researchers, especially in regard to its origins (Plummer, Haynie, & Godesiabois, 2007; Wood & McKinley, 2010). The question of what triggers entrepreneurship in some people and not others, remains an area of interest for policy makers and scholars. Venkataraman (1997) contends that the question of ‘where opportunities come from?’ is one of the most neglected areas in entrepreneurship research.

Opportunity identification which happens in the beginning stage of business venture is a crucial phase in the entrepreneurship process (Ardichvili, Cardozo, & Ray, 2003). It is generally accepted that entrepreneurs are able to identify unique opportunities because they are different in terms of knowledge (and information), cognition, and behaviour (Venkataraman, 1997). Therefore, it is reasonable to expect that the venture created by Muslim entrepreneurs is different as a result of their opportunity identification process that is shaped by their knowledge, cognition, and behaviours.

According to Baron (2007) efforts made to examine opportunity as a process is insufficient. He further adds that prior research mainly disregards the question of how opportunity recognition occurs; or in other words, how do specific persons actually identify opportunities? Hence, in attempt to understand how opportunity recognition happens this study is taking the process approach, guided by a research question of “*how do Muslim entrepreneurs understand entrepreneurial opportunity?*”.

Literature Review

Opportunity is such a complex concept that is difficult to operationalise. Hence, empirical work in this area has been lacking (Sanz-Velasco, 2006). A number of models have been introduced in attempt to capture the relevant process involved in developing entrepreneurial opportunity. The researcher will discuss three well-known entrepreneurial opportunity models in this section. The first model is Hills, Shrader, and Lumpkin’s (1999) creativity based model of entrepreneurial opportunity recognition. The second model is Ardichvili and Cardozo’s (2000) opportunity recognition model. The final model will be reviewed is George, Parida, Lahti and Wincent’s (2014) model of opportunity recognition process. One similarity among these three entrepreneurial opportunity model is that the opportunity recognition appears to be a predominant element in the development process of entrepreneurial opportunity. As one of the central ideas of entrepreneurship, opportunity recognition refers to “the ability to identify a good idea and transform it into a business concept that adds value and generates revenues” (Lumpkin & Lichtenstein, 2005, p. 457).

Hills, Shrader, and Lumpkin’s (1999) model of entrepreneurial opportunity recognition

Hills et al.’s (1999) model of opportunity recognition proposes a five steps process in developing entrepreneurial opportunity which includes: 1) preparation, 2) incubation, 3) insight, 4) evaluation, and 5) elaboration (see Figure 1). Each of these steps is explained in the following section.

Preparation. According to Hills et al., (1999), ‘preparation’ as in the context of opportunity recognition relates to the background and experience that an entrepreneur brings to the opportunity recognition process. In order to identify opportunities, entrepreneur needs a knowledge base where he or she can draw on. Such knowledge stem from a person’s personal background, training, work experience, and knowledge of a field.

Incubation. This step refers to the part where entrepreneur is contemplating an idea or specific problem (Lumpkin & Lichtenstein, 2005). Campbell (1985) describes incubation as an on going process that often takes place while a person is occupied in activities that has nothing to do with a specific issue. Hence, in the context of opportunity recognition it does not apply to conscious problem-solving or systematic analysis (Hills et al., 1999). Rather, it is an intuitive, non-linear, non-intentional, style of considering possibilities or options.

Insight. This is the stage where the whole answer or core solution realised by a person suddenly and unexpectedly (Lumpkin & Lichtenstein, 2005). Often times it occurs iteratively throughout the opportunity recognition process (de Koning, 1999). Hills et al., (1999) suggest three types of insights: 1) the moment of recognition of business opportunity spontaneously, 2) the moment a person experience when he or she gets the solution to a problem that he or she has been contemplating, and 3) the moment a person gets an idea from his or her social circle.

Evaluation. This is the phase in the process wherein ideas are tested for their viability (Hills et al., 1999) through various kinds of analysis, such as preliminary market testing, financial viability analysis and/or feedback from business partners and others in a person’s social circle (Bhave, 1994; Singh, Hills, Lumpkin, & Hybels, 1999). Very often, the result of the analysis requires one to go back to the incubation and preparation stages for more careful consideration (Hills et al., 1999).

Elaboration. This is the phase in which the creative insight is turned into reality (Hills et al., 1999). Following the evaluation process, if the business idea is still regarded as feasible, the elaboration phase may entail business planning process in order to reduce uncertainty (Lumpkin & Lichtenstein, 2005). Of all the phases in the process, this phase is the most difficult and time-consuming (Csikszentmihalyi, 1996).

Insert Figure 1 about here

Ardichvili and Cardozo’s (2000) Opportunity recognition Model

This model suggests that entrepreneurial opportunities are discovered through recognition instead of purposeful search. Therefore, “search” process is not a necessary component in this model. They also suggest that, successful opportunity discovery is subject to a number of conditions, which include entrepreneurial awareness, access to extended social networks, and prior knowledge of markets and customer problems (see Figure 2). The emphasis of this model is more on the interaction of occurrences that happen leading to the recognition of opportunity by entrepreneur. It does not address the occurrences that follow after that, such as evaluation and exploitation of opportunity.

Insert Figure 2 about here

George, Parida, Lahti, and Wincent’s (2014) model of opportunity recognition process

This model proposes that prior knowledge, social capital, cognition/personality traits, environment conditions, alertness, and systematic search are among the important influencing factors that ‘open the way’ for entrepreneur to recognise opportunity (see Figure 3). However, there are few overlooked influencing factors that are not considered in this model such as emotions, genetic influences, and market orientation. This model places both opportunity discovery and creation under the same category of opportunity recognition, which the researcher view as less appropriate. Opportunity recognition implies that the entrepreneur to be aware of the profit potential of an opportunity before taking any action towards realising that opportunity (Lumpkin et al., 2005). Meanwhile, the opportunity creation view assumes that profit is only realised after entrepreneur enact or act on the opportunity.

Insert Figure 3 about here

The term ‘opportunity recognition’ used in these three models suggests that they only address discovered type of opportunities, where opportunities are ‘discovered’ instead of ‘enacted’. Hence, there is a need to explore in more depth to capture and explain the development process of entrepreneurial opportunity that is more emergent and unconscious.

Research Methods

A qualitative research design was chosen to inductively explore how do Muslim entrepreneurs understand entrepreneurial opportunity? This approach allows illustration and explanation of phenomena for deeper insights to emerge for theoretical development (Siggelkow, 2007). As qualitative researchers are interested in sources that are information-rich (Patton, 1990), this research design allows us to move closer to the source of data where we are able to reach deeper within a particular contextual space.

Process research is about comprehension of how things develop over time and why they develop in a certain way (Van de Ven & Huber, 1990), which makes process data mostly composed of narratives about what took place and who did what when, or as Langley (1999) describes it is about events, activities, and choices ordered over time. Hence the analysis of process data necessitates a means of conceptualising events and of discovering patterns among them (Langley, 1999). Process research also concern with the development of relationships between people or with individuals’ reasoning and feelings they make sense of and respond to events (Isabella, 1990; Peterson, 1998). Given that opportunities are dynamic processes (Short, Ketchen, Shook, & Ireland, 2010), the researcher argue that the process view is better at capturing the evolving nature of entrepreneurial opportunities (i.e. recognition, development, evaluation, and exploitation).

Participants

Research participants were selected through purposive sampling (Miles & Huberman, 1994), where only participants with relevant knowledge, experience, and criteria that are relevant to the study were selected (Gibson & Brown, 2009). Participants were chosen based on three criteria. First, they must be involved in the process of creating their ventures. Secondly, their ventures must be known to adopt Islamic principles and values. Third, they must be willing to share their experience and willing to participate in this research.

Fifteen entrepreneurs (12 females and 3 males) from various industry and nature of business took part in this study. They were all based in Kuala Lumpur and Klang Valley. These two spots are well known as the heart of Malaysia's economic and business activities. Participants were from various demographic backgrounds in terms of gender, age, years in business and educational background (see Table 1).

Data Collection and Analysis

Using narrative interview as the data collection technique, the researcher asked each participants to share their experience of starting a venture. On average, the researcher spent approximately two hours interviewing each participant. The interviews were audio recorded with the permission from the participants and were transcribed verbatim to become the central database for this study. The researcher assigned each participant a pseudonym to ensure his or her anonymity and privacy were protected and respected.

In analysing the data, the interview transcripts were read several times in order to get a 'general sense' of the data (Creswell, 2009). The researcher tried to be as expansive as we could in conducting 'open coding' on the data while relying on our research question to guide the process (Merriam, 2009). In this process the researcher tried to understand how these entrepreneurs identified the opportunities that eventually led them to the creation of their ventures. The researcher noted the steps that were taken, activities and events that took place during the journey of venture creation of these participants. The researcher then performed 'axial coding' (Corbin & Strauss, 2007) where the 'open coded' themes were revised and reworked until she reached the final categories of themes. The final results of this study are discussed in the following section of this paper.

Findings

From the analysis the researcher has identified three opportunity realisation patterns that explain the process and stages these Muslim entrepreneurs went through from the first time they were aware of an entrepreneurial opportunity until they turned it into reality.

1. Accidentally found opportunity

This pattern refers to entrepreneurs who found their entrepreneurial opportunity by chance. They learned about the opportunity by themselves or through the other people around them. Nine of 15 entrepreneurs related their experience of opportunity realisation as being accidental or by chance. Figure 4 illustrate the opportunity realisation process as experienced by all the nine entrepreneurs. These entrepreneurs went through the following five stages during the process:

i. Awareness of gap

This is a stage where entrepreneurs first became aware of the opportunity. There were two types of gaps that triggered the opportunity: 1) missing product or service, and 2) dissatisfaction with the current situation. The first is a gap that existed due to missing product or service in the market. The second type of gap deals with the gap that existed between the entrepreneurs' expectations of how things should be – shaped by their interpretations of the Shariah, and the reality that causes them to feel dissatisfied with the current situation. One participant for instance, shared her experience of how

she first became aware of a gap in the market for Muslim swimwear. This gap existed due to missing product or service in the market:

“It was an idea of a friend, when she told me that she does not have any proper swimwear to be worn in the public.”

Aida, Muslim swimwear entrepreneur

Another participant related her experience of being aware of gap that was triggered by her dissatisfaction with the current situation. As she elaborated:

“...we believe that there is a need for a new and innovative, more refreshing way to communicate Islam. It is all about the communication. We believe Islam as a religion is perfect, but the communication is out-dated (...) the style of communication, the quality of the medium is completely out-dated, in my point of view (...) our mass media are so influenced by the West. We got so carried away with the western values. So, we need to balance up that perception.”

June, public relations consultant

ii. *Exploration of gap*

This is a stage where entrepreneurs began exploring the gap. They began gathering information that would help them to understand and address the gap. One participant explained that upon realising there was a gap in the market for Muslim-made household products, his father went further to investigate the requirements if they were to fulfil the gap:

“My father went to search for manufacturer to get quotation and tried to understand what needs to be done.”

Hakeem, health and household products entrepreneur

iii. *Evaluation*

This stage involves making judgment whether the gap existed and worth to pursue. This stage occurred in the form of market test conducted by the entrepreneurs. Laila, who is a franchisor of Islamic pre-school education centre, created a website to test the market on consumer’s acceptance of English as a medium of instruction in pre-school education. As she elaborated:

“We created a website because we wanted to test the market. At that time English Islamic books are quite new. So, we were not sure if Malaysians are ready for Islamic books in English.”

iv. *Exploration of Islamic values*

In this stage, entrepreneurs got in touch with their spiritual beliefs in justifying an opportunity. One of the Islamic values that majority of the participants frequently spoke about is the value of *Fardhu Kifayah*. This value refers to the legal obligations that the Muslim community must discharge. The whole community is free from sin when a sufficient number of people shoulder these responsibilities. If not the whole community carries a collective sin for not fulfilling it (Al-Qaradawi, 2010). A sense of community appeared to be the dominant spiritual value that influence this stage. Entrepreneurs justified the opportunity as a way to help the Muslim community, which was also part of their responsibilities. As one participant, Jasmine who is a designer and image consultant justified:

“At the end of the day, we are helping another Muslim to get a job and help to project the right image for himself, as well as for the society.”

v. *Exploitation*

As the idea or opportunity was deemed to be viable by these entrepreneurs through the exploration of spiritual values stage, they then progressed to this final stage. During this stage these entrepreneurs began to put their ideas into reality. Aida, the Muslim swimwear entrepreneur discussed the actions she took to turn opportunity into reality:

“What I did was...I contacted all the media. I faxed them. Then only they responded. News Daily was the first media to call me up. We had a photo-shoot at Derby Park in November 2006. After that, there was one VIP approached me with the idea to

organise a fashion show in November. It was the first fashion show where I showcased my swimwear.”

Insert Figure 4 about here

2. Actively seeking for opportunity

For this pattern of opportunity realisation, entrepreneurs learnt about the opportunity by themselves instead of from other people. These entrepreneurs always on the lookout for opportunities. Hence, entrepreneurs’ knowledge and preparation preceded the opportunity realisation process. Three out of 15 entrepreneurs were identified from the data as having this pattern of opportunity realisation. Figure 5 illustrate the opportunity realisation process as experienced by these three entrepreneurs. These entrepreneurs went through the following stages in the process of creating their ventures:

i. Preparation

This is a stage where the entrepreneurs were involved with accumulation of knowledge, skills, and experience. It is also a stage where they opened themselves to any business ideas that came across them. One participant shared his experience of ‘preparation’ before he finally ventured into his current business:

“I worked in a factory, where I go in the morning and I don’t know what is happening outside of the factory. By the time I look at the outside, it’s already dark. After a while, it doesn’t really fit my soul, so to speak. I became fed up. I said to myself, I think I’ll go into business but I don’t have the experience. So, I think I need to gain some experience because you will need to wear so many different hats when running a business. I went to learn in so many different business sectors. I worked as an administrator at a college. I started with an entry level, just to learn and gain experience.”

Haris, Hajj-specialised skincare entrepreneur

ii. Awareness of gap

This is a stage where entrepreneurs became aware of an opportunity. Similar to accidentally found opportunity, this type of opportunity realisation process also was triggered by two types of occurrences: 1) missing product or service, and 2) dissatisfaction with the current situation. One participant, Nani who is a health and beauty therapist, described the missing of beauty and health treatments from the market that are halal and conform to the Islamic religious requirement:

“...there are demands from people who are practising Islam, who can’t get a comfortable place that can conform to their religious needs”

Another participant shared her dissatisfaction with the selection of teen novels in the market that led her to an awareness of gap in the market for a more suitable option:

“...we don’t like the one [novels] that were offered in the market. We wanted to do it our way (...) we don’t like novels that holding hands, you know things like that, because that thing will be picked up and practised by our society, especially by the kids and teenagers. So we feel that this is our social responsibility to start publishing novels that are informative and beneficial.”

Soraya, Islamic teen novels publisher

iii. Exploration of spiritual values

After these entrepreneurs learnt about the gap and the potential opportunity, they got in touch with their spiritual beliefs before deciding whether the gap that they just learnt about was indeed an opportunity. One entrepreneur, Soraya discussed how the value of *dakwah* (the call of joining the good

and forbidding the bad) helped her to justify the gap that she identified earlier. She shared her hope of transforming other people’s lives through her books:

“What we need to do now is to transform the lives of those who have been far from being Islamic.”

iv. *Evaluation*

Entrepreneurs did not conduct a ‘formal’ market test to assess the viability of their business ideas. Instead, evaluation occurred in the form of feeling confidence that the business idea was going to work based on the entrepreneurs’ years of experience of doing business and knowledge background. Haris for instance, elaborated on how his formal education background in chemistry gave him the advantage in formulating the *hajj*-specialised skincare product. As he explained:

“The formulation is no different. It’s not rocket science, and because I studied chemistry when I did my bachelor degree, it is easier for me. So, the way we do it is to work backwards. We know what the Muslim wants in a skincare. For example, when we perform our wudhuk (ablution), we don’t want the lotion to be too oily because it will prevent the water from touching the skin. So, we know the attributes of the products for Muslim, and we work backwards based on JAKIM’s criteria for halal certification”

v. *Exploitation*

This pattern of opportunity realisation process also ended with the exploitation stage. In this stage entrepreneurs began taking actions after believing that the opportunity was worth pursuing. For instance, Nani who owns an Islamic spa business started to gather experts to help her draft the Standard Operating Procedure (SOP) to run an Islamic spa. As she explained:

“I invited experts from Department of National Development and the Ministry of Human Resources to guide me on how to develop this SOP (...) I have no problem with using my own money to hire these experts to help me develop this SOP.”

Insert Figure 5 about here

3. Spiritually-driven opportunity

In this final pattern of opportunity realisation process, entrepreneurs went through a spiritual experience that led them to the opportunity. Spiritual experience made these entrepreneurs re-evaluate their lifestyle, their way of thinking, attitude and how they value lives. Figure 6 illustrate the opportunity realisation process as experienced by these entrepreneurs. Three out of 15 entrepreneurs were identified from the data as having this pattern of opportunity realisation process and went through the following five stages in turning their opportunities into realities:

i. *Transformation*

Transformation refers to a stage where the entrepreneurs experienced a change in their lives. This change was related to their spirituality, which consequently led to a change in their perspectives on lives, their way of thinking and ultimately their lifestyle. During this stage they experience intrinsic and extrinsic change where they questioned about their purpose of life or realised something was missing in their lives. One entrepreneur, Farah recounted her experience of transformation:

“One day I woke up and realised that my passion was without meaning. Slowly I delved into Islam. This came about when I was at a crossroad in life.”

Farah, owner of Islamic fashion boutique

ii. *Awareness of gap*

While still experiencing the transformation stage, these entrepreneurs became aware of a gap in the market. Similar to the previous pattern of opportunity realisation, the gap stemmed from two

problems: 1) missing product or service and 2) dissatisfaction with the current situation. Farah, an entrepreneur who experienced a transformation decided to fully observe the Islamic code of dressing when she became aware of a gap in the market:

“I couldn’t find anything that suited my build and physique in the local market and none that suited my taste and needs (...) here in Malaysia, though there is a growing market for Muslim wear, it’s still very much lacking in variety and choice, and most of the time stores only cater to the typical Asian size, which is super small.”

iii. *Preparation*

In this stage entrepreneurs began gathering information, knowledge, and skills that relate to the gap. For one entrepreneur, her previous working experience with the Malaysia Islamic Consumer’s Association had enabled her to gather important information about Muslim consumers’ issues. She learnt that most of Muslim consumers were having problem with the healthcare issue, specifically with regard to finding halal food supplements products. As she elaborated:

“Based on what I learned while collaborating with the team (the Malaysia Islamic Consumer’s Association), the issue was related to food consumption, health product and all that...”

Mumtaz, Halal supplements entrepreneur

iv. *Evaluation*

In this pattern of opportunity realisation, the evaluation stage did not occur in a formal style such as market analysis or testing. Instead it happened through feeling confident that the idea would work. Mumtaz shared her experience of the evaluation stage:

“At that time, there were not many supplementary food products like today, not many – maybe one or two. But their emphasis was more on the product as good supplementary food, not on the habit of taking the food as part of the Sunnah.”

The above statement indicated that Mumtaz was very clear on what kind of business she was going to venture into and how she was going to position the venture.

v. *Exploitation*

Similar to the other two patterns of opportunity realisation, this stage involved entrepreneurs taking actions and turning their ideas into reality. This step was taken by entrepreneurs upon realising that their ideas about the concept of their businesses were viable. For one entrepreneur, Omar, his exploitation stage started when he began to define the target market segment for his comic book business. He explained:

“So, we started with focusing on primary school children, which around seven until 14 years old readers.”

Insert Figure 6 about here

Discussion

Three patterns of opportunity realisation were experienced by the Muslim entrepreneurs in the formation of their ventures, which are: 1) accidentally found opportunity, 2) actively seeking for opportunity, and 3) spiritually-driven opportunity. These three different patterns indicate that the Muslim entrepreneurs learnt about their entrepreneurial opportunities through different paths. Nonetheless, the researcher identifies that they all experienced the same ‘macro-level’ process in establishing their business ventures. This macro-level process consists of three phases, that are: 1) gearing up phase, 2) weighing up phase, and 3) carrying out phase. These phases are further discussed in the following section.

Gearing up phase

This phase began when entrepreneurs become aware of a gap and then begin exploring the gap to seek more information. As soon as they realised there was a gap, they began seeking more information to gauge if the gap had potential to be developed into a sound business idea. By seeking more information about the gap the participants were preparing themselves for the entrepreneurial role. By exploring the gap these entrepreneurs knew what they would have to do next in order to develop the gap into a sound business ideas. Hence, there were primarily two things that were ‘geared up’ in this phase, which are: 1) the gap, and 2) the entrepreneur. While the gap was prepared with more information in order to be developed into a sound business idea, the entrepreneur was prepared with knowledge, experience, and insight for the entrepreneurial role. Hence, this finding reinforces Bolton and Thompson’s (2013) assertion that people and idea are the basic components that feed the entrepreneurial process.

Preparing for the entrepreneurial role emphasis the importance of entrepreneurial learning, which involves encouraging development of specific subset knowledge and skills that relate to establishing and managing new ventures (Politis, 2005). As Cope (2005) wrote, “It is through learning that entrepreneurs develop and grow” (p. 379). This finding also supports efforts to describe entrepreneurs based on their ability to learn, develop, and change, instead of defining them based on traits (Gartner, 1988).

While previous studies argue that prior experience is a crucial element determining the success of individuals in exploiting new market opportunities (Cohen & Levinthal, 1990; Gatewood, Shaver, & Gartner, 1995; Shane & Eckhardt, 2003; Zahra & George, 2002), this finding shows that regardless of whether participants have prior experience or not, they still engage in the preparation process. The preparation process does not exclude anyone.

Weighing up phase

In this phase the entrepreneurs weighed up the opportunities for attractiveness and determined whether it was worth investing time, energy and money in pursuing them. Findings revealed that some entrepreneurs conducted formal analysis while others did not. Those who performed formal market analysis were first-time entrepreneurs. Hence, their lack of knowledge and experience could be the reason behind the formal market test conducted during this phase. Meanwhile, those who went with their gut feelings were considered to be experienced entrepreneurs. While this study confirms that individual differences influence their assessments of opportunity (Williams & Wood, 2015), it also contributes in extending the type of assessment approach that entrepreneurs are inclined to choose – whether to go for formal assessment or follow their gut feelings.

Another important finding in the weighing up phase is that all entrepreneurs engaged in a step of exploring their spiritual values before arriving at a decision to pursue the opportunities. All of them agreed that the spiritual value of “communal obligation” played a significant role in justifying the attractiveness of the opportunities. Dependence on religious and/or spiritual resources was one of the alternative ways in dealing with uncertainties related to the start-up process (Bellu & Fiume, 2004; Dodd & Gotsis, 2007; Fernando, 2007). The spiritual value that these entrepreneurs explored during the weighing up phase influenced their views on the attractiveness of opportunities. It helped the entrepreneurs to view the opportunities as able to generate value that further drove them to act on those opportunities by establishing their ventures. The “value” that they perceived to be generated from the opportunities included non-economic value, as they justified pursuing opportunities as part of discharging their communal obligation that also fulfilled their spiritual needs. This thought of fulfilling spiritual needs by pursuing the opportunities outweighed their perception of risks. Taking the risk by pursuing the opportunities was spiritually rewarding for these entrepreneurs.

Carrying out phase

This is a phase where the entrepreneurs started gathering resources to act on the opportunities after they viewed them to be attractive and worth their time, effort and investment. This phase is connected with how entrepreneurs feel after the weighing up phase. Welpe, Spörrle, Grichnik, Michl and

Audretsch (2012) explain that if the evaluation process makes them feel that the likelihood of success is high or if they believe that the potential profit that they are going to earn outweigh the opportunity cost, the possibility that they will exploit the opportunity is high. Exploitation of opportunity depends on the characteristics of the opportunities and the emotions that accompanied the evaluation process (Welpel et al., 2012). From their study, Welpel et al. (2012) found that fear reduced entrepreneurial exploitation, while emotions such as joy and anger increased the tendency of exploitation. Although this study does not specifically investigate the emotions of Muslim entrepreneurs during the evaluation process, the exploration of spiritual values in the weighing up phase provided them with a sense of relief knowing that what they were doing was partly fulfilling their meaning and purpose. Most participants indicated increased happiness, satisfaction, and a higher sense of inner well-being when they engaged in the exploration of spiritual values process. These Muslim entrepreneurs concluded their weighing up phase with positive emotions that led them to feeling optimistic about carrying out the opportunities.

Conclusion

This study contributes in extending the understanding of entrepreneurial opportunity. While traditional views on the existence of opportunity suggest that it is knowledge and information related (Hayek, 1945; Kirzner, 1973; Schumpeter, 1934), this study extends this view to support the other perspective that views the existence of opportunity as revolves around non-economic goals (Rindova, Barry, & Ketchen, 2009). Data shows that through careful analysis and evaluation, non-economic goals that were spiritually inspired can be developed into opportunities.

Secondly, the ‘exploration of spiritual value’ step in the process of realising an opportunity complements the evaluation step that the participants engaged in during the process. It is also the distinctive feature that differentiates the models that the researcher discovered from the other three models reviewed earlier in this paper.

The literature informs that traditionally, there are two views with regard to the pattern of entrepreneurial opportunity search. Entrepreneurs learn about entrepreneurial opportunity either by accidental (Baumol, 1993) or through searching intentionally (Bailey, 1986; Koller, 1988). While the findings of this study confirm these two views, the uncovering of spiritually-driven opportunity realisation contributes to the current literature on opportunity search. Hence, while entrepreneurs may find an opportunity accidentally or deliberately, they may also rely on their spirituality to inspire an opportunity.

Acknowledgement

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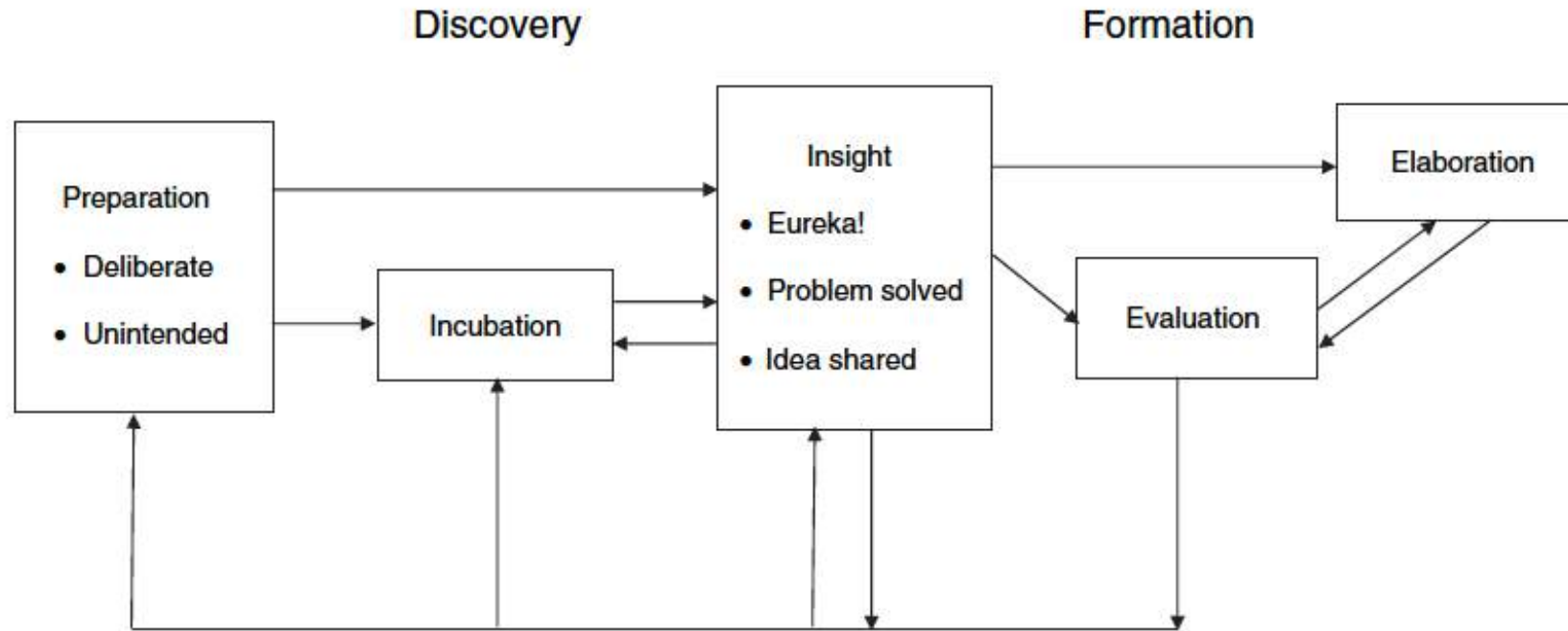
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Creativity-based Model of Entrepreneurial Opportunity Recognition*



*Based on Lumpkin, Hills, & Shrader, 2004; Hills, Shrader, & Lumpkin, 1999.

Figure 1: Hills, Shrader, and Lumpkin's (2005) Creativity-Based Model of Opportunity Recognition Process

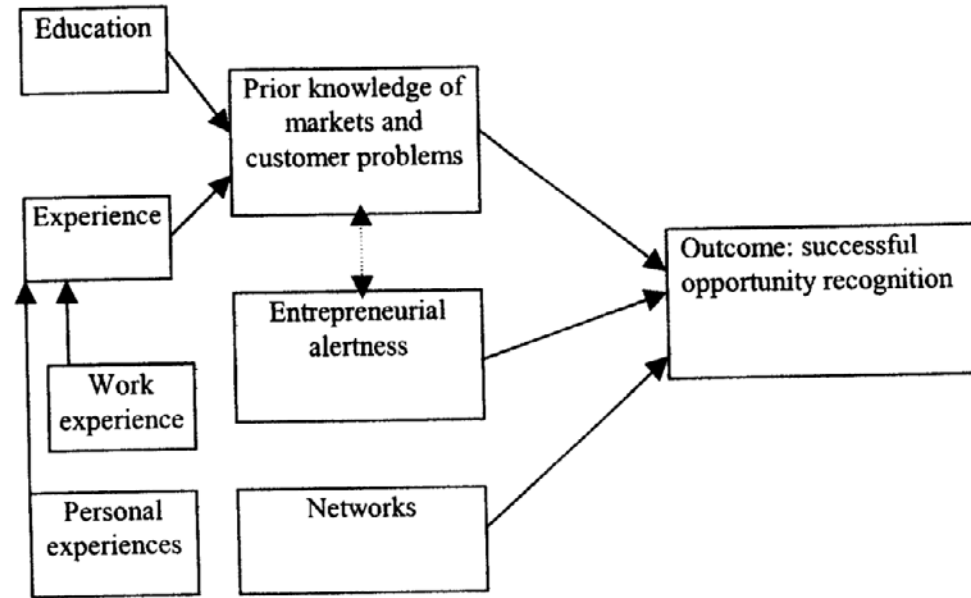


Figure 2: Ardichvili and Cordozo’s (2000) Opportunity Recognition Model

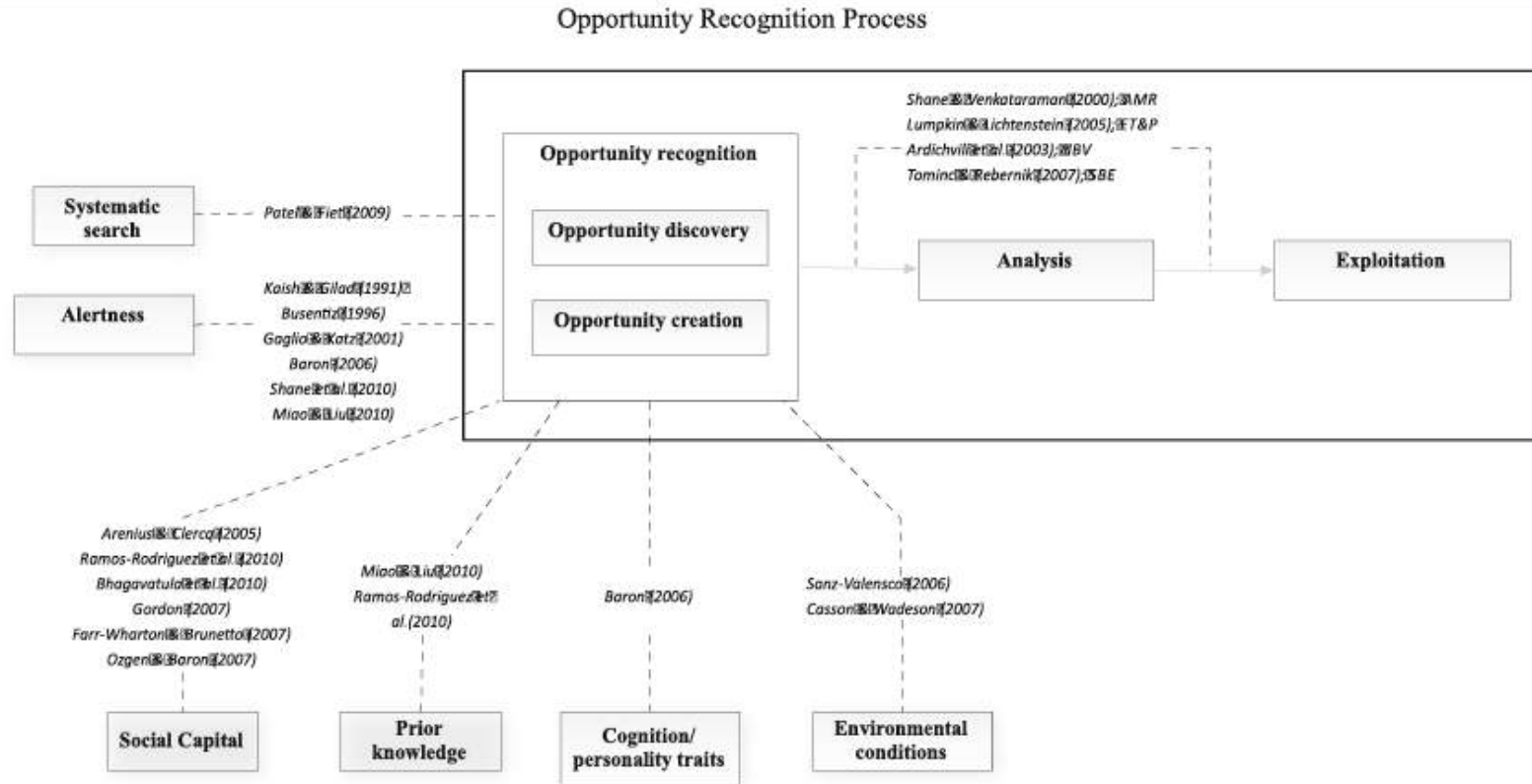


Figure 3: George, Parida, Lahti, and Wincent’s (2014) Model of Opportunity Recognition Process

Table 1: Participants Information and their Ventures

Participant	Position	Nature of Business	Year Founded	Core Product	Gender	Education Background
Aida	Managing Director	Muslim Swimwear	2006	Muslim Ladies Swimwear	Female	Degree in Economics
Hakeem	Managing Director	Consumer goods	1992	Skincare and healthcare products	Male	Master of Law
June	Managing Director	Public Relations and Market research	1999	Halal food directory	Female	Degree in Public Relations
Jasmine	Director	Officewear, Training & Image Consultant	2000	Training and image consultancy	Female	Degree in Mass Communication
Sabrina	Managing Director	Islamic media	1989	Books and CDs on Islam	Female	Degree in Mathematics
Farah	Owner	Islamic haute couture	2010	Custom-made dresses	Female	Degree in Public Relation Studies and Management
Nani	Managing Director	Beauty care and spa	1989	Islamic spa practice	Female	Degree in Education
Haris	Managing Director	Skincare	2003	Hajj-specialised skincare	Male	Degree in Textile Technology
Soraya	Managing Director	Publishing	2007	Teenage novels	Female	Degree in Mass Communication

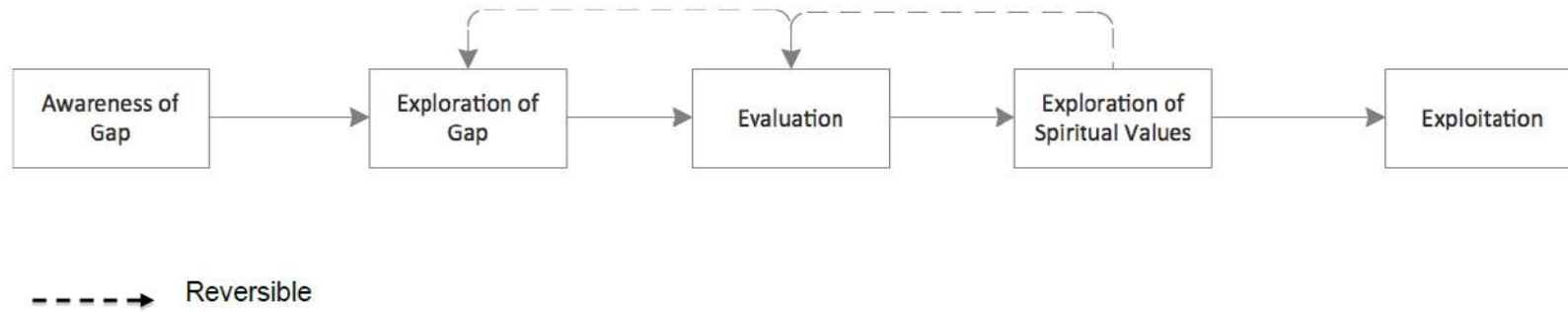


Figure 4: Accidentally Found Opportunity

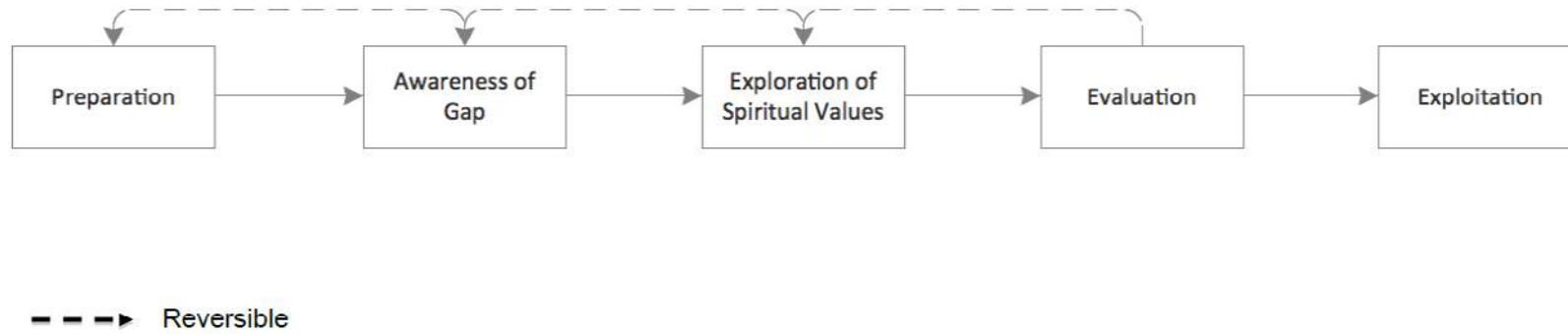


Figure 5: Actively Seeking for Opportunity

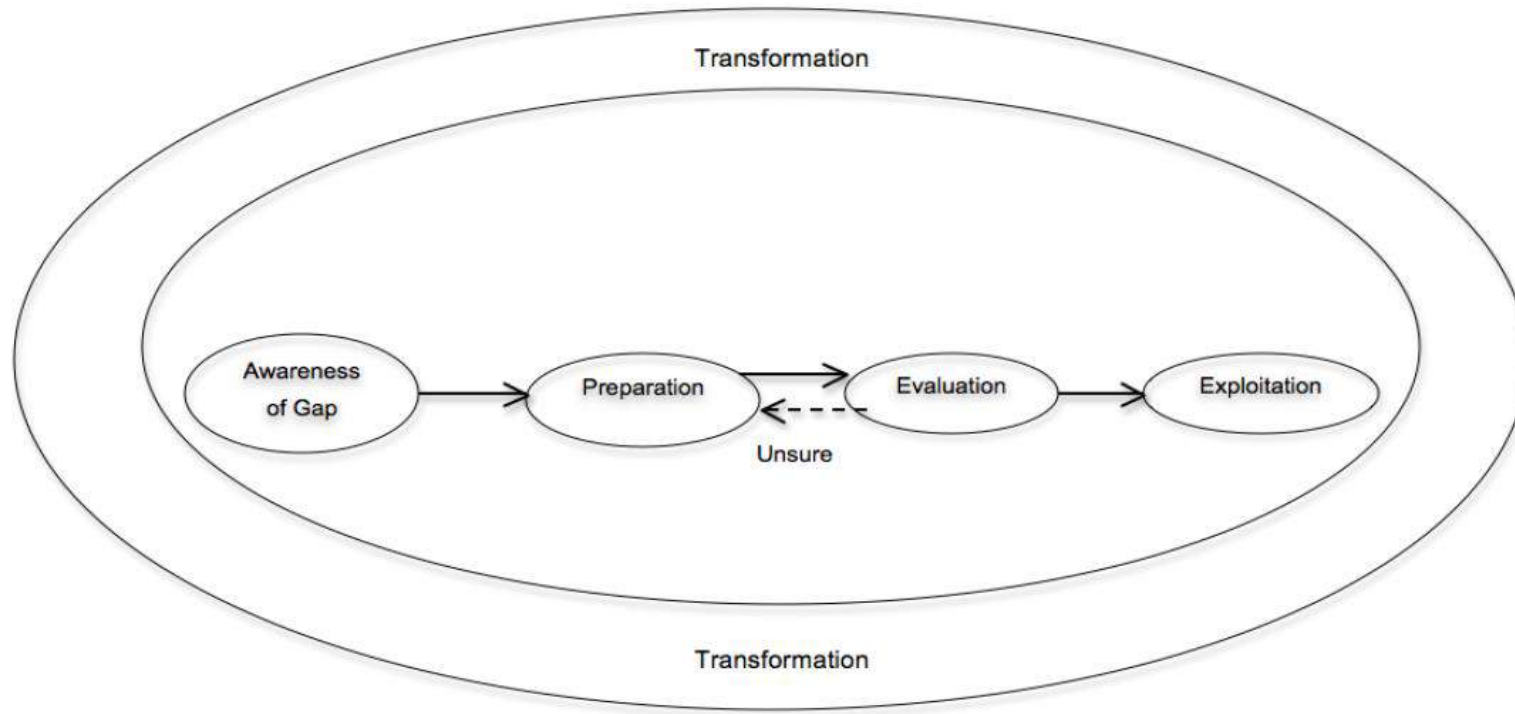


Figure 6: Spiritually-Driven Opportunity

Challenging masculinity in business education The case of Maya and Susanna

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Challenging masculinity in business education – The case of Maya and Susanna**Abstract**

Business administration as a study choice has been explained via its practicality, high societal status and prestige, and as an opportunity for upwards mobility. Shahzad, Ahmed, and Ghaffar (2013) describe “the nature” of business as a study choice that matches extroversion and dominance. The stories of our participants’ reconstruct the businessperson, broadening it. For them business studies needs to contain the values of equality, work-family balance, permanent responsibility towards current and future generations, and skirts, sweatpants and ponytails as truthful pictures of the businessperson of the future.. The linguistic constructions that challenge business masculinity in these life stories hold the power to modify business education.

Keywords: gender, diversity, identity, business schools

INTRODUCTION

For many of us, our way into working life started when we chose what to study at university. Some people prepare this choice over many years, while others hesitate until the last day to fill in the form or admission webpage. But even an apparently arbitrary choice serves as a social marker and is considered to say something about the individual's preferences, family background, potential salary and future influence in society. Thus, our choice of studies is important to how we socially introduce ourselves, how we socially construct our identity, often including contradictory and complex experiences. However, the ways we present ourselves can be understood as constructions of social power and the promotion of specific identities at the expense of others: thus shaping how people think, feel, and act (Alvesson and Billing, 2011). Ibarra (1999) describes how junior professionals (consultants and investment bankers) assume and adapt to new roles long before fully living the professional identity in their new roles in the company. These young professionals’ narratives are constructed around their future professions even before they begin their working life.

Business administration is one of the most popular subjects in Swedish higher education. In 2014/2015, 12% of all students in Swedish higher education studied business administration (Universitetskanslerämbetet

Stream 3. Gender, Diversity and Indigeneity: “Challenging masculinity in business education” Competitive

& SCB, 2016). When the Swedish educational system expanded in the 1990s, business administration courses developed more than most in students numbers (Universitetskanslerämbetet, 2016). Business administration programs have been popular all over Sweden for several decades, with numerous applicants. Previous studies on business administration as a study choice have explained this via its practicality, high societal status and prestige, correctness and adaption to social norms, and as an opportunity for upwards mobility (Engwall, 2009; Pásztor, 2012). Quantitative research has described in detail different areas within business as a study choice, attempting to understand who applies, and how higher education institutions can reach and educate these applicants (Damron-Martinez, Presley, & Zhang, 2013; Downey, 2011; Geyfman, Force, & Davis, 2016; Järlström, 2000; Shtudiner, Zwilling, & Kantor, 2017). However, we know less about how the choice to study business economics is linguistically constructed. This means that we know less about what social structures these students produce and reproduce, which is remarkable given the importance of the topic and the number of business economics students.

The social construction of masculinity is a broad field of research that includes masculinity in relation to, among others, adolescence (Edley and Wetherell, 1997; Phoenix and Frosh, 2001), parenthood (Edley, 2001; Johansson and Bergström, 2015), care (Courtenay, 2000; SeymourSmith et al., 2002), sport (Edley and Wetherell, 1997), violence (Courtenay, 2000; Kirby and Henry, 2012), and sexuality (Connell, 1992).

Business leaders and entrepreneurs have been described as carriers of a particular kind of hegemonic masculinity: transnational business masculinity, which can be understood as the expression of a combination of traditional values and adaptation to modern technocratic and global masculinity (Connell, 2010; Connell and Pearse, 2015). In addition, previous research has gendered the business student and business as an academic subject. For instance Shahzad, Ahmed, and Ghaffar (2013) describe “the nature” of business as a study choice that matches extroversion and dominance. They find male business students score higher on extroversion than female students, who score higher on openness and agreeableness, including nurturing and affiliation. Previous research has described the choice of business studies as based on the values of money and career success (G. Blackburn, 2011; Easterlin, 1995; Hilmer & Hilmer, 2012; Laswad & Tan, 2014; Li, Zhang, & Zheng, 2014). Quantitative studies show that male students score higher on career and compensation expectations than female students (Dalci, Arasli, Tümer, & Baradarani, 2013; Geyfman et al., 2016; Malgwi, Howe, & Burnaby, 2005). These studies construct male students as a better “fit” with business as a study choice. The same studies construct female students as “the other” in relation to business

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as a study choice, and hence as a group that needs to adapt to current standards in education and their future working life.

Business undergraduate education is today one of the few "headcount" gender neutral subjects in Sweden, where neither of the sexes makes up less than 40 percent of all registered students (University Chancellor and SCB, 2016). Previous research has described business as a field that contains “not many specific men’s or women’s jobs” and that attracts men and women equally in Scandinavia (Järllström, 2000). However, the business world has many masculine traits: a world of hard working males, loyal to their companies and with few obligations in domestic life (R. Connell, 2010). Wajcman (2013) has described managerial masculinity, stating that in corporations, women tend to fall behind in salary and careers due to masculinity and masculine values. However, expressions of hegemonic masculinity must be challenged in practice as well as in research. Discussing how constructions of masculinity are challenged is a sound development in the research field of masculinity (R. W. Connell & Messerschmidt, 2005). However, few qualitative studies of business as a study choice have been published (Greg Blackburn, 2011; Pásztor, 2012).

The aim of this article is to discuss how first year business students construct their study choice linguistically. Our focus is on gendered descriptions and on how students position themselves in their imagined future working life. In this study, masculinity and femininity are seen as plural phenomena, and as such, gender hierarchies and male dominance both change over time and context (Cockburn & Ormrod, 1993). In social interaction, people can choose to accept or oppose given positions. But, as soon as we assume a position, we assume in the conversation the pictures and metaphors that depend on this position (Wetherell, 1998; Wetherell and Potter, 1992). Similarly, we can experience space and limitations in the position attributed to us in a particular situation or interaction. The meaning, for ourselves and for others, in the epithelium depends on where, when and how these "labels" are used (Wetherell and Potter, 1992). Thus, the language can be seen as the fabric in which power claims are built, maintained, and challenged. By focusing on language constructions and context, the use of positioning has been described as suitable to describe how people construct and challenge power and inequalities (Wetherell and Potter, 1992; Whittle and Mueller, 2011). Edley (2001b) claims a growing consensus over disciplines that language can be seen as a key to understanding how gender is constructed in and through discourse. What is considered masculine or feminine in a certain context is understood as normative forms of behavior adapted to that context, in this case to business masculinity as an expression of hegemony. We base our discussion of the business

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economist’s positioning with regard to social constructions of masculinity on previous research in discursive psychology, for example, Edley (2001), Wetherell and Edley (1999) and Edley and Wetherell (1997), but also on research into challenges to the construction of business masculinity (Connell , 2010).

DISCURSIVE CONSTRUCTION OF GENDER

Discursive psychology builds upon structuralist and poststructuralist language philosophy, based on the premise that the meaning we ascribe to reality is based on language. Using language, we create representations of reality. This does not mean that there is no reality beyond language, but rather that this reality makes sense through language. With roots in social constructionism, language is assumed not only to describe the world, but to construct it, and consequently language also has consequences in reality (Potter, 1996/2004; Wetherell & Potter, 1992). As in ordinary conversations, people’s descriptions usually vary; people often contradict themselves in the same conversation. These variations fulfill different purposes, or features, in the conversation (Juhila, 2009; Wetherell & Potter, 1992). Within discursive psychology, these variations and contradictions are considered products of historical and social specific situations: people use a range of historically and socially designed discourses (Potter & Wetherell, 1987a; Wetherell & Potter, 1992). In social interaction, people can choose to accept or oppose given positions. But as soon as we assume a position, we also assume those pictures, metaphors and so forth that depend on this position. The meaning, for ourselves and for others, in the identities varies depending on where, when and how gendered “labels” are used. We position ourselves and position others by using available language constructions. Similarly, we can experience space and limitations in the identities attributed to us in a particular situation or interaction. Thus, we construct, deconstruct, and reconstruct difficult or troubled, versus comfortable or untroubled positions (Wetherell, 1998; Wetherell & Potter, 1992). Thus, positioning can be seen as identity constructive, but identity construction as a linguistic product that fluctuates and depends on history, and the given social interaction and context (Korobov, 2013). But even social communication is based on the reproduction of socially shared or taken for granted understandings. By challenging the available position in an argumentation, one can modify the taken for granted positioning, and social change can occur (Billig et al., 1988; Edley, 2001b).

Positioning occurs when an individual linguistically assumes or assigns an identity in a social situation. The identities that can be selected are those available in the given context (culture, time, location, conversation) and linguistically constructed by the local and local use of interpretation repertoires (Davies

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and Harré, 1990; Korobov, 2010, 2013; Wetherell, 1998; Wetherell and Edley, 1999; Wetherell and Potter, 1992). At the same time, these constructions imply that we construct what may be credible action options for this identity in the present, present and future; which means that identity construction in the present depends upon the construction of possible identities in the future (Korobov, 2010; Wetherell and Edley, 1999). By varying usage, different positions are constructed around one and the same individual or group (Billig et al., 1988; Reynolds and Wetherell, 2003; Seymour-Smith et al., 2002). But such variation can also create space for individual or (professional) group flexibility, since comfortable positions can also create space for uncomfortable positions (Juhila, 2009).

Our choice of profession, work or studies tends to operate as an important part of the puzzle when we socially construct who we are, how we fit into society, what we are interested in and prefer in life, and how we explain where we come from, our family background, and what our potential future looks like. The construction of our possible future positions within a profession starts when we choose what to study, years before we actually enter working life (Ibarra, 1999). But how we construct our past can also change due to the study program we choose. People can describe their past and how it led towards a particular choice of studies, but later change the story in multiple ways if they change study choice (Holmegaard, Ulriksen, & Madsen, 2014). Hence, when they enter higher education, students are already beginning to construct their identity for their future working life. Nevertheless, research on study choices often overlooks students own linguistic constructions of their future working life when they begin their studies (Holmegaard et al., 2014; Lair & Wieland, 2012; Pásztor, 2012) and research on study and career counseling rarely uses discourse analysis in general (Stead & Bakker, 2010). However, Xue (2008) claims discursive psychology, more than other perspectives within social constructionism or discourse analysis, can explain the social and cultural construction of gender. Within discursive psychology gender constructions, masculinity and femininity are not seen as representing certain types of men and women, but as subject positions used by men and women in certain social contexts (Wetherell & Edley, 1999). Discursive psychology, as a theoretical and methodological approach, can provide insights into how people produce and reproduce social structures (Stead and Bakker, 2010; Wetherell and Potter, 1992).

METHODOLOGICAL REMARKS

Data collection

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During 2012-2013, the first author conducted 25 interviews with first year business administration students at two Swedish business schools. The two sets of interviews were part of a seven-year doctoral project, during which we also selected and analyzed other empirical material on higher education. We based our selection of the business schools on national rankings. The Swedish student organization “The Business Student” (Ekonomistudenten, 2015) publishes a yearly ranking based on admitted student grades, percentage of students obtaining a job within six months of graduating, and initial salary. Stockholm Business School (henceforth *S-University*) ranks first of 25 universities, while Mälardalen University (M-University) ranks 24th. The national university ranking Urank (2015) is based on national statistics on students grades and achievements, teacher qualifications, quality of teaching and research, and students’ social background. In total, S-University ranks third of 24 business schools while M-University ranks 19th. However, S-University ranks 24th out of 24 for the heterogeneity of student social backgrounds while M-University ranks first. We selected these two universities for the study based on these national rankings.

At M-University the students were introduced to the planned study by a short presentation at an introductory lecture and on the university website. Those who were interested in participating signed up after the lecture or e-mailed the first author. We selected a random sample of five women and five men, based only on first names to obtain a balance in gender. The interviews were held at the university and all participants received a movie theatre ticket as a token of appreciation.

At S-University, access to the students was more difficult. We were allowed to post a short text on the students’ website with a description of the study. We made the same random selection among the students that were willing to participate in the study.

Data analysis

Methodologically, the interviews were inspired by life story interviews. Life stories are more unstructured than traditional interviews and take the form of a conversation rather than questions and answers (Riessman, 2008). Life story interviews allow the respondent to organize life events in context. When conducted correctly, the interview takes the form of an autobiography (Atkinson, 1998). In this case, however, the objective was to highlight a shorter part of the respondent's life; when they were choosing what to study and the time after high school graduation. Therefore, the interviewer's role was to help the respondent move forward and back in time to find events that they wanted to describe as affecting their study choices.

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The interviews lasted one to two hours and we transcribed them verbatim. As is common in discursive analysis, to analyze the interview material we read and re-read the transcriptions several times searching for linguistic patterns (Potter & Wetherell, 1987). We conducted the interviews in Swedish and translated the quotes used for this paper into English ourselves. This was followed up by a proof-reader to ensure we captured the essence of the respondents’ words.

R. Connell (2010) argues that life stories are particularly appropriate for social analysis, as they reveal trajectories or repertoires through a series of institutions such as family, education, and organizational working life. Through life story interview material, he suggests, we can see the tensions and links between patterns of gendered constructions in the local context. At the same time, these repertoires construct institutions. In the life story material, the students used several repertoires to explain their current and future selves as business people. We selected the life stories of Maya and Susanna since in different ways they contain positioning work that is typical of our interview material and that can be recognized in linguistic patterns throughout the material. We present the interviews as short cases, followed by analysis, discussion, and interpretation of the linguistic constructions made in these cases.

THE CASE OF MAYA

Maya is a 19-year-old student at M-university. In the first phase of the interview, our conversation was repeatedly interrupted by her receiving text messages on her phone that she just had to read and answer. Maya comes from a small town not far from M-university, so she still lives with her parents.

She discovered business studies when her older brother took the same subject and later on started working for the Swedish Tax authorities. With few other academics in her family, role models are scarce and Maya explained that her brother’s job seemed flexible. She liked that, and thought that business studies might suit her too. When I again asked her why, she laughed and said that she likes handling money.

Interviewer: What’s the thing with money?

Maya: The funny thing, in the family, I’m the one that takes care of bills and transferring money and deals, you know, with all the bank numbers and social security numbers (laughs).

This positioning of herself as someone that likes to handle money, opened her story of a study choice that began to develop earlier in her life. She went back in her family history. Her parents came to Sweden as refugees the year before Maya was born. Her father struggled for years to get a job to be able to provide for his family. Maya’s mother only went to school for a few years in her home country. Because of her lack of

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schooling, Maya’s mother cannot read or write, and has found it hard to learn Swedish. She never got a job in Sweden, and remained a housewife. With a hardworking father and a mother without language skills, Maya had to take responsibility for the family’s relations with society.

When she spoke about her mother, Maya seemed more emotionally engaged. Her parents were poor throughout her childhood, but her mother made the household work and the family always had food on the table.

Maya: She [the mother] says this money should go here, that should go there and this is for saving. And she knows where things are cheap, where they are expensive, where I can go shopping where I can do this, rather efficient. I am fascinated because she can’t read or write, she is often ill as well, so it is funny that at the same time, sure, the refrigerator is full of food, but at the same time, she manages to save a lot of money. It is totally incredible.

Maya started her story about constructing her study choice by describing a male role model. Her brother did similar studies and she positioned herself in relation to his working life. Since he seems to have a flexible job, and Maya claims to like flexibility, her study choice was a good fit for her. UNICEF (1999) describes how one reason for young women’s lack of aggressiveness in the academic sector could be the lack of positive female role models in society and working life. However, later on in Maya’s story another role model appeared. She positioned her mother in terms of traditional bookkeeping and as the leader of the household. Maya’s positioning work in her story is constructed in relation to her mother more than in relation to her brother. Female students often described their mother and other female relatives vividly during their interviews. However, they did not construct them as role models for their working life, but as efficient leaders in domestic life. In relation to the working lives of their mother or other female relatives, several of the female students (and some of the male students) constructed their study choice as a way to *avoid* exclusion from working life or hard labor in traditional female jobs (such as nursing).

When I ask Maya about how she sees her future, she changed her story again. In fact, she has always been interested in fashion. She loves fashion and it is her dream to work in the fashion industry. But at the same time, working in fashion scares her. She pictures an industry where everyone has to be creative and in control all the time to be able to make a living. Instead, she explained, she might work in accounting for a fashion company, which would still be in her area of interest, but a more secure job. Then she stated that she would probably work in a bank. She thought that would be boring, but that she would probably end up there

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anyway. Or she could start her own business and be her own boss. She could work practically anywhere.

When discussing her possible future roles on the labor market, Maya positioned herself as a future mother and described the dilemma of working life and motherhood:

Maya: I don't want to miss out on anything, like, I want to do everything, I want to study, get a good job, have a family, travel. I want to do everything. Kind of like that, all in one. At the same time, I want a family. Children and everything. But at the same time I want a good working life. So I can, I just don't want to, I couldn't just sit at home and take care of the children. [...] I have to do something to pass the time. Something to make me feel valuable, kind of. So I could never. Like my sister, she is at home with her kids and doesn't think like that. She has her daughter now. Takes care of the family. Sure, that's fun, but when my kid is one or two I would like to think that I could go back to work.

When discussing the challenges in her future working life, joining the labor market does not seem an issue, as she says she could work practically anywhere. Instead, Maya positions herself as a future working mother. She says that she does not “want to miss out on anything,” anything being either working life or motherhood. The choice to study business is through the material constructed as a future working life that makes both career and motherhood possible. Maya then says that she needs to do “something to make me feel valuable.” Traditional feminine values, might relate being valuable to motherhood, however this is not how Maya positions it. Traditional masculine values might relate being valuable to a career and a good salary. But this is not how Maya positions it either. Instead, she describes being valuable as being part of a team, sharing, recognizing and being recognized by one's peers or coworkers. Maya states that a good job in business is where you have colleagues that miss you when you are not there. Being valuable is being part of a group or a team with colleagues with whom you share ups and downs and work closely. With colleagues, you don't have to be an expert in everything yourself, and you share equal responsibility for both success and failure.

When we reached the end of the interview, I asked Maya to picture her future working role for me. In Swedish, the word for businessperson is gender neutral (*företagsekonom*). However, Maya positions the businessperson as masculine, but immediately repositions herself in a feminine position:

Interviewer: Can you picture a businessperson? Could you describe a businessperson to me?

Maya: At least the clothes I know are typical. A suit and all that. I don't like that. I want, typical girl, want to dress in a skirt. High skirt, white shirt and a jacket. Ponytail and like glasses (laughs).

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Even if one resists a position, one reproduces that position as taken for granted (Wetherell & Edley, 1999). When positioning the businessperson as a man in a suit, Maya reproduces the forgiventaken power structure between men and women in business, constructing a dilemma of being both alike and different (Billig, 1991; Billig et al., 1988). By *using* the forgiventaken she reproduces it, but by *resisting* the forgiventaken, she highlights the dilemma between the forgiventaken and the desirable (Wieslander, 2015).

Wrapping up the interview, we talked about business in general. With regard to her choice of studies, Maya concludes:

Maya: Business ... everything is business to me, kind of.

Interviewer: In what way is everything business?

Maya: Kind of it affects everyone. Like in a recession. What happens then? It is kind of, a lot of people get affected by that. A lot of people get affected. So it's kind of, you, it has its power. That's how it is.

In this last section, Maya uses the word “power” to explain business, this power affects “people”. Being part of the world of business she herself will affect people, taking an active part in this power. In Maya’s story, business is constructed as a collective rather than individual field.

THE CASE OF SUSANNA

Susanna was 21 years old at the time of the interview. She comes from a small city in the south of Sweden, where she grew up with her mother who is a vet. Her parents divorced when she was a small girl and since then her father has been absent from Susanna’s life.

Susanna obtained excellent grades at school, and after spending a gap year abroad, she decided to study to become a medical doctor. She was accepted by several universities, and she started her studies at one of the most prestigious medical schools in Sweden. However, she didn’t enjoy the work or get on with her classmates. At this point in her life she was in an identity crisis, questioning herself and who she was. She went back to high school where she took a class in entrepreneurship. She remembers this as an interesting, useful, solution-focused class. Despite negative reactions from her friends and family, she decided to drop out of medical school and apply for S-university.

Susanna: I had not thought about S-university before. I guess I had some preconceptions that you had to have a certain background and parents with prestigious jobs and eh ... clothes and that there would be social pressure on how to look. [...] And then I thought I didn’t fit, but I did some research and it is still the best-ranked business school in Sweden and, you know, I have the grades.

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In this quote, Susanna uses the stereotypical picture of the businessperson as being from a certain background or social class and a certain type of clothes and look. She positions herself as different from this stereotype. She does not have the right background or the right looks, but she has the grades. In the middle of the interview, we discussed Susanna’s possible future. She explained:

Susanna: By forty, I would like to be in a position with responsibility. Not necessarily as a boss or something like that but a project leader in some way, to get training in leadership and human resources and organization. I want challenges in my work and problems to solve. Well, challenge goes hand-in-hand with that. I hope that I will be good at what I do. And you hope that you will be responsible and appreciated in some way and able to make a difference. I would really like to work to make a difference for humankind. Well, it’s the same reason as with medicine, I want a job where I make a difference. To do good and not just help banks make more money or more bonuses but actually...

Interviewer: What is making a difference? What does that mean?

Susanna: A job where I can say that this group of people in one way or another is better off. Where I can say that I make a concrete difference to improve the lot of animals or nature or humans. Where we use resources better or more efficiently. Making the world better. [...] And that does not go hand-in-hand with becoming an investment banker, not with my view on investment banking. So that’s why that is not for me. [...] I’m not after a job where I will make a lot of money. It’s not the important thing for me.

Asked if anything else would happen by her forties, Susanna explained:

Susanna: I hope I have a family that I have time for. Work will always be important for me because I think, I hope that I will like working when I am forty, that work will be fun. [...] But, um, family must also be important, or for me it is because I have the experience of being an only child and having a father who never cared, or at least never showed he cared, and I don’t want my children to experience that.

In this quote, Susanna starts again with the stereotype of the businessperson: the boss. And she continues with other stereotypical business roles and drivers: being an investment banker, making money for banks and for oneself. Again, she positions herself as different from the stereotype. This way of positioning herself can be explained as putting herself in a comfortable position and thus avoiding a socially uncomfortable position (Juhila, 2009; Wetherell, 1998; Wetherell & Potter, 1992). The uncomfortable position for Susanna would be to be seen as a greedy investment banker. The comfortable position is to position herself as valuing ethical and sustainable development for humans, animals, and nature. She uses her former identity as a possible

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medical doctor to support this position as a possibility in her future professional identity. The repositioning of the self as different from the stereotypical businessperson in terms of ethics and the desire to do good is a linguistic pattern that crisscrosses several of the interviews with both female and male students. With variations, this positioning follows the pattern of both recognizing and opposing vertical careers and making a lot of money. At the same time as it positions the businessperson as the stereotype, it repositions the student.

Susanna went back to discussing her possible future work in terms of achievements and problem solving. When I asked her about her greatest fears for her midlife, she explained that it would be bringing up her children on her own, but reasoning with herself, she comes to the conclusion that she could manage that as well. If she had to bring up her children on her own, she would manage. With the study program she has chosen, she will be able to work flexible hours or run her own company if needed. As we have also seen with Maya, career and motherhood is a repertoire that is repeated in the material. Using this repertoire, business studies are justified as enabling one to support one’s children independently and combine a career and domestic responsibilities. Throughout the material, business studies seem to be a better fit in terms of motherhood than traditional female professions such as nursing that involves shiftwork at the weekend, at night, and on public holidays. Coming to her old age, I asked Susanna to look back on her life from the age of eighty:

Susanna: I hope that I have time to see my grandchildren and that I can afford to spoil them. [...] To have someone to share with, nostalgia, all that that you have time for when you are eighty and have a lot of time. I don’t have much fear now either.

In this quote, Susanna again draws on stereotypical features of the businessperson: not enough time and plenty of money. This she justifies in relation to coming generations: she hopes to have time to see her grandchildren and that she will be able to spoil them. As long as she has someone by her side (which is by no means certain), she has no fear of her future. Closing the interview, we asked Susanna to describe a businessperson to us.

Susanna: When I applied for this school, I pictured a shirt and tie, kind of a suit. Now, I think anyone can be a businessperson. If you are driven and ambitious and interested above all. I like that because, as I said, I had some preconceptions about S-University. But when you go through the gates, you see everything from suits to sweatpants. [...] It is as broad as you wish, and I kind of, I feel that, my God, I

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fit in excellently because there are five like me and five other types [...] you really fit in as you are because everyone here is really, really different.

Again, Susanna reproduces the businessperson in a suit as a traditional masculine look. But then, she contrasts this stereotype with “my God I fit in excellently”. In the quote, Susanna explicitly uses the word “different”: “everyone here is really, really different”.

Throughout the interview, Susanna’s absent father was present in her descriptions of her life choices. But at the end of the interview, she instead insists on the importance of her mother’s support. As her mother is a vet, I ask her to compare her mother’s choice of profession with her own:

Susanna: Businesspeople don’t work with living animals [...] well, they don’t work healing animals, but healing companies. No, I don’t know, but actually, the difference is the animals, you might say.

This last quote positions the businessperson as a caretaker or physician who has the skills to take care of and heal companies.

DISCUSSION

Maya and Susanna’s accounts can be understood as young women’s naïve stories. They are too young to have a great deal of experience of life. But the construction of these young students’ life stories must also be understood in relation to the common understanding of business as a study choice that involves preconceptions of extroversion and (male) dominance (Shahzad et al., 2013), and is based on values of money and career success (G. Blackburn, 2011; Easterlin, 1995; Geyfman et al., 2016; Hilmer & Hilmer, 2012; Laswad & Tan, 2014; Li et al., 2014; Malgwi et al., 2005). Business studies are built on the hegemonic perception of business masculinity (R. Connell, 2010). In the cases of Maya and Susanna, we see how these young women reproduce business masculinity through constructing suits, long working hours and money as taken for granted. However, they are not positioning themselves as passive participants, they challenge and oppose what is taken for granted and thereby construct new roles and new understandings of their future roles as businesspeople.

The concept of hegemonic masculinity presumes the subordination of the other, non-hegemonic masculinities and femininities (R. W. Connell & Messerschmidt, 2005). One way to understand these young women’s stories is as constructions of labor market underdogs. Adapting to masculine gendered areas is not just about symbolism, but also about social, political and/or economic privileges (Edley, 2001b). These privileges are at stake for these young women entering business education. Even if university business

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studies in Sweden are headcount gender neutral, segregation takes place in the labor market after graduation, where male business students are likely to obtain more senior positions in the private sector, and female business students midlevel positions in the public sector (Beck, 2013). Furthermore, university business is one of the higher education disciplines leading to the biggest income differences between men and women (Beck, 2013; SACO, 2016). Instead of reducing, gender gaps have gradually increased in recent years among young Swedish business managers (Tuvhag, 2013). Female finance managers earn 70% of the salary of male financial managers, which is described by Statistics Sweden (2016) as an "unexplained pay gap." It cannot be fully explained by different sectors, different parts of the labor market or different education and working hours. The active positioning of young female business students as other than the stereotypical businessperson does have consequences.

However, young professionals adapt to future working roles long before they enter working life, and the construct they bring into their future professions has the power to reconstruct or adjust the profession. Professions do not only develop from seniors to juniors, but also vice versa (Ibarra, 1999). Gender relations can change due to women resisting patriarchal structures and men shouldering alternate masculinities (R. W. Connell & Messerschmidt, 2005).

Men's and women's lives have been created throughout history in opposition to one another. Therefore gender must be understood as a historical construct, and hence femininity and masculinity gain from being analyzed in tandem (Aberi, 2011). Discussing women's relational work of masculinity emphasizes gender as relational and in constant flux (R. W. Connell & Messerschmidt, 2005).

The contestation is real, and gender theory does not predict which will prevail – the process is historically open. Accordingly, hegemony may fail. The concept of hegemonic masculinity does not rely on a theory of social reproduction. (R. W. Connell & Messerschmidt, 2005, p. 853)

Gendered discourses construct meanings of femininity and masculinity based on history. As such, men and women both shape and are shaped by gendered beliefs, practices and institutions (Liddington, 2011). Edley (2001a) describes how gender identities remain fluid and can adapt to change in particular social settings.

The concept of hegemonic masculinity as a pattern of practice is debated and criticized in the field of discursive psychology (Wetherell & Edley, 1999). In the same way, we must be open to new ways of understanding gender constructions, both masculine and feminine, as in constant flux. Patterns of gender

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constructs vary due to context, including class and generation. Also, due to the inherent dichotomization of gender, constructs of masculinity depends on constructs of femininity and vice versa, and therefore need to be studied and discussed together as relational. R. W. Connell and Messerschmidt (2005) point out that the field of hegemonic masculinity has come to miss out of constructions of femininity, and claim that studies on masculinity needs discussions on femininity to unveil the asymmetrical positioning of gender — but also the possibilities of change.

Gender identities are negotiated in certain social contexts, and this negotiation involves the operation of power (Edley, 2001b). However, masculinity can be described as a struggle or a constant negotiation, where new forms of masculinity might displace old ones (R. W. Connell & Messerschmidt, 2005). With the roots of language being in social constructionism, discursive psychologists claim that it not only describes, but also constructs the world, and therefore language holds real consequences. Through constant negotiations together, we modify our opinion of which arguments hold the truth (Potter, 1996/2004; Wetherell & Potter, 1992). Using this argument, we can analyze the alternate future businessperson that Maya and Susanna construct. Their possible future constructions of work and life positions retains the traditional values of efficient use of limited resources, but they also hold values of work-family balance and responsibility towards current and future generations¹. Maya and Susanna view the future businessperson as having a high skirt, sweatpants, ponytail or glasses, as broad as you wish, and really, really different. They see the businessperson of the future as missed when absent, as a team member among equals, and as a healer of companies with the power to do good for society.

However, Maya and Susanna’s stories may be less important as stories of young women reconstructing the businessperson, but should rather be highlighted as constructions of new positions for the businessperson? The linguistic constructions that challenge business masculinity in these life stories hold the power to modify business education. R. Connell (2010) claims that through life histories we can understand how the contractions of labor processes are possible. Instead of analyzing how these women adapt to business masculinity, we should analyze how they adapt business to themselves, and their experience and values. If business as an academic subject and we as university teachers hold on to the stereotypical picture of the drivers of business and businesspeople, these students are likely to drop out of their studies, and the

¹ Can be compared to the work of WCED (1987) “*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*”

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drivers for change will disappear. As women today comprise half of the business students in Scandinavia, they have the power to bring emancipation. Because what if these young women (and men), through their expectations, can change the business construct as we know it? By listening to these young students and living up to their expectations, the negotiation of business administration as an academic subject must contain the values of equality, work-family balance, permanent responsibility towards current and future generations, and skirts, sweatpants and ponytails as truthful pictures of the businessperson of the future. What if hegemonic business masculinity needs to change from the outset — when the student chooses to study business.

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Stream 3. Gender, Diversity and Indigeneity: “Challenging masculinity in business education”
Competitive

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02- Entrepreneurship, Start-Ups and Small Business
Competitive Session

Determinants and Outcomes of Intrapreneurship: a Review and Ways Forward

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02- Entrepreneurship, Start-Ups and Small Business Competitive Session

Determinants and Outcomes of Intrapreneurship: a Review and Ways Forward

ABSTRACT:

Intrapreneurship is recognized as an essential component in developing an innovative culture within organizations and providing an opportunity for organisations to engage employees in challenging and meaningful work. However, intrapreneurship is still lacking a systematic review to provide an overview of the field and to clarify the contribution of the work of previous intrapreneurship studies. This paper aims to consolidate the forty-five (45) publications published between 2001 to 2018 on intrapreneurship concept and provide a descriptive review to clarify the intrapreneurship concept and provide a detailed overview of the determinants and outcomes of organisational intrapreneurship practices, identify gaps and propose a future research agenda.

Keywords: intrapreneurship, innovative culture, systematic review

Today, business and economic environments are becoming increasingly challenging for most organisations due to the changes in global economy and disruptive technology (Baruah & Ward, 2015). Many organisations are being replaced by new companies in emerging industries that are claimed to be a result of the process of creative destruction (Schumpeter, 1942). Due to the increasingly challenging and competitive business environment, firms are looking for better ways to manage innovation and remain competitive in the market place. In this regard, intrapreneurship has been placed at the center. Although early research on intrapreneurship focused mostly on large organizations, it also benefits small and medium-sized organisations (Antoncic & Hisrich, 2003).

Intrapreneurship has been identified as an organisational level approach that allows employees to lead firm growth (Antoncic, 2011) and strategic renewal (Deprez & Euwema, 2017). Hence, scholars mainly explored the organization specific drivers, assumed to stimulate intrapreneurial practices of organisations and associated benefits for organisations. They further recognised that intrapreneurship is increasingly associated with organizations that have created a culture conducive for employees to leverage their entrepreneurial capabilities within corporations (Shah et al., 2014). Such organizations are able to achieve success by using innovative approaches, not only with their products, services, and processes, but

also in the development of their business models and unique cultures (Shah et al., 2014). Scholars have also recognised that the intrapreneurship success is dependent on ‘intrapreneurs’, employees who have the capacity to innovate and pursue opportunities for the organization (Menzel, Aaltio, & Ulijn, 2007). The increasing interest has been given to explore the characteristics of intrapreneurs (Chan et al., 2017; Martiarena, 2013; Smith, Rees, & Murray, 2016; Turro, Alvarez, & Urbano, 2016), factors that drive and stimulate the behavior of intrapreneur (Chan et al., 2017; Turro et al., 2016).

Despite the development of intrapreneurship strategies and research in the last three decades, some issues remain unexplored (Kuratko & Audretsch, 2013). Intrapreneurship lacks a consistent definition (Menzel et al., 2007; Skovvang Christensen, 2005) and it is often identified as corporate entrepreneurship (Antoncic & Hisrich, 2003; Bosma, Stam, & Wennekers, 2010), but there is a distinction between them. Researchers have mainly treated intrapreneurship as an organisational level construct (Antoncic & Hisrich, 2001; Antoncic, 2011; Augusto Felício, Rodrigues, & Caldeirinha, 2012; Baruah & Ward, 2015) and largely investigated the organizational benefits of intrapreneurship. Alternatively, several other researchers have treated the concept as an individual level construct (Guerrero & Peña-Legazkue, 2013; Parker, 2011; Steward, Wu, & Hartley, 2010) but individual level benefits are largely overlooked (Chan et al., 2017). As per the current understanding, there is no systematic review showing detailed overview of the intrapreneurship research outcomes taking both organisational and individual level perspective.

Therefore, this paper aims to fill this important research gap by performing a systematic literature review to analyze the determinants and outcome perspective of intrapreneurship research. Hence, the contributions of this paper are twofold. First, as per the current knowledge, this is the first paper to systematically review the intrapreneurship literature of last two decades taking both individual and organisational level perspective. The paper distinguishes the intrapreneurship concept and past research outcomes from two main perspectives of individual and organizational level. It shows the distinct position of intrapreneurship research on both perspectives. Second, this paper provides a detailed categorization of antecedents and impact of intrapreneurship practices identified in the past research. This enable to identify most interesting research gaps under each category. Filling these gaps will lead to develop more complete

knowledge of intrapreneurship concept. The paper is structured as follows. The next section provides the theoretical background for this paper and discusses the intrapreneurship concept and related dimensions. Section three introduces the method for study selection and analysis process. Section four discussed the major findings of the analysis and finally the areas for future research is discussed.

THEORETICAL BACKGROUND

Intrapreneurship Concept and Dimensions

Increasingly, scholars are highlighting entrepreneurship as an essential attribute for achieving the success and growth within high-performing firms, with the process of entrepreneurial activity in existing organizations also increasing (Turro, Alvarez, & Urbano, 2016). Intrapreneurship concept was first introduced by Gifford and Elizabeth Pinchot in 1978 as a method of using the entrepreneurial spirit of employees within large organizations (Pinchot, 1985). Miller (1983) further defined the concept and suggested that firm-level entrepreneurship can be identified in terms of a firm's ability to take risks, innovate and compete proactively. Since then, intrapreneurship became a separate research topic, largely through the works of Pinchot (1985), Rule and Irwin (1988), Guth and Ginsberg (1990), Antoncic and Hisrich (2001, 2003) and Parker (2011).

The term intrapreneuring (Pinchot, 1985), corporate venturing (MacMillan & George, 1985), internal corporate entrepreneurship (Schollhammer, 1982), have been used to describe the phenomenon of intrapreneurship. Prior studies have highlighted that intrapreneurship concept is similar to the corporate entrepreneurship (CE) concept (Antoncic & Hisrich, 2001; Antoncic, 2011) but there is a distinction between them. Intrapreneurship refers to bottom-up proactive approach which empower innovative and entrepreneurial employees to nurture more initiatives within organisations (Åmo & Kolvereid, 2005; Sinha & Srivastava, 2015), whereas corporate entrepreneurship refers to a top-down corporate innovation process initiated from management relevant to organisation's strategic focus (Gapp & Fisher, 2007; Kazanjian, Drazin, & Glynn, 2002).

Stopford and Baden-Fuller (1994) introduced three key aspects of the intrapreneurship concept. New business venturing, organizational transformation and the activities needed to change the rules of

competition within the industry (Stopford & Baden-Fuller, 1994). Alternatively, Antoncic and Hisrich (2001) argue that the intrapreneurship concept has four distinct dimensions; the new-business venturing dimension, the innovativeness dimension, the self-renewal dimension and the proactiveness dimension. Several authors view new business venturing as the most salient characteristic of intrapreneurship (Antoncic & Hisrich, 2003; Parker, 2011; Turro et al., 2016) to advance new business opportunities and create economic value (Pinchot, 1985). But in larger organizations it can also include the formation of autonomous or semi-autonomous units or firms and also other innovative activities and orientations such as the development of new products, services, technologies, administrative techniques, strategies and competitive postures (Antoncic and Hisrich, 2003). However, many researchers have recognized the similarities between intrapreneurship and organizational innovation, which is also viewed as a subset of intrapreneurship (Antoncic and Hisrich, 2003) as the predominant focus of intrapreneurship is new business creation, which is not the primary focus of organizational innovation (Antoncic & Hisrich, 2003).

Despite to this organisational level identification of intrapreneurship, intrapreneurship is also defined as a process in which individuals inside organizations act entrepreneurially in pursuing new opportunities or to do new things (Franco & Pinto, 2016a; Turro et al., 2016) and given the intrapreneurship concept an individual level identification. Employees who have the entrepreneurial ability have been defined as ‘intrapreneurs’ following the work of (Pinchot, 1985). Gifford Pinchot, defined intrapreneurs as dreamers who figure out how to turn an idea into a profitable business reality (Pinchot, 1985) within the context of their employer’s organization. More recently, intrapreneurs are identified as one of the strongest outcomes of development of human capital in the workplace (Orchard, 2015). In conclusion, intrapreneurship can be identified as a bottom-up organisational level approach that empowers innovative and entrepreneurial employees to innovate and pursue opportunities within organisations.

METHOD FOR STUDY SELECTION

A structured literature review was conducted to understand the current stats of the literature on theoretical and empirical studies on the concept of intrapreneurship. This analysis includes papers only articles in peer-reviewed journals in English with an intrapreneurship focus. This excludes papers in other

languages as well as those with, related to corporate entrepreneurship focus. Related publications were mainly searched as a keyword search; intrapreneurship or intrapreneur on title or keywords from the six databases of ABI/INFORM, sciencedirect, Springer, Emeraldand, Ebsco, and Scopus. The initial search identified 136 publications between 2001 to 2018. Finally after a quality and content check, articles to be included and excludes were identified. The final sample of 45 articles was identified for the analysis. Figure1 shows the approach for the paper extraction.

Insert Figure 1 about here

As the first step, papers were classified by using descriptive dimensions such as distribution of publications across the time period, types of papers, journals that articles are published, research methodologies applied. And each paper was assigned to only one category. In the second step, the detailed content analysis was done with respect to research outcomes. Articles were coded based on the research outcomes and three main themes were identified. The determinants of intrapreneurship, the outcomes of intrapreneurial practices and the emphasis on scale and model development. For the final step, as per this paper focus, only the themes of determinants of intrapreneurship and the outcomes of intrapreneurial practices were further analysed and synthesised. Three sub themes from determinants of intrapreneurship and four themes from the outcome perspective of intrapreneurship were identified.

ANALYSIS OUTCOMES

Distribution of publications across the time period

The total number of literature papers identified for the analysis is 45 papers. The first article recognised and include into this review was by Antoncic and Hisrich (2001). The number of articles published since has increased slightly in a very volatile passion until 2009. The distribution of the publications across the time period is (2001-2017) is shown in Figure 2. The number of publications shows a substantial increase since 2010 and out of total number of 45 articles, 39 articles (86%) were published during the period of 2010 to 2017. The highest number of publications is found in the year 2017 (11 articles), which remains on a significant level since.

Insert Figure 2 about here

Research Methodologies applied

The majority of the articles were on empirical studies (39 of the pool of 45 articles, 91%) and 6 articles were purely conceptual papers. Among the empirical studies, authors have used different methodologies that are illustrated in figure 3. Quantitative and qualitative methodologies were observed within the sample and there is no article on mixed-methodology. Quantitative research was the most dominant methodology (33 of the pool of 45 articles, 73%) most authors used to examine intrapreneurship construct. Only seven articles concerned qualitative methodological approach (15%), applying case studies and interviews. Case study approach was the most dominant approach (5 articles) among qualitative research studies, of which four applied a multiple case study approach. The sample contained no literature on a review of the literature in intrapreneurship. This further emphasises the need for a structured literature review for the intrapreneurship research.

Insert Figure 3 about here

Research outcomes

Outcomes of past research were mainly focused around three main categories. They are (1) identifying factors that drive intrapreneurship, (2) impact of intrapreneurial practices and behaviours and, (3) the emphasis on scale and model development. Early research on intrapreneurship has mainly focused on exploring the impact of intrapreneurship practices. Since 2010, researcher’s main attempts was given to discover the factors that drive intrapreneurship practices of organisations as well as the intrapreneurial behaviour of employees. This will further discuss in following sections. Despite the researcher main attempt to explore the determinants and outcomes of intrapreneurship, three studies (Antoncic & R. D. Hisrich, 2001; Di Fabio, 2014; Vargas-Halabí, Mora-Esquivel, & Siles, 2017) attempted to develop individual and organisational level scales for intrapreneurship domain. Two studies (Park, Kim, & Krishna, 2014; Subramanian, 2005) focused on developing models of employee interaction with firms.

Determinants of Intrapreneurship

Scholars have continuously been exploring the factors that drive and stimulate intrapreneurship practices in organizations. The factors that drive intrapreneurship can be grouped into three categorised based on the level of impact. Which are individual level drivers, organisational level drivers, and external environmental drivers (see Table 1 in Appendix A). As per the review results, the scholars have mainly explored organizational level drivers and individual /employee specific drivers that enable and stimulate intrapreneurship practices. Among the *organisational level drivers*, top management and organisational support has been identified as the key enabler of intrapreneurial success by (Alpkan, Bulut, Gunday, Ulusoy, & Kilic, 2010; Antoncic & Hisrich, 2001; Farrukh, Chong, Mansori, & Ravan Ramzani, 2017; Haase, Franco, & Félix, 2015; Lages, Marques, Ferreira, & Ferreira, 2017; Smith et al., 2016). Organisational *structural and cultural elements* such as task autonomy and employee empowerment (Deprez & Euwema, 2017; Haase et al., 2015; Park et al., 2014; Valsania, Moriano, & Molero, 2016), organisational values (Antoncic & Hisrich, 2001), employee-employer relationship (Deprez & Euwema, 2017; Park et al., 2014), organisational tolerance for risk-taking (Alpkan, Bulut, Gunday, Ulusoy, & Kilic, 2010) has been also identified as the determinants of intrapreneurship. Other management elements of organisational leadership (Deprez & Euwema, 2017; Moriano, Molero, Topa, & Mangin, 2014; Valsania et al., 2016), open and quality communication (Haase et al., 2015; Park et al., 2014), are also critical in intrapreneurial success. Some studies have concluded the organisational resource availability (Urbano et al., 2013) , reward structure (Franco & Pinto, 2016), and effective feedback mechanism (Deprez & Euwema, 2017) also determine the intrapreneurial success.

In addition to organisational level drivers, several studies have explored the *individual level drivers*, which enable and stimulate intrapreneurial behaviour of employees. Camelo-Ordaz, Fernández-Alles, Ruiz-Navarro, and Sousa-Ginel (2012) concludes intrapreneur's age negatively associate with entrepreneurial values and the firm's innovative performance. As age increases, flexibility gets decreases and then resistance to change rises. As a result, employment security becomes more relevant and intrapreneur tend to apply more conservative strategies. Which results in lower innovation performance. Camelo-Ordaz et al.

(2012) further examined, intrapreneur's organisational tenure also cause a negative association with entrepreneurial values of intrapreneurs. As longer organisational tenure leads the employee to the status quo which increases the risk aversion and more rigid attitude towards entrepreneurship. With respect to educational level, Camelo-Ordaz et al. (2012) reveals in the creative industry, education level negatively associates with innovation performance. They justified as formal education system provides certain limitations to the capacity, which transfer competencies that are needed to drive innovative performance of employees. However, Turro et al. (2016) also investigated using data from the Spanish Global Entrepreneurship Monitor conclude that the higher education achievement has increased the probability of developing intrapreneurial activities of employees. Therefore, the findings relating to demographic characteristic variables shows mixed results.

Several other researchers have investigated employee *abilities* that drive and stimulate intrapreneurial behaviour of employees. Ability to detect opportunities has been recognised as the key determinant in employee entrepreneurial success (Martiarena, 2013; Smith et al., 2016; Turro et al., 2016; Urbano et al., 2013). In addition, proactiveness and innovation action (Augusto Felicio et al., 2012; Mário Franco & Pinto, 2016; Seyed Hadi Razavi & Kamarulzaman Ab Aziz, 2017), orientation towards goals (Franco & Pinto, 2016) also been identified as drivers of intrapreneurial action of employees. Research on *entrepreneurial values* shows that values such as persistence, hard work, ambition, creativity, risk-taking (Camelo-Ordaz et al., 2012), optimistic perception of success (Camelo-Ordaz et al., 2012; Lages et al., 2017), desire to take on new challenges (Smith et al., 2016), influence the innovative behaviours of employees. More specifically the fear of failure has been recognised as has a negative effect on opportunity recognition and developing employee entrepreneurial activities (Turro et al., 2016).

In relation to the *factors which stimulate Intrapreneurial* behaviour of employees, Urbano et al. (2013) conclude employee's previous entrepreneurial experience inspire employees to be innovative and entrepreneurial at work. A recent work of (Chan et al., 2017), shows that high level of employee professional and leadership motivation is associated with greater levels of intrapreneurial motivation and this provides an improved career motivation framework to assess and develop the necessary talent which

innovation firms demand. Turro et al. (2016) studied the impact of social capital (presence of business owners among relatives, friends) on intrapreneurship and concluded that employee's social capital impact the ability of opportunity recognition and stimulate employees to be entrepreneurial at work.

From the sample, only two studies have considered the impact of environmental factors on intrapreneurship. Ağca, Topal, and Kaya (2012) have examined two environmental determinants, which are environmental munificence (environmental dynamism, the abundance of the technological opportunities, growth potential of the industry and demand for new products) and environmental hostility (radical changes in an industry or intensity of the rivalry) and their influence on firm-level intrapreneurship. The study reveals the positive association between environmental factors and intrapreneurship. Also, firms are more sensitive to the environmental munificence than environmental hostilities when they focus on intrapreneurship dimensions. Ağca, Topal, and Kaya also propose, intrapreneurship could be used as business strategy to cope with the threats of the dynamic environment. However, studies which investigate the impact of environmental factors particularly the socio-cultural and institutional environment on intrapreneurship practices are still lacking.

Outcome perspective on intrapreneurship

Various studies have focused on possible outcomes of intrapreneurship practices. Four different outcome perspectives can be identified from the analysis sample (see Table 2 in Appendix A). Which are organisational outcomes, employee level outcomes, outcomes for other stakeholders and national level outcomes. From the analysis sample, authors have mainly studied the *organisational outcomes* of intrapreneurship with reference to factors related to firm growth (Ağca et al., 2012; Antoncic & Hisrich, 2001; Antoncic, 2011; BAntoncic, 2007; Augusto Felício et al., 2012), firm market performance (Benitez-Amado, Llorens-Montes, & Perez-Arostegui, 2010), corporate venturing (Guerrero & Peña-Legazkue, 2013), sustainable innovation (Widya-Hastuti, Talib, Wong, & Mardani, 2016), profitability (Antoncic, 2007), international business expansions (Altinay, 2004; Steward et al., 2010), market exploration (Skarmeas, Lisboa, & Saridakis, 2016) and low staff turnover (Haase et al., 2015).

Among the few attempts to discover the *employee level outcomes* of intrapreneurship, Di Fabio, Palazzeschi, and Bucci (2017) concluded that intrapreneurial human-capital developed via intrapreneurial practices leads to employee life satisfaction and flourishing (social capital, psychological prosperity and well-being). It is also recognised that intrapreneurship outcomes can produce positive gains for employees' personal resources (e.g. ego-resilience, optimism, and self-efficacy) over time, enhancing employee work engagement (Gawke, Gorgievski, & Bakker, 2017). Ağca et al. (2012, p. 21) also investigated employee level outcomes of intrapreneurship and concludes as 'intrapreneurship dimensions of innovativeness, self-renewal, new business venturing, risk taking and proactiveness are positively associated with employee satisfaction' when they are given the opportunity to make more innovations and take calculated risks. Despite that, the studies focused on the impact of intrapreneurial practices on individual level outcomes, or on the impact on employee outcomes are scarce.

From the studies which investigated outcomes for other stakeholders, Ağca et al. (2012) concluded that the firm intrapreneurship actions cause improve customer satisfaction through continuous innovation, proactive actions in the market and self-renewal activities of firms. Steward et al. (2010) found that the supply managers intrapreneurial ability such as imitativeness, risk-taking, effective resource management positively influence managers to performance beyond the job description and effectively find creative solutions for the challenges inherent in a supply chain. Which ultimately enhance the quality of relationship with suppliers and further affects the higher levels of firm commitment to the supplier. From the study sample, research focusing on broader national level outcomes of intrapreneurship is very limited. Berzin, Pitt-Catsouphes, and Gaitan-Rossi (2016) have investigated the national level impact of intrapreneurship in the context of social service organisations. Berzin et al. concluded that intrapreneurship is a strategic approach to social innovation (the innovation respond to a social issue) which is important in responding changes in the environment also be a core-competency for the organisations today. They further emphasise that intrapreneurship benefit social sustainability by creating organisations the ability to plan, implement, and assess the effectiveness of social innovation initiatives. Although several researchers investigated the intrapreneurship practices of organisations and intrapreneurial behaviour of employees and their impact on

organisations, research on how these activities benefit employees, other stakeholders and particularly the studies on national level outcomes are very limited.

DISCUSSION AND FUTURE RESEARCH AGENDA

Discussion

The review results reveal that the scholars have mainly explored organizational level drivers and individual /employee specific factors that drive and stimulate intrapreneurship practices. Among the organisational level drivers, top management and organisational support has been identified as the key enabler of intrapreneurial success. Task autonomy, employee empowerment, organisational values, organisational tolerance for risk-taking, organisational leadership, open and quality communication, resource availability, reward structure, effective feedback mechanism are also recognised as the other organisational drivers of intrapreneurship.

In addition to organisational level drivers, several studies have explored the individual level drivers, which enable and stimulate intrapreneurial behaviour of employees. Ability to detect opportunities has been recognised as the key determinant in employee's entrepreneurial success (Martarena, 2013; Smith et al., 2016; Turro et al., 2016; Urbano et al., 2013). Proactiveness and innovation action, orientation towards goals (Franco & Pinto, 2016), entrepreneurial values such as persistence, hard work, ambition, creativity, optimistic perception of success (Camelo-Ordaz et al., 2012; Lages et al., 2017), desire to take on new challenges (Smith et al., 2016), influence the innovative behaviours of employees. Employee's previous entrepreneurial experience (Urbano et al., 2013), professional and leadership motivation and social capital (Turro et al., 2016) inspire employees to be innovative and entrepreneurial at work. Apart from organisational and individual level factors, environmental factors also drive intrapreneurship. Such as environmental dynamism, the abundance of the technological opportunities, growth potential of the industry and demand for new products also drive company's intrapreneurial orientation (Ağca et al., 2012).

From the outcome perspective of intrapreneurship, authors have mainly studied the organisational outcomes of intrapreneurship. It is evident that intrapreneurship is associated with firm growth (Ağca et al., 2012; Antoncic & Hisrich, 2001; Antoncic, 2011; Antoncic, 2007; Augusto Felício et al., 2012, corporate

venturing (Guerrero & Peña-Legazkue, 2013), sustainable innovation (Widya-Hastuti, Talib, Wong, & Mardani, 2016), profitability (Antoncic, 2007), market exploration (Skarmeas, Lisboa, & Saridakis, 2016) and low staff turnover (Haase et al., 2015).

Intrapreneurship is also benefit intrapreneurs or entrepreneurial employees. As employee's intrapreneurial work affect intrapreneur's life satisfaction and flourishing (Di Fabio, Palazzeschi, & Bucci, 2017), positive gains for employees' personal resources over time, enhances employee work engagement (Gawke, Gorgievski, & Bakker, 2017) and associated with job satisfaction (Ağca et al., 2012). Successful intrapreneurial practices may lead to customer satisfaction (Ağca et al., 2012) and improved supplier relationships (Steward et al., 2010) and even the positive gains for the environment (Berzin et al., 2016) such as social sustainability through social innovation (Ağca et al., 2012).

Suggestions for Future Research

As revealed in the analysis, from the outcome perspective of intrapreneurship, scholars have mainly investigated organisational level benefits of intrapreneurship. Studies focus on the impact of intrapreneurship on employees; other stakeholders and also the broader national level outcomes are rare. This gap in the literature presents an opportunity to study the impact of the intrapreneurship practice beyond the organisational context and investigate how these activities benefit employees, other stakeholders and how the practices contribute to national level gains.

From the determinants of intrapreneurship, scholars have mainly explored organisational and employee specific factors that drive and stimulate organisational intrapreneurship practices and employee intrapreneurial behaviour. However, the environmental and contextual influences and the heterogeneity of behaviours are largely accounted for the broader innovation and entrepreneurship literature, they are rarely accounted in the intrapreneurship literature. This gap in the literature presents an opportunity to study how do the contextual factors particularly the socio-cultural and institutional environment affect the organisational and individual drives to intrapreneurship. Despite these findings and recommendations, the literature review is limited to 45 selected articles, which were extracted, in the systematic approach discussed in the methodology section.

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FIGURES

Figure 1: Overview of study selection process

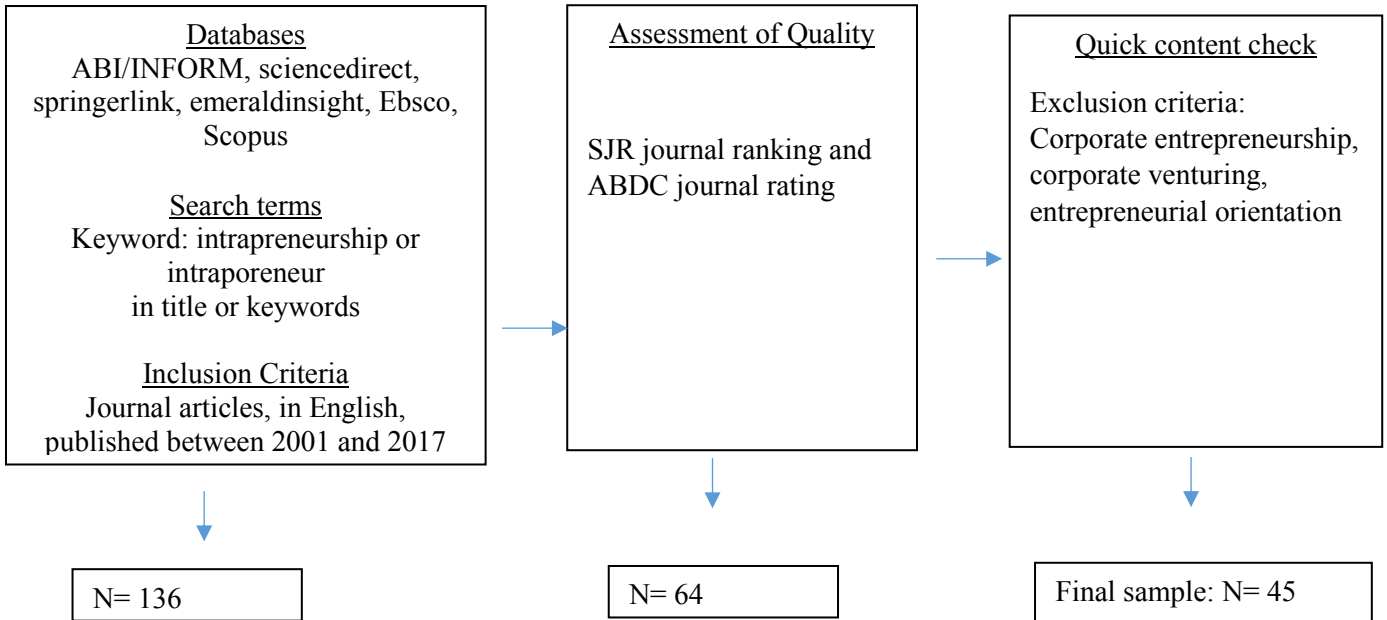
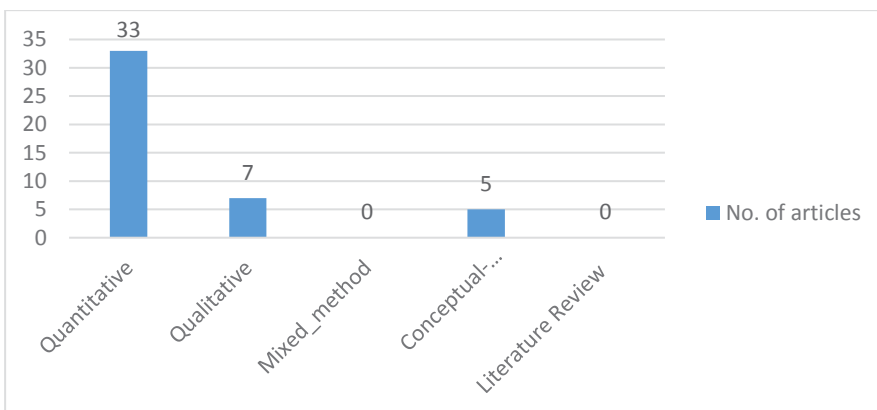


Figure 2: Distribution of publications across the time period (2001-2017)



Figure 3: Research Methodologies applied



Appendix A

Table 1: Determinants of Intrapreneurship and Intrapreneurial Behaviour

	Factor	Sources
Organisational drivers	top management and organisational support	Alpkan, Bulut, Gunday, Ulusoy, & Kilic (2010); Antoncic & Hisrich(2001); Farrukh, Chong, Mansori, & Ravan Ramzani (2017); Haase, Franco, & Félix (2015); Lages, Marques, Ferreira, & Ferreira (2017); Smith, Rees, & Murray (2016)
	task autonomy and employee empowerment	Deprez and Euwema (2017); (Haase et al., 2015; Park et al., 2014; Valsania et al., 2016),
	organisational values	Antoncic & Hisrich (2001)
	employee-employer relationship	Deprez & Euwema (2017); Soo Hyun Park et al. (2014),
	organisational tolerance for risk-taking	Alpkan, Bulut, Gunday, Ulusoy, & Kilic (2010)
	organisational leadership	Deprez & Euwema(2017); Moriano, Molero, Topa, & Mangin (2014); Valsania et al.(2016),
	open and quality communication	Haase et al.(2015); Soo Hyun Park et al. (2014),
	organisational resource availability	Urbano, Alvarez, & Turró(2013)
	reward structure	Franco & Pinto (2016)
	effective feedback mechanism	Deprez & Euwema (2017)
	Factor	Sources
Individual drivers	Intrapreneur’s age	Camelo-Ordaz et al. (2012)
	Intrapreneur’s organisational tenure	Camelo-Ordaz et al. (2012)
	employee’s educational level	Camelo-Ordaz et al. (2012), Turro, Alvarez, and Urbano (2016)
	ability to detect opportunities	Martiarena (2013); Smith et al. (2016); Turro et al.(2016); Urbano et al. (2013).
	proactiveness and innovation action	Augusto Felicio et al. (2012); Mário Franco & Pinto, (2016); Seyed Hadi Razavi & Kamarulzaman Ab Aziz, (2017),
	goal orientation	Mário Franco & Pinto (2016)
	values (persistence, hard work, ambition, creativity, risk-taking)	Camelo-Ordaz et al. (2012)
	optimistic perception of success	Camelo-Ordaz et al.(2012) ; Marisa Lages et al.(2017)
	desire to take on new challenges	Smith et al. (2016)
	fear of failure	Turro et al. (2016)
	Previous entrepreneurial experience	Urbano et al. (2013)
	Employee professional and leadership motivation	Chan et al. (2017)
	Employee’s social capital	Turro et al. (2016)
employee satisfaction	A. Antoncic (2011)	

	Factor	Source
Environmental drivers	environmental munificence , environmental hostility	Ağca et al. (2012)

Table2: Outcome perspective on intrapreneurship

	Outcome	Source
Organisational level outcomes	firm growth	Ağca et al. (2012); (Antoncic & Hisrich, 2001; A. Antoncic, 2011; B. Antoncic, 2007; Augusto Felício et al., 2012)
	firm market performance	(Benitez-Amado, Llorens-Montes, & Perez-Arostegui (2010)
	corporate venturing	Guerrero & Peña-Legazkue (2013)
	sustainable innovation	Widya-Hastuti, Talib, Wong, & Mardani (2016)
	profitability	B. Antoncic (2007)
	intrenational business expansions	Altinay (2004); Steward, Wu, & Hartley (2010)
	market exploration	Skarmeas, Lisboa, & Saridakis (2016)
	low staff turnover	Haase et al.(2015).
	Outcome	Source
Outcomes for employees	employee life satisfaction and flourishing	Di Fabio, Palazzeschi, and Bucci (2017)
	employee work engagement	Gawke, Gorgievski, & Bakker, (2017)
	employee satisfaction	Ağca et al. (2012)
	Outcome	Source
Outcomes for other stakeholders	customer satisfaction	Ağca et al., (2012)
	supplier relationships	Steward et al. (2010)
	Outcome	Source
National level outcomes	social sustainability	Berzin et al. (2016)

Stream 01. Conference theme: Managing the many faces of sustainable work
Competitive
Abstract Only in Program

An exploration of how Australian universities are improving the health of their employees

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Stream 01. Conference theme: Managing the many faces of sustainable work
Competitive

An exploration of how Australian universities are improving the health of their employees

ABSTRACT: *Despite Health Promotion Programs (HPPs) being heralded for placing health at the centre of employee and business objectives, the process of formulating different types of programs and their implementation has been overlooked. This paper reviews different types of HPPs and their implementation within eight Australian universities through an analysis of publicly available website documentation. An examination of the health issues and health risk factors targeted reveals what type of HPPs are currently being used by sampled universities. The nature of the activities and processes used for implementing HPPs and managing their performance is also examined to determine the input of stakeholders. The paper concludes that HPPs prepare employee health for measurement by evaluating promotion as opposed to health outcomes.*

Keywords: (Healthy work, new organisational forms, organisational performance, organisational productivity)

INTRODUCTION

New management practices in Australia's higher-education sector, which focus on university performance (Lafferty & Fleming, 2000), have coincided with rising student-teacher ratios (Marginson, 2007) and increased workplace stress amongst employees (Winefield, Boyd, Saebel, & Pignata, 2008; Winefield et al., 2003). The demand for effective and efficient teaching and research outcomes is increasingly threatened with limited availability and competition for resources (Egan, 2014). Research has shown significant increases in stress and decreases in wellbeing amongst employees in the Australian university sector because of adverse changes to working conditions (Gillespie, Walsh, Winefield, Dua, & Stough, 2001; Winefield et al., 2008; Winefield et al., 2003). Despite awareness that employee health impacts on productivity and performance (Parry & Sherman, 2015; Sherman & Lynch, 2014), viable strategies for improving employee health and business outcomes are less certain (Berger, Howell, Nicholson, & Sharda, 2003; Nielsen et al., 2017).

In this paper, we identify the ways in which Australian Universities are creating healthy and sustainable workplaces for their employees. Specifically, we identify the health issues Australian universities are concerned with; the health risk factors they are targeting; and the activities employed to improve employee health. To do this, we identify Health Promotion Programs (HPPs), defined here as any set of practices, whether focused on the employee or workplace, that aims to improve the health and

productivity of individual employees or the workplace in general (Goetzel & Ozminkowski, 2008; Potvin & Goldberg, 2012).

Over the years HPPs such as disease-management programs that offer preventative health screenings, or mental-health programs that build resilience through counselling and support services, have increased in importance within workplaces. A growing number of international universities are using HPPs to improve employee health (Dooris & Doherty, 2010; Shutler-Jones, 2011). Research identifying the HPPs implemented in Australian settings is limited (Machen, Cuddihy, Reaburn, & Higgins, 2010; Pillay, Kluvers, Abhayawansa, & Vranic, 2013; Smith, 2011) and international research findings are difficult to generalise to Australian settings (Battle-Kirk, Barry, Taub, & Lysoby, 2009).

METHOD

Archival data was collected from eight Australian universities selected for performing comparatively well in world university rankings, as well as outwardly marketing established systems for promoting employee health. The expectation was for these workplaces to offer several opportunities to support the health and performance of employees that set a benchmark for other universities to follow.

A systematic search strategy was developed to capture relevant publicly available information from university websites. A pilot of the search strategy revealed that relevant information relating to employee health was found within: annual reports, strategic planning documents, operational planning documents, budgeting and audit guidelines, and information contained within advertisements, manuals, minutes of meetings, policies and procedures. All documentation contained within the “health, safety and wellbeing” section of university websites was also included. Finally, a range of search strings were used to identify additional information based on synonyms of “health promotion activities” and “performance measurement” in combination with the important terms “employee AND health” (e.g. “counselling AND health” or “counselling AND wellbeing”). To produce a coherent sample across the universities, external links that were not formalised within university documents were excluded. Through this process, 497 relevant documents were identified (as surmised in Table 1).

[INSERT TABLE 1 HERE]

As information contained within website pages is dynamic and subject to change (Grana & Ling, 2014), collected information was preserved by storing the content within NVivo qualitative data analysis software. Content was collected between November 2014 and July 2015 with analysis occurring throughout 2016 and 2017. To assist in the transparency of the coding process, Tables 2 offers a set of definitions for the types of HPPs programs developed through a literature review.

[INSERT TABLE 2 HERE]

Health issues targeted by HPPs in Australian universities

As indicated in Table 3, Australian universities have typically focused on initiatives targeting mental health, cancer, cardiovascular disease, and diabetes with less significance given to other health outcomes such as oral health.

[INSERT TABLE 3 HERE]

“Mental health” was the most prominent issue mentioned by sampled universities, referenced in 125 of the 497 documents included in the data set. Familiar problems associated with poor mental health were referenced within university documents including anxiety, bipolar and depression. As shown in Table 4, these health issues were linked to six different HPP types. Specifically, mental health was addressed through disease management programs by 1 university; diversity and inclusion (6 universities); employee assistance (7); mental health programs (8); nutrition and weight management (2); and physical activity (2).

[INSERT TABLE 4 HERE]

In addition to mental health, cancer (linked to five different programs), cardiovascular disease (6) and diabetes (5) were consistently referenced within university documents. These four health issues were typically referenced by at least one university (see Table 3). Moreover, each health issue was linked to more than five program types (see Table 4) and collectively accounted for a significant proportion (83.64 percent) of documented references to health issues. This implies a high probability that universities will link HPPs to at least one of these four health issues and produce website documentation to promote their association. As shown in Table 3, minimal programs were referenced to health issues by U1, U3, U5 and U7. Except for U5, initiatives for these universities demonstrated higher

representations for health issues other than “lung and kidney function”, “musculoskeletal disorders”, “oral health” or respiratory conditions”.

The least common health issues mentioned in Table 3 were oral health with links to one program and lung and kidney function was linked with two. These findings confirm that Australian universities target health issues unique to local contexts (Australian Government, 2016) which differ from international studies (Goetzel et al., 2004; Harris & Fries, 2002; Juneau, Jones, McQueen, & Potvin, 2011). In the literature, poor oral hygiene has been linked to addiction related (e.g. smoking) and nutrition and weight management interventions such as consumption of sugary foods and beverages (Lamster, DePaola, Oppermann, Papapanou, & Wilder, 2008). Yet, oral health was reported by two sampled universities and only linked to disease management programs. Rather than indicating that these health issues are unimportant to the employee, the low references indicate the importance of workplace contexts in defining health. For example, both universities advertised the importance of oral health in relation to utilising health clinic services provided by the university.

Health risk factors targeted by HPPs

Table 5 indicates that Australian universities consistently referenced alcohol and other addictions, discrimination and harassment, physical activity, smoking and social determinants but demonstrated lower representations of health risks such as domestic violence.

[INSERT TABLE 5 HERE]

The alcohol and other addictions category primarily targeted alcohol and drug use (81 mentions); with 11 documents referencing gambling addiction. An obligation to manage these health risks was apparent from a health and safety perspective. This was best demonstrated in information contained within a section on managing and supporting employees impaired by alcohol and other drugs within U8’s website. The information provided to employees pointed to the university’s “general ‘duty of care’ obligation to ensure that, as far as practicable, workers are not exposed to hazards and risks that could arise from impairment by alcohol and/or other drugs” [Document: U8.043].

A similar emphasis towards compliance was evident with “discrimination and harassment” and “smoking”. HPPs promoting inclusive workplace environments consistently referenced Australia’s anti-

discrimination legislation, which targets discrimination towards personal attributes such as age, disability, race, sex, and sexual orientation (Australasian legal information institute, 2016).

Several universities linked HPPs to a diverse range of social determinants. As shown in Table 6, social determinants were linked to more program types than any other health risk factor. The most common determinant identified was working conditions (referenced in 53 documents) which included managing workloads, work conflicts, redundancies and unemployment. This finding was expected with working conditions having long been considered a risk to the physical safety of employees (Munz, Kohler, & Greenberg, 2001; Murphy, 2002). However, despite literature increasingly recognising the potential for working conditions to positively impact on employee functioning and fulfilment (Day & Randell, 2014), sampled universities primarily focused on reducing the consequences of social contexts on health. Situations where social contexts could be adapted to suit specific employee requirements such as through career progression, improving job satisfaction and providing support for employees with caring responsibilities were less common. Several health risk factors attributable to caring responsibilities emerged (referenced in 22 documents) and were coded within the social determinants category. However, the variation in content coded to the caregiving sub-category illustrated the potentially diverse demands and support needs of employees. An employee might be supporting a child, partner, incapacitated or disabled family member, or elderly parent.

[INSERT TABLE SIX HERE]

Despite being referenced in six programs (see Table 6), the majority of the 19 program types referenced to overweight and obesity across all universities were in relation to disease management (referenced by five universities) and nutrition and weight management programs (6 universities). Very few universities linked these health issues to alternative programs such as participating in physical activity programs to manage weight. This could signal a preference to assist employees in making responsible dietary decisions as opposed to creating opportunities to participate in sporting activities. For example, providing healthy catering options might make more economic sense in comparison to providing employees with the time and resources to organise and participate in their favourite sporting activities. The latter requires more trust in employees to self-govern their work commitments.

Activities currently employed to implement HPPs within Australian Universities

Universities have employed various activities to target specific health issues and health risk factors. Activities used to implement HPPs were grouped according to whether activities functioned at an individual (“awareness and behaviour change”) or organisational level (“supportive environments”) (O'Donnell, 2002, 2017). Table 7 presents an overview of the activities identified in the sample.

[INSERT TABLE 7 HERE]

Table 7 shows extrinsic motivation was the most commonly used activity to support the implementation of HPPs. While extrinsic motivation was the most commonly used activity, the most widely advertised activity was courses and training (mentioned in 93 documents). It should be noted that these two activities were commonly linked in the data set. For example, one university offered a “healthy breakfast” as an incentive for participating in a physical activity program [Document U4.069]. Other universities incentivised courses by emphasising savings such as U2’s offer of “eight, free one hour [quit smoking] sessions” [Document U2.056]. This could suggest that universities consider employees may not see intrinsic value in the HPPs offered.

The diverse range of training topics by one university was highlighted in a document advertising health promotion initiatives offered to employees. In advertising activities that could be tailored to suit employee needs, the university promoted

“wellbeing education seminars including: dealing with change, emotional intelligence, family and relationship issues, grief and loss, healthy heart, healthy eating and reading food labels, how to clean green, managing stress and relaxation, cancer awareness and healthy cooking demonstrations” [Document: U4.087].

A broad range of activities were also categorised within brochures, guides, flyers and posters including digital applications and online self-help resources, campus walking maps and signage to motivate taking stairs as opposed to elevators. Novel activities were also implemented such as “expectant parent kits” [Document U4.033]. It is possible that universities could use dialogue and communication with employees intending to start a family to assist with workforce planning, forecasting and retention strategies.

A comprehensive range of policies and structures helped facilitate supportive environments for health. This was consistent with literature suggesting that HPPs will fail without clearly established policies and procedures to guide their implementation (Pronk & Kottke, 2009). Every university documented policies for addiction, diversity and inclusion, flexible working arrangements, and leave management. However, it was interesting to observe that policies regarding ‘mental health’ were only documented by three universities. This was surprising given the emphasis on this issue observed in Table 1. Despite the complexity of the issue, the policy approach seems broad, with universities showing preference for awareness and behaviour change activities unless legislative or institutional motivations for supportive environments preceded action.

Strong support for activities that facilitate a healthy university culture were observed with references to these initiatives found in 100 documents. Two prominent types of activities emerged within this category. Firstly, support networks for bullying, discrimination, and other general health promotion objectives accounted for references observed in 39 documents. Secondly, 36 documents contained references to team-based initiatives and revealed diverse group activities based around biking, buddy fitness, mental wellbeing, phobia treatment, smoking support, social clubs, spirituality, team building, swimming, walking and running, and Weight Watchers.

The least common activities coded to supportive environments were clinics and centres, physical environments and structure. Existing university facilities such as chaplaincy, dental, fitness, medical, and nutrition and dietetic clinics and centres were referenced to varying degrees. Most activities coded to physical environments reinforced each universities mandate to provide a smoke-free campus, provide breast feeding facilities, access for people with disabilities, and ergonomically sound workplaces. Finally, activities coded to structure reported on the intersection between program objectives and administrative tasks such as mental health committees, mental health strategies and audits.

Information displayed in Table 8 is used to examine the association between the type of programs implemented by universities and the nature of activities used. From Table 8, it is evident that activities differ depending on the type of HPPs implemented. For example, coaching, counselling and mentoring services were associated with alcohol related (referenced by 6 universities), disease management (1),

diversity and inclusion (7), employee assistance (8), and mental health programs (5). What was not obvious with this analysis was the influence of local circumstances such as resource constraints on programming decisions. For example, how was the implementation approach used by a university different from one program to the next and what elements of the operational context explain this difference? Consequently, case study research would be worthwhile to examine how managerial contexts impact HPPs and their implementation.

[INSERT TABLE 8 HERE]

Rather than being an attribute of planning by senior management as suggested in health promotion literature (O'Donnell, 2002), the following discussion analyses the mix of activities based on their operational contexts. The connections between activities and programs shown in Table 8 reveal various drivers within university settings that appeared to interact to define health problems and negotiate program activities. For the eight sampled universities, sets of activities appeared to be contained within three program clusters, as discussed.

Cluster one: Employee assistance and mental health programs

The content of employee assistance programs was characterised by their strong association with outsourced programs. Through their employee assistance programs, all sampled universities gave employees struggling with work or personal situations free access to counselling. These outsourced counselling services were available to employees that might be struggling with several health issues such as alcohol and drugs, financial problems, mental health, stress and life pressures and various working conditions.

The content of mental health programs was characterised by their strong association with courses and training activities. Universities have extensive expertise available for specialised training to administer these programs. Thus, universities offered numerous training opportunities to employees on diverse topics such as “mindfulness, resilience and stress management courses” [Document: U1.066], “mental health essentials, mental health first aid” [Document: U3.072], and training to “building a suicide-alert community” [Document: U4.085]. Many programs were offered free to employees with group training and social clubs used to create a supportive culture that fostered mental health and

resilience. Based on the nature of activities grouped around cluster one programs, we conclude that their primary objective is to motivate employees to utilise outsourced programs and attend training courses to improve health and productivity.

Cluster two: Disease management, nutrition and weight management, and physical activity programs

A broad range of activities were associated with cluster two programs. This cluster of programs was consistent with literature that invoked questions about disciplining behaviours through programs (Soler et al., 2010). Do HPPs lead to changes in employee health outcomes? What employee behaviours or health outcomes are influenced by program activities? What activities will result in change and provide the best use of university resources? These questions were answered using programs that offered the ability to leverage existing facilities to offer support to employees on a diverse range of activities. The availability of health screening assessments, exercise facilities, and nutritional advice, formed the basis for targeting the greatest range of health outcomes. Every university provided access to gym facilities and discounted membership options. Like Cluster one, programs within cluster two showed a strong preference for using activities to motivate employees, but the emphasis was on utilising university facilities.

Cluster three: Addiction related, diversity and inclusion, and ergonomic programs

A strong association with bureaucratic activities and processes was observed for programs within cluster three. The emphasis was orientated towards maintaining appropriate systems and managing associated risks to reputation. Addiction related, diversity and inclusion and ergonomic programs had strong relative associations with physical environments and policies. To a lesser extent, associations with checklists, toolkits and forms, and structures were observed.

Accounting for the performance of HPPs

The case for the relationship between health and productivity is not in dispute. Numerous reports testify to these links (Aldana, Merrill, Price, Hardy, & Hager, 2005; Baicker, Cutler, & Song, 2010; Goetzl & Ozminkowski, 2008; Scuffham, Vecchio, & Whiteford, 2014). Strong business performance translates to a healthier workforce as profits are reinvested back into the business. Similarly, poor health can inhibit performance and distract the focus of employees from important workplace processes.

However, content analysis findings suggest that framing the links between health and productivity within university contexts is problematic. Regarding observations around the implementation of HPPs (health issues and risk factors targeted, and activities employed), health appears to be inseparable from the contexts in which programs operate and the perceived benefits attributable to promotion. This appears to result in program decisions based on expected benefits to one group of actors (e.g. around branding, compliance or productivity) while other benefits such as health outcomes remain uncertain.

Figure 1 highlights performance measures referenced in the content analysis in relation to implementing HPPs. Each measure reported in the figure was generated when a university expressed information about different control arrangements for promoting employee health. Measures that were repeated more frequently across the sampled universities are displayed in a larger font size when compared to other measures. For example, *number of staff trained* is the largest measure in the figure as it was referenced by every university. This contrasts with several measures preceded by the words *number of* which were referenced by fewer universities.

[INSERT FIGURE 1 HERE]

A proactive approach to implementation was apparent with universities tracking the activity and output of committees, meetings, senior leaders, and operational staff. The most common measures for managing the business processes that support HPPs included monitoring the number of: awards and recognition, audits conducted, policies audited and reviewed, policy and guideline updates, partnerships established with experts, and the tracking of website activity. Four universities referenced each one of these measures in their website documents. Finally, although it was less common for universities to identify budgeting processes, two universities tracked expenditure against budgets (budget achieved) and one monitored health references in budgets.

Each university also measured the performance of selected programs. Performance measures were directly associated with addiction related, diversity and inclusion, employee assistance, ergonomic, and mental health programs. To measure this, universities track the number of diversity initiatives, ergonomic incidences, and staff trained to build mental resilience. Participation in employee assistance programs and the use of on-site services were also consistently monitored by universities. In

collaboration with a research study to promote stair usage, one university “used infrared people counters and manual observations to continuously monitor stair and lift usage” [Document: U5.045].

Nutrition and weight management and physical activity programs offered a good example of the tendency to evaluate implementation by analysing the demand for in-house and outsourced activities. As revealed in the discussion on program clusters, a diverse range of activities were implemented for these programs in comparison to others. However, participation in, and satisfaction with nutrition and physical activity programs was poor. Except for following up on participation rates and satisfaction, one university identified measures for tracking steps per workforce and weight loss per workforce, which were associated with outsourced activities such as Global Step Challenge and Weight Watchers. A program report described how “staff have lost over 270kgs through the Weight Watchers at Work program” [Document: U8.083]. It is interesting to note that programs with institutional benchmarks were the only programs that appeared to be evaluated on health outcomes. Universities were potentially reluctant to acknowledge the impact of HPPs on employee health outcomes without legitimate measures to support these claims.

Universities favoured objective measures of program performance over measures that were responsive to individual health requirements. Measures appeared to reflect concerns from health, safety and wellbeing personnel about the viability and authenticity of programs rather than the outcome on an individual’s health. An exception was found with one university that measured proactivity in developing key-performance indicators, and nature of initiatives undertaken. The latter measure was linked with diversity initiatives and was interesting because the “nature” of diversity initiatives is open for discussion and debate in comparison to quantitative measures (e.g. number of initiatives). The paradox with implementing several initiatives in support of employee diversity was the difficulties in unifying beliefs about social norms such as equality, sexual orientation and an intolerance towards violence.

CONCLUSIONS AND FUTURE RESEARCH

HPPs are defined in literature as the combination of activities that improve health outcomes for employees (Goetzel & Ozminkowski, 2008; Potvin & Goldberg, 2012). The purpose of the content analysis presented here was to identify the scope of HPPs in use by Australian Universities to identify

those strategies that are shown to have positive outcomes on health. While universities have targeted a range of health issues and risk factors; the documents that record their design and implementation demonstrate a keen focus on those activities that have strict legislative prerogatives. However, the analysis of the universities selected for this study—eight universities recognised for their novel uses of HPPs—revealed that “promotion” is more important than “health” when it comes to program implementation. Figure 1 in particular indicates that research should focus on the role that accounting for the performance of a HPP plays in its implementation.

In presenting this conclusion, a key limitation with content analysis studies is acknowledged in that it is spurious to assert that the frequency of documented references to programs is a fair representation of their importance (Smith, 2003; Weber, 1990) to the university in improving health. By focusing only on publicly available sources, this study has narrowed the data collection to the formalised management control systems disclosed through university websites. Senior management and other implementation stakeholders would have access to various communication channels for transmitting information such as electronic mail, video conferencing, social media platforms, and face-to-face communication. Future research would therefore need to follow the implementation of HPPs to more accurately capture the conversation of what matters more: making employees healthy or being seen to offer frameworks through which employees may make themselves healthier.

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TABLES

Table 1: Summary of the data set identified in the search strategy

University	Documents (e.g. webpages and reports)
U1	50
U2	72
U3	74
U4	88
U5	63
U6	38
U7	43
U8	69
Total	497

Table 2: Definition of the different types of HPPs

Type of program	Description
Addiction related (AR)	The different types of addiction related programs offered typically include behaviour related activities that prepare people to manage and quit their addictions and provide training and social support to assist people coping with necessary lifestyle changes (Gottlieb, 2002; Webb, Shakeshaft, Sanson-Fisher, & Havard, 2009). It is not only the lifestyle choices of employees but also their working conditions and other social situations that influence alcohol, tobacco and other substance misuse (Cercarelli, Allsop, Evans, & Velander, 2012; Roman & Blum, 2002; Willemsen, de Vries, van Breukelen, & Genders, 1998).
Disease management (DM)	Disease management programs aim to improve a person's health problems and reduce future issues associated with illness by targeting many illnesses (Jutkowitz, Nyman, Michaud, Abraham, & Dowd, 2015). Programs provide screening and health risk assessments (e.g., blood pressure monitors), education services and regular communication with relevant persons (e.g., patients, doctors and health service providers). By providing quality health services, education and support to people with illnesses, improved health and lower medical related costs are expected (Coughlin, Pope, & Leedle, 2006).
Diversity and inclusion (DI)	The focus of diversity and inclusion programs is commonly on workplace issues such as discrimination, harassment and bullying and personal issues such as family violence. The aim is to establish organisational policies that prevent this kind of adverse behaviour from occurring. The organisation of appropriate behaviours results from a wide range of activities including, but not limited to, developing an open and supportive culture and social values, improving policies, raising awareness and providing training (Vickers, 2006).
Employee assistance (EA)	Employee assistance programs focus on eliminating or reducing the impact of a wide range of health problems on work productivity (Kirk & Brown, 2003). Their focus is on people with pre-existing problems and providing interventions to treat and manage matters concerning these illnesses (Day & Randell, 2014; Goetzel & Ozminkowski, 2008).
Ergonomics (Er)	Ergonomic programs primarily aim to provide employees with appropriate working conditions and roles that are suitable for their physical and mental abilities (Bernard & Putz-Anderson, 1997). An important goal is to reduce and eliminate injuries relating to stress, bad posture and repetitive tasks (Galinsky, Swanson, Sauter, Hurrell, & Schleifer, 2000).
Mental health (MH)	Mental health programs aim to provide information and support to employees experiencing mental health problems. This requires interventions that strengthen people's ability to cope with adverse life events by enhancing their self-esteem, coping mechanisms and social support (Keleher & Armstrong, 2005).
Nutrition and weight	Nutrition programs aim to improve the food choices of employees by targeting increases in fibre intake and fruit and vegetable consumption, along with reductions in fat and sugar intake (Anderson et al., 2009). These programs typically provide consultations with

management (NW)	dietitians (e.g., to assist with dietary modifications), counselling, health risk assessments and recipe advice to help employees set and achieve their nutritional goals (Glanz & Kristal, 2002; Linnan et al., 2008). The emphasis is on improving the attitudes, behaviours and knowledge of employees in ways that encourage healthy eating habits (Glanz & Kristal, 2002). Similarly, weight management programs primarily aim to encourage and assist employees in achieving a healthy weight. Thus, techniques for managing weight include walking groups, tailored exercise programs, and access to fitness facilities (Henrikus & Jeffery, 1996). In addition, specific information on weight is necessary and can be provided through seminars, counselling, interventions like “Weight watchers”, and the provision of information and equipment such as pedometers to assist with managing weight (Morgan et al., 2011; O'Donnell, 2002).
Physical activity (PA)	Physical activity programs are increasingly being used by organisations to improve employee health and productivity by addressing physical inactivity (Gebhardt & Crump, 1990). Organisations with many employees typically provide on-site exercise facilities and other financial incentives to participate in programs. Organisations with fewer resources typically include basic activities such as providing education on the types of activities and their benefits, fitness breaks, encourage employees to take the stairs rather than using elevators, participate in walking groups, and cycle to work (Dishman, DeJoy, Wilson, & Vandenberg, 2009; Kahn et al., 2002; Linnan et al., 2008; Wilson, Griffin-Blake, & Dejoy, 2002).

Table 3 – Health issues targeted by universities through implemented HPPs

Health issues	Document Coverage	Number of programs universities used to reference health issue								
		U1	U2	U3	U4	U5	U6	U7	U8	Total
Cancer	28	1	2	1	3	1	2	1	4	15
Cardiovascular disease	28	0	2	1	4	0	2	0	4	13
Diabetes	36	1	1	1	4	0	2	1	3	13
Lung and kidney function	8	0	0	1	2	0	1	0	0	4
Mental health	125	3	6	3	4	1	3	2	4	26
Musculoskeletal conditions	15	1	3	0	1	1	1	0	2	9
Oral health	13	0	0	0	0	1	0	0	1	2
Respiratory conditions	7	0	2	0	1	0	1	0	2	6
Total		6	16	7	19	4	12	4	20	88

Table 4 – Health issues targeted by HPPs across each university

Health issues	Document Coverage	Number of universities with programs that reference health issue								
		AR	DM	DI	EA	Er	MH	NW	PA	Total
Cancer	28	5	6	0	0	2	0	1	1	15
Cardiovascular disease	28	1	4	0	0	2	1	2	3	13
Diabetes	36	0	6	0	0	1	1	2	3	13
Lung and kidney function	8	0	3	0	0	0	0	1	0	4
Mental health	125	0	1	6	7	0	8	2	2	26
Musculoskeletal conditions	15	0	1	0	0	6	0	0	2	9
Oral health	13	0	2	0	0	0	0	0	0	2
Respiratory conditions	7	1	3	0	0	1	0	0	1	6
Total		7	26	6	7	12	10	8	12	88

Table 5 – Health risk factors targeted by universities through implemented HPPs

Health risk factors	Document coverage	Number of programs universities used to address health risk factor								
		U1	U2	U3	U4	U5	U6	U7	U8	Total
Alcohol and other addictions	92	3	2	4	3	3	4	2	5	26
Biomedical factors (e.g. evaluations)	26	1	1	1	3	1	1	1	2	11
Discrimination and harassment	139	1	1	2	3	2	3	1	2	15
Domestic violence	40	1	1	2	1	1	1	1	1	9
Food and nutrition	28	1	1	1	3	1	1	1	1	10
Overweight and obesity	27	2	2	1	5	2	2	3	2	19
Physical activity	67	1	4	2	4	1	3	1	2	18
Smoking	60	2	2	2	2	1	2	1	2	14
Social determinants	95	3	6	4	5	5	5	4	6	38
Total		15	20	19	29	17	22	15	23	160

Table 6 –Health risk factors targeted by HPPs across each university

Health risk factors	Document coverage	Number of universities with program addressing health risk factor								
		AR	DM	DI	EA	Er	MH	NW	PA	Total
Alcohol and other addictions	92	8	4	0	7	0	6	1	0	26
Biomedical factors (e.g. evaluations)	26	0	7	0	0	0	0	1	3	11
Discrimination and harassment	139	0	0	8	3	0	4	0	0	15
Domestic violence	40	0	0	8	1	0	0	0	0	9
Food and nutrition	28	0	2	0	0	0	1	6	1	10
Overweight and obesity	27	2	5	0	0	1	3	6	2	19
Physical activity	67	0	4	0	0	0	2	4	8	18
Smoking	60	8	4	0	1	0	1	0	0	14
Social determinants	95	3	4	8	8	3	8	0	4	38
Total		21	30	24	20	4	25	18	18	160

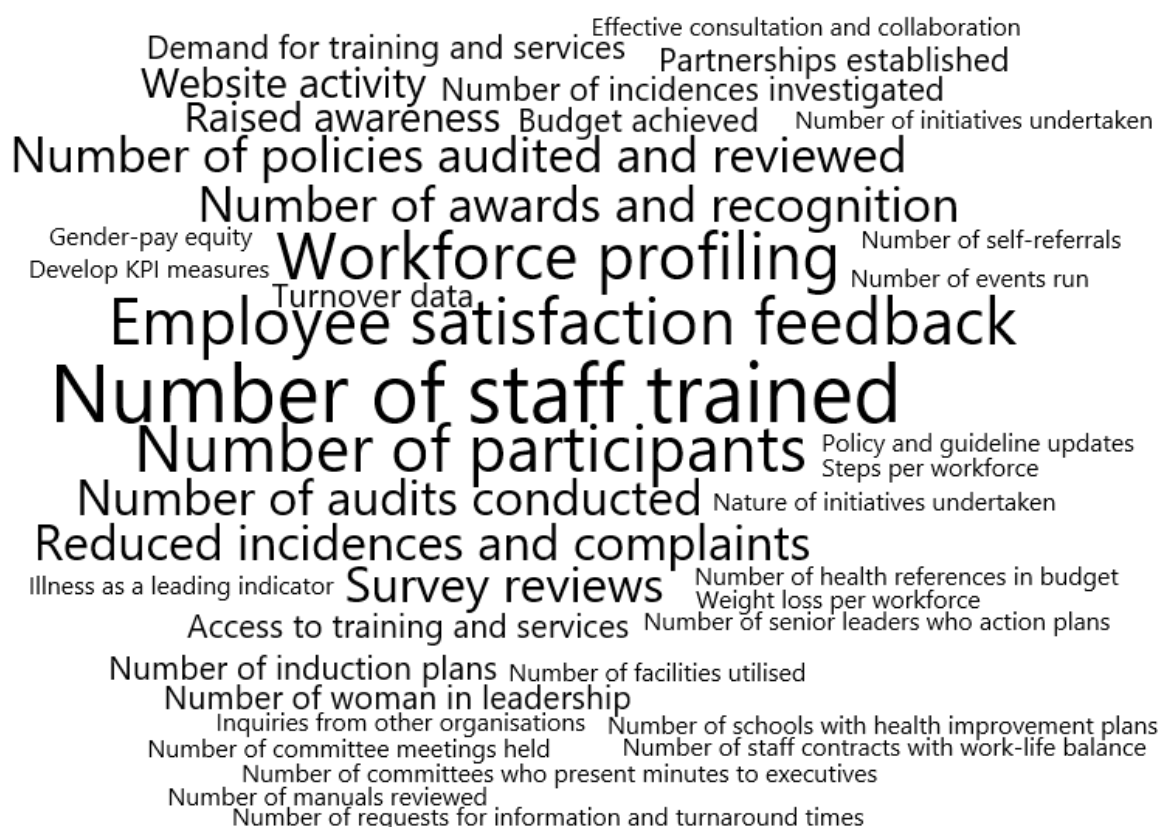
Table 7 Activities targeted by universities through implemented HPPs

Activity	Document Coverage	Number of programs at each university with reference to activity								
		U1	U2	U3	U4	U5	U6	U7	U8	Total
Awareness and behaviour change										
Brochures, flyers, guides and posters	75	3	2	4	6	4	3	5	8	35
Checklists, forms and toolkits	28	4	1	3	1	4	0	1	3	17
Coaching, counselling and mentoring	68	4	3	4	5	3	2	2	4	27
Courses and training	93	3	3	2	7	3	4	4	7	33
Extrinsic motivation	65	2	6	4	7	5	3	3	6	36
Health-risk assessments	36	1	2	1	2	2	5	2	4	19
Supportive environments										
Clinics and centres	57	4	4	3	4	3	3	5	4	30
Culture	100	4	6	2	5	4	3	2	5	31
Employee ownership and involvement	87	3	5	4	5	5	1	2	6	31
Physical environments	50	1	4	2	3	3	2	3	3	21
Policy	143	4	3	5	6	3	2	4	4	31
Structure	55	0	2	2	2	4	0	1	3	14
Total		33	41	36	53	43	28	34	57	325

Table 8 –Activities targeted by HPPs across each university

Activity	Document Coverage	Number of universities with programs that reference activity								
		AR	DM	DI	EA	Er	MH	PA	NW	Totals
Awareness and behaviour change										
Brochures, flyers, guides and posters	75	3	1	7	7	5	7	3	2	35
Checklists, forms and toolkits	28	1	0	5	1	4	4	1	1	17
Coaching, counselling and mentoring	68	6	1	7	8	0	5	0	0	27
Courses and training	93	2	3	7	3	4	8	4	2	33
Extrinsic motivation	65	3	8	2	8	0	5	6	4	36
Health risk assessments	36	0	8	0	0	3	2	4	2	19
Supportive environments										
Clinics and centres	57	3	8	5	0	0	4	8	2	30
Culture	100	4	0	8	2	2	4	6	5	31
Employee ownership and involvement	87	4	2	8	2	3	4	4	4	31
Physical environments	50	8	0	6	0	5	0	2	0	21
Policy	143	8	5	8	2	5	3	0	0	31
Structure	55	0	1	4	0	3	4	1	1	14
Total		42	37	67	33	34	50	39	23	325

Figure 1 – Measurement Word Cloud



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Entrepreneurial Learning and Fear of Failure: An Empirical Investigation in the Context of International Opportunity Evaluation

ABSTRACT

International opportunity evaluation, as a key stage of decision-making encompassing both cognition and emotion. Using interpretative phenomenological analysis (IPA) from a qualitative approach, we find that learning is highly adaptive and beneficial to manage the fear of failure when evaluating the international opportunity, contributing to the coherence between thinking and feeling resultantly. Our convergent finding manipulates a learning framework, integrating experiential learning method and social learning method, illustrating (1) entrepreneurs engage fearful emotions to gain resilience (2) entrepreneurs reflect critical internationalisation experience and co-creation of contextual uncertainty reduction. Consequently, learning increases not only the entrepreneur's motivation regarding evaluating the opportunity desirability but also the self-efficacy concerning the opportunity feasibility.

Keywords: learning, fear of failure, international opportunity evaluation

INTRODUCTION

Although entrepreneurs and their SMEs (small and mediums sized enterprises) embrace international opportunities from globalisation, high failure rates of small ventures (Cope, 2011) or unexpected decreased involvement in international market, such as withdraw, divestment or de-internationalisation (Lafuente, Stoian, & Rialp, 2015), may trigger fearful reactions by entrepreneurs. Entrepreneurship, as a highly personal experience rich in affect, is central to the individual entrepreneur's feelings and emotions (Morris, Kuratko, Schindehutte, & Spivack, 2012). Essential to entrepreneurship, fear of failure is the experience anticipating emotion, cognition and action that affects how entrepreneurs make decisions (Cacciotti, Hayton, Mitchell, & Giazitzoglu, 2016). "It is perhaps not that insightful or unique anymore for affect and cognition research simply to argue-or show-that what people think and feel influences their behaviour, but more insightful to consider how, when and why such cognitions and emotions change" (Grégoire, Cornelissen, Dimov, & Burg, 2015) (p.135). With so many distinct entrepreneurship literature research the fear of failure (Cacciotti & Hayton, 2014; Cacciotti et al., 2016), we believe it is critical to move beyond the cause of the fear of failure but to understand further how to manage the fear of failure and handle that situation by entrepreneurs. In the light of these developments, the central question guiding this study naturally arises: how does an entrepreneur manage the fear of failure in the context of international opportunity evaluation?

We try to answer this question from a learning perspective. Entrepreneurship is a process of learning because each stage encompasses continuing application of new knowledge throughout entrepreneurs' professional lives (Minniti & Bygrave, 2001). Entrepreneurial learning means a

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continuous process that facilitates the development of necessary knowledge for being useful in starting up and managing new ventures (Politis, 2005) (p.g 401). The learning domain has a promising space in entrepreneurship research (Wang & Chugh, 2014). Entrepreneurs must learn from their decisions, from mistakes, from experience and their networks for the growth of their SMEs (Deakins & Freel, 1998). Some research exploring ‘Learning from failure’ are flourishing (Cope, 2011; Politis & Gabrielsson, 2009; Shepherd, 2004), and they highlight the role of affect (Grégoire et al., 2015).

Internationalisation is a learning process of relationship and commitment (Johanson & Vahlne, 2003, 2009). Notwithstanding internationalisation ‘experience’ remains a hot topic to explain a firm’s learning behaviour (Giarratana & Torrisci, 2010; Jones & Casulli, 2014; Manolova, Brush, Edelman, & Greene, 2002; Oviatt & McDougall, 1997). A firm’s international business experiences are more likely to influence its international commitment decisions, especially for international new ventures (Oviatt & McDougall, 1997). The dynamic learning capability (Weerawardena, Mort, Liesch, & Knight, 2007) and individual learning is more likely to occur in small firm’s internationalisation (Anderson & Boocock, 2002). Entrepreneurs draw on their international experiences and skills when internationalising their SMEs (Manolova et al., 2002), such as foreign market entry and survival (Giarratana & Torrisci, 2010). Most International Business (IB) research focuses on knowledge transfer in deciding the internationalisation (De Clercq, Sapienza, Yavuz, & Zhou, 2012), but the emotional role remains absent.

International opportunity evaluation (IOE) fertilises a rich background to explore the interplay of learning and emotion. Psychology literature indicates fear of failure affects decision-making (Conroy, Willow, & Metzler, 2002). Opportunity evaluation is defined as a “future-focused activity that informs but is separate from the decision to exploit, and also one that represents a first-person – rather than at third-person – assessment of opportunity” (Haynie, Shepherd, & McMullen, 2009) (p.g 353). IOE, as a new concept in International Entrepreneurship literature, implies an important stage when deciding to choose foreign markets and the degree of internationalisation (Chandra, 2017a). We argue that managing the fear of failure in the critical stage of IOE may contribute to better decision-making.

This paper addresses this research enquiry through the lens of learning, aiming at developing a profound understanding of this prominent phenomenon. We sought to make contributions in several

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ways. First, we move from ‘learning from failure’ yet to the fear of failure to open a new research avenue. Second, most learning literature on entrepreneurial opportunity studies are still on the conceptualisation stage (Corbett, 2005; Holcomb, Ireland, Holmes Jr, & Hitt, 2009; Politis, 2005; Rerup, 2005; Ucbasaran, Wright, Westhead, & Busenitz, 2003) and ignores opportunity evaluation (Corbett, 2007; Dimov, 2007; Rae, 2004, 2006; Smith, Matthews, & Schenkel, 2009), this paper adds empirical weight to the extent discussion on learning and fear of failure in relation to opportunity evaluation. Besides, we contribute to the IB literature by highlighting the role of learning in the firm’s internationalisation activity. Additionally, our research helps entrepreneurs who confront fear of failure to develop a learning identity: person’s belief about themselves particularly their views about their ability to learn (D. A. Kolb & Yeganeh, 2011). Our research implication is beneficial to designing entrepreneurship training programmes as well as put new awareness to occupational health: entrepreneurs need to manage the fear of failure to keep mental healthy.

First, we review the experiential learning approach and social learning approach in line with ‘*the social theory of learning*’ (Wenger, 1998), serving as the theoretical foundation of this article. Then we present the discussion of literature review. It is followed by presenting methodology, analysis and findings. Prior to our implication and conclusion, we point to avenues for future research.

THEORETICAL OVERVIEW OF ENTREPRENEURSHIP LEARNING

Experiential learning is a “whole-person” learning whereby feelings, emotions and cognitive aspects related to the learning event matter (Rogers & Freiberg, 1969) thus combining the affective and behavioural domains with the cognitive field (Kenderdine & Keys, 1974). It focuses on individual experiences that develop learning and perceptual capacities, develop and reinforce cognitions, and impact on emotions and attitudes (Hoover, 1974). consequently, individuals develop the capacity to behave consistently with the insights of these processes and experiences (Hoover, 1974).

Experiential Learning Theory notes that people respond in a way they have done in the past, defined as “the process whereby knowledge is created through the transformation of experience” (D. Kolb, 1984). It presents an account of transforming experience into knowledge and highlights the centrality of experience in the learning process. It occurs when an entrepreneur learns from experience

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and accumulate newly formed knowledge in memory (D. Kolb, 1984). The process of entrepreneurial learning is experiential: entrepreneurs' career experience, the transformation process and entrepreneurial knowledge regarding recognizing and acting on entrepreneurial opportunities and coping with the liability of newness (Politis, 2005), and may explain the decision of habitual entrepreneurship from previous ownership experience (Ucbasaran et al., 2003). Thus, entrepreneurial learning is a dynamic experiential process of awareness, reflection, association, and application; whereas the utilisation of entrepreneurial learning may take place longer than the experience itself (Cope, 2005) (p.g 387).

Social Learning Theory emphasized on the process of how individuals participate in the outside world. It focuses on “learning by doing”: it concentrates more on behavioural and environmental influences than cognitive influences concerning sense-making (Bandura & McClelland, 1977). Learning occurs through social interaction such as contact with other people, observation and imitation of role model behaviours. Vicarious learning, also labelled as observational learning, is highlighted from social learning theory: learning involves modelling the behaviours and actions of others (Bandura & McClelland, 1977). Individuals establish their learning from their observations towards to the outside world and thereby they can imitate others' behaviour (Bandura, 2002), and knowledge formed in this manner as a template for emulating their behaviours or actions (Holcomb et al., 2009).

Some arguments may arrive at the overlap between the *Experiential Learning Theory* and *Social Learning Theory* because an individual may also reflect the prior experience of social interaction to learn. Thus, *Social Learning Theory* was modified by Wenger (1998) as ‘***the social theory of learning***’ who argues that learning is a systematic experience: learning as doing, belonging and becoming. Wenger's work serves as a link between *Social Learning Theory* and *Experiential Learning Theory*. We agree that *Experiential Learning Theory* and *Social Learning Theory* compliment and support each other but differ in learning skills/methods: the reflection of prior experience (inward learning) and the interactive communication/vicarious observation (outward learning). Therefore, entrepreneurial learning is defined as the process by which people acquire new knowledge from direct experience and from observing the behaviours, actions, and consequences of others (p.g 172) (Holcomb et al., 2009).

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THE CONTEXT OF IOE

We attempt to extend the learning domain to study IOE. There is a growing interest in applying the learning perspective to the study of entrepreneurship opportunity (Corbett, 2005; Ucbasaran, Westhead, & Wright, 2009). Here we summarised the literature review in Table 1. Some research employs an experiential approach focusing on prior experience (Corbett, 2007) and knowledge acquisition (Shane, 2000; Smith et al., 2009) to explain why some entrepreneurs discover more opportunities while others may not. Conversely, other research highlights vicarious learning from a social learning approach (Cope, 2005; Dimov, 2007; Rae, 2004, 2006). While learning shines in opportunity research (Corbett, 2005; Politis, 2005; Shepherd & DeTienne, 2005), they are imbalanced due to most researchers have focused on opportunity identification and exploitation rather than evaluation (Wood & McKelvie, 2015). Lumpkin, Hills, and Shrader (2004) consider evaluation as the most explicit ‘learning’ stage because entrepreneurs can learn during the evaluation phase because learning can determine their next decision on ‘moving forward’ or ‘looping back’. ‘People-orientation’ is a focus during the evaluation phase because entrepreneurs should work from a number of divergent opinions concerning the fit between the opportunity and the marketplace (Corbett, 2005). Furthermore, Welch and Welch (2009) indicate a learning challenge in the internationalisation: the difficulty of anticipating what specific lessons an individual will take from previous internationalisation activity: the connection between prior international experiences and its outcomes, and type of learning (p.570).

Insert Table 1 about here

We choose China as the context of the investigation. China embraces exporting, offering a unique and favourable institutional environment to explore entrepreneurs’ internationalization activities. First, entrepreneurs do not have internationalisation experience until China established the ‘open-door’ policy in 1979. Fear of failure might be one of the most distinctive characters due to this historical reason: they are the first generation entrepreneurs to trade internationally. Second, large trade corporations dominate international business in China (Gao, Ballantyne, & Knight, 2010; MacBean, 1996) that possess key networks across borders (Ellis, 2011). Meanwhile, SMEs operate the business in a less open environment in comparison. Ellis (2011) suggests that China’s entrepreneurs are still at a learning stage

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about internationalisation activities, and they need to improve their knowledge and capabilities necessary for expanding the business into international markets (Liu, Xiao, & Huang, 2008).

RESEARCH METHOD

Qualitative research is deemed appropriate for this phenomenon-driven research, to empirically explore entrepreneurial learning (Wang & Chugh, 2014) and the management of failure emotions (Shepherd, 2004) regarding opportunity activities (Ucbasaran et al., 2003). This study is based on interview data with 22 entrepreneurs and their SMEs (Table 2), concerning the nature of consciousness and the first-person’s subjective character and reflect upon and make sense of their entrepreneurial experience (Morris et al., 2012). We asked participants questions such as “Going back to the example/situation you described just now, was there anything you learned from it?” “In that situation, what individual characteristics/skills helped you manage your attention to learn new information and eventually to better evaluate this IO?”

Insert Table 2 about here

An inductive approach is warranted for creating a rich understanding of data analysis and demonstrating rigour of qualitative research. We employ Interpretative Phenomenological Analysis (IPA) to scrutinize each transcript to identify critical descriptive codes describing the phenomenon based on the interviewed participants’ accounts. Then we interpret the meaning of information and collate descriptive codes that share some common meaning. The overarching themes that would represent the key theoretical understanding referring to the research question and theoretical framework.

Insert Table 3 about here

RESEARCH FINDINGS AND DISCUSSION

We re-examined our interview data though moving back to the literature review. Our data revealed entrepreneurs’ learning experience regarding international opportunity evaluation and its effort in managing the fear of failure. Our analysis of interview data allows the theoretical conceptualisation. In doing so, we offer propositions explaining the dynamic learning experience to evaluate an international opportunity better. We report our analysis with representative illustrative data in tables.

Insert Table 4 and 5 about here

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Entrepreneurs fear failure when evaluating an IO: *“Facing with this failure, it is inevitable for me to fear to enter an unknown market, because I do not understand, not understand its business habits, not understand the political and business environment”* (Chen). Participants demonstrate that fear of failure triggers them to learn more for the sake of a more in-depth analysis of IO:

I worry about the failure of this opportunity. Or I can analyze my resources which are not enough, where the allocation does not match my resources and this business. I need a more in-depth analysis: for example, relate to the competitors of the product, my product quality is excellent, but the price is relatively high. (Jinguan Li)

Individuals with higher level of fear of failure places greater emphasis on potential value if exploiting a certain opportunity while less emphasis on the number of potentially available opportunities (Mitchell & Shepherd, 2010). Fear of failure implies an individual’s self-evaluative framework that determines how they will define, orient to and experience failure in achievement situations (Heckhausen & Baltes, 1991). Consequently, learning leads to changing the perception of failure. Participants tend to view potential failure as a learning opportunity, and view the loss as learning cost: *“Even though big state-owned companies have to lose money to pay tuition fee, regardless to say SMEs owned by individuals. There is no possibility for SMEs to win. Therefore, I regard the consequence of failing as the payment of tuition fee.”* (Yuan) Furthermore, participants perceived the potential failure consequence as a temporary stage rather than the final consequence. They hold the belief in the possibility of success in the long-term. *“I think there is nothing scary about success and failure. Failure is temporary, and I think there is nothing to be afraid of”* (Chu).

Our finding on the perception of IO failure is in line with (Chandra, Styles, & Wilkinson, 2009): the first IO may not be profitable for the SME owner’s venture, but it can be beneficial to entrepreneurs as it generates internationalisation experiences and learning as well as networks for future IOs. But we argue it is a learning outcome in managing the fear of failure. Fear of failure shapes an individual’s perceptual outlook of a certain achievement situation: they tend to feel being threatening, judgment of the global self instead of viewing it as an opportunity to learn or improving their competence or competition (Conroy, 2001). Instead of emerging in negative emotions, participants adjust their mental

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state to view the consequence of failure rationally as a learning journey, Xiao said as follows: *“First of all, failures are setbacks on the road of life, which is also an exercise for me. It is natural”*. (Xiao)

Although analysis and rational thinking influence on the choice by an entrepreneur, it is still a result of one’s sense of an experience of panic, flow, overwhelming burden, self-actualization emerged from their venture and the context (Morris et al., 2012). The overall learning journey contributes to enhancing the coherence between thinking and feeling regarding international opportunity evaluation. For example, Zhu illustrates as follows:

“What I have learned can be summarized as being rational, being modest to evaluate and make a judgment, whether what they talked can really make sense or not. Therefore, I get to integrate them into my own theory, to determine the validity and feasibility of an IO. I have to evaluate this IO to think about whether we can undertake it or not according to the current situation of my enterprise. (Zhu)”

(1) Learning and emotion

Entrepreneurs learn from engaging fearful emotions to gain resilience. A few participants sought to re-reflect challenging emotions, such as overseas fraud experience (Yuan), closed business experience (Han), exit the overseas market (Zhou) or failure of internationalisation (Chu), and lawsuit (Liangwen): *“My prior experience did some help. Some experiences let me feel painful”*. Our finding supports Chandra (2017b): entrepreneurs often made major mistakes or encountered setbacks in international markets, and these experiences offer learning opportunities (p.438). The prior ‘hard’ experience contributes to managing the fear of failure:

“First of all, for investor, the normal psychological quality, it comes from two factors. First, his previous experience, because what he had experienced before, especially he experienced similar issue before, he knew how to deal with it. Because a lot of things are negative, he has experienced, he must know it clear, if he got through before, he can handle it, it is a kind of psychological quality, this is the previous experience, the best thing that happens to be the same thing happens to him. His reference case happens. He can do it better...” (FU)

Other participants prefer to communicate hardship with the trustworthy contact to manage the fearful emotion, such as chatting and talking about their difficulties or challenges with trustworthy contact, such as friends, peers or teachers and close-relatives.

I put myself as a normal person, regard (my business) as a normal thing, will be like a parabola, have high and low. There is success while there is failure. There are no ever-victorious generals. No one may be plain sailing. You've got it done, it might fail, then fail how to face it. Ah, first adjust my own mental state. Isn't it? I would be frustrated by failure, discouraged me. I would have a look, looking

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for a friend to chat to eat a meal, adjust my own mentality. Adjust the state of mind is good, you will be able to do things afterwards. (YUAN)

An individual's affective state, including their mood and emotions, influence their decision-making (Foo, 2011). Indeed, our research finding supports that the entrepreneur is learning from their emotions, such as their comfort level with ambiguity, risk tolerance, ability to handle stress and need for control, leading to self-discovery regarding one's comfort with growth, innovation, or change that impacting on making decisions (Morris et al., 2012). Learning contributes to managing the fearful emotion so that participants strengthen their mental ability confronting the fear of failure: *"When the corresponding fear and worry may slowly be weakened, I will certainly think of a solution."* (Qiang)

Fear of failure itself is a motive for individuals to avoid disappointment and the emotion of shame and embarrassment (Carsrud & Brännback, 2011). We find that learning in managing fearful emotions increases entrepreneur's motivation concerning IOE: *"Eh, as a matter of fact, everyone fears failure, but everyone pushes their head to move forward, just like a gambler, the same with being a person and the way to do business. Everybody looks at the same direction and move forward rapidly to the same goal"* (Zhu). Motivation is defined as "a drive or force within the organism that activates behaviour or directs it towards a goal" (Coon, 1983). An individual's motivation is predominanting in encouraging entrepreneurs to start international activities and subsequently choosing scale and scope of operations by firms in international markets, as well as their effort in IO activities and setting and achieving internationalisation goals (Zahra, Korri, & Yu, 2005).

It is due to that learning generates new knowledge to enhance the evaluative assess on opportunity desirability, relying on the potential value of an entrepreneurial opportunity, which is based on both the economic return and social contribution of the entrepreneur's effort (Venkataraman, 1997). Participant Zhu demonstrates his learning experience in relation to opportunity desirability.

Generally, I learned when I get a product, during the negotiation, I have a look of this product and I have to know my profitable point and their profitable point. I can make an evaluation at the first moment. Then I know how to get the economic return from exporting this product, as well as the way to make the profit, I have a probable evaluation inside my brain. I should have a probable business strategy in my mind. I feel confident about this IO. (Zhu)

As a behavior response, entrepreneurs accept failure can occur anytime but still be motivated to evaluate this IO:

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“Then when we evaluate an international business opportunity, I will think of this thing if made it happen. I will go on a good side. I will not keep thinking ‘can’t do’ like this. I will have an optimistic attitude to overcome this fear, this feeling. Then let me use a better rational way to deal with this transaction with an analysis. (Xiao)”

(2) Learning and cognition

Fear of failure has a negative impact on forming an expression of a certain opportunity: opportunity expression is individualized as one relates his/ her knowledge to the opportunity as well applying his/her task-specific motivation, fear of failure and experience with previous business failure (Mitchell & Shepherd, 2010). Our finding indicates that participants reflect key decision-making experience to manage the fear of cognitive unknown of the internationalisation, particularly critical risk assessment experiences such as prior entered markets, relevant working experience, and the critical decision-making experience. *“It is the main experience, experience. Then there is the personal quality, the mental quality. I’m not afraid of this failure, and be willing to take on this risk. (Chu)”*

Other participants demonstrate vicarious learning from the public internationalisation case or consult about critical information and knowledge on international market: *“When I met a problem, I asked questions to relevant experts, expanding the scope of information, and enriching information channels” (Jinguan Li)*. The learning aim is the co-creation of contextual uncertainty reduction, contributing to enlarge the information source required by IOE, and to understand an IO more in-depth. *“That is to say my business, in fact, I usually have to continue to absorb all kinds of knowledge and multi-level of information. Then I put all of this information when it comes to a summary, combined with my own business; I will see the opportunity more clearly (Mao).”* Ellis (2011) highlight the importance of what they know and who they know (networks) in the context of internationalisation. Successful entrepreneurs should be capable to use multiple information sources providing new knowledge on the potential opportunity; then utilize appropriate knowledge gained from prior learning and experience to value the opportunity (Fiet, 2002).

Our finding demonstrate a trying attitude after learning the learning outcome in managing the fear of cognitive unknown. *“I try the ‘water’ first, and so feel good next and more single. These controllable factors must be controlled” (Guo)*. An opportunity emerges from an individual’s perception that the situation is controllable (Barbosa, Gerhardt, & Kickul, 2007). Entrepreneurs require the capability of

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action-taking to achieve a goal in the presence of fear (Kilmann, O'Hara, & Strauss, 2010). Learning helps participants to generate courage and confidence regarding IOE, shedding light on the notion of self-efficacy (Bandura, 1997), that means “people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their levels” (p.71).

Courage and confidence, of course, is to understand the market, to seize a business opportunity after the thorough understanding of the entire information. If you do not have enough self-confidence, of course, opportunities and risks coexist. Anything is risky, but I have a chance. Of course, you assess the risk, you can afford, and be able to control. Even if there is any problem, you have a guaranteed end without any problems, then this opportunity is entirely possible to try. Yes, not anyone like me, I think no need to fear this failure. (Chu)

Self-efficacy has an impact on one’s thoughts, actions, and emotions (Bandura, 1982), playing a critical role in relation to IO activities (Muzychenko & Liesch, 2014) and subject to the social context (Wilson, Kickul, & Marlino, 2007). The perceived possibility of failure is a key determinant for individuals to make a decision to pursue opportunities, and this is influenced by an individual’s self-confidence and fear of failure (Ucbasaran et al., 2009). Fear of failure influences opportunity evaluation from its negative impact on entrepreneurs’ self-esteem and self-efficacy (Shepherd, Patzelt, & Wolfe, 2011). Thus, learning in manage the fear of cognitive unknown contributes to increasing the perception of opportunity feasibility, refers to an individual’s perception that they have the requisite knowledge about a specific opportunity (Krueger & Carsrud, 1993). Therefore, it enhance the self-efficacy concerning IOE: *“It depends on some professional analysis. Now I think that I cannot take ‘the fear’ as the point of view because there are risks when I confront any problem. Therefore, there is no need to me to fear failure”.* (Li jinyun)

THEORETICAL DEVELOPMENT

We draw the *Social Theory of Learning* to inform investigations on the fear of failure and IOE. Fear of failure is an experience which encompassed both affect and cognition, embodied in the mind and emotions of the individual (Cacciotti & Hayton, 2014). Learning, with its effects in managing the fear of failure both cognitively and emotionally, support successful IOE because of their impact on improving the coherence between thinking and feeling. We echoed that learning is not static and isolate construct, but dynamic ongoing experiences existing in a certain time and situation (D. Kolb, 1984) and

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a continuous process involving an individual’s interaction with the environment (Bandura & McClelland, 1977). Our findings emphasize the ‘moving back and forth’ between experiential learning method and social learning method to (1) engaging fearful emotions to gain resilience through reflecting challenging emotional experience and communicating hardship with the trustworthy contact (2) critical reflection of internationalisation experiences and co-creation of contextual uncertainty reduction. As a result, learning contributes to managing the fear of failure in IOE by increasing motivation and perceived opportunity desirability, and increasing self-efficacy and perceived opportunity feasibility. Our results lead us to conjecture the following framework (Figure1).

Insert Figure 1 about here

Proposition 1: learning through engaging fearful emotions to gain resilience moderates the relationship between fear of failure and international opportunity evaluation, enhancing motivation and perceived opportunity desirability.

Proposition 2: learning through critical reflection of internationalisation experiences and co-creation of contextual uncertainty reduction moderates the relationship between fear of failure and international opportunity evaluation, enhancing self-efficacy and perceived opportunity feasibility.

CONCLUSION

We make efforts on uncovering how ‘learning’ makes an impact to manage the fear of failure in relation to IOE, offering an exploratory attempt to explain that learning does not limit to knowledge on what works and what does not. Marrying the experiential learning method and social learning method with their application in exploring IOE, we integrate the research of learning to a new avenue: learning helps to manage negative emotions such as the fear of failure. Moreover, our study forges a new research that focuses on the dynamic aspect of learning from the fear of failure in internationalisation research. Our finding based on this theory-building study. Large samples across different international settings are encouraged to test our proposition. Our research adds value to the training programs in entrepreneurship education. Furthermore, our investigation of learning and fear of failure can support decision-makers to better evaluate international opportunities.

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APPENDIX

Table 1 Literature review on learning and entrepreneurial opportunity

Author(s), year	Research Topic	Focus on entrepreneurial opportunities	Literature /Theory Base	Method	Data and Measurement	Key Findings Focusing on learning and entrepreneurial opportunities
(Ucbasaran et al., 2003)	The impact of Entrepreneurial experience	Opportunity identification and exploitation	Attribution Theory	conceptualization	N/A	Entrepreneurial experience is an important component of human capital resource impacting on subsequent activities of opportunity identification and exploitation. The extent to which entrepreneur can translate previous ownership experience into subsequent entrepreneurial performances depends on learning and learning from experience may influence the decision of habitual entrepreneurship.
(Rae, 2004)	Practical theory and entrepreneurial learning	Opportunity recognition	Practical theory	QUAL	Thirty entrepreneurs have been interviewed on their life stories.	Recognising and acting on opportunities is a contextual learning outcome, including learning through industry or community experience and socialisation with other cultural, industry and community.
(Politis, 2005)	The process of entrepreneurial learning	Opportunity recognition and opportunity exploitation	Experiential learning theory	conceptualization	N/A	The process of entrepreneurial learning is conceptualized as an experiential process: entrepreneurs' career experience, the transformation process and entrepreneurial knowledge regarding to recognizing and acting on entrepreneurial opportunities and coping with the liability of newness.
(Corbett, 2005)	Experiential learning	Opportunity identification and exploitation	Experiential learning theory	conceptualization	N/A	(1) Learning is the manner that an individual transform their experiences, expertise and prior knowledge into new entrepreneurial knowledge. (2) Individual learn in different ways that matters who identifies what opportunity.

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						(3) The effectiveness of different learning styles varies through different stage of the opportunity identification and exploitation process.
(Rerup, 2005)	Learning from past experience and mindfulness	Opportunity discovery and opportunity exploitation	Behavioural learning theory and mindfulness theory	conceptualization	2 cases (Hajilaonou and the easy Group) are applied to explain mindless and mindful opportunity discover and exploitation	Habitual entrepreneurs' use of past experience may improve the performance of their ventures; The degree of mindfulness with which entrepreneurs use prior experience can both help and harm their ability to discover and exploit opportunities.
(Rae, 2006)	Entrepreneurial learning	Opportunity creation, recognition and development	Wenger's social theory of learning	QUAL	In-depth life story interviews with ten entrepreneurs from technology-based enterprise.	Contextual learning includes an individual's social participation in community, industry and other networks through one's experiences, and as a learning outcome, it leads to the recognition and enation of opportunities in specialised situations
(Dimov, 2007)	Person-situation learning match	Opportunity intention	Experiential learning theory	QUAN	Experiment on 95 MBA and executive MBA students.	The importance of person-situation-learning match indicates that the likelihood of acting on the initial opportunity, not only depends on the entrepreneur's prior knowledge but also their learning style matches the situation at hand.
(Corbett, 2007)	Learning asymmetries	Opportunity identification	Experiential learning theory	QUAN	A survey with an embedded quasi-experiment based on 380 technology professionals.	Learning asymmetries (the different manner in which individuals acquire and transform information) not only exist, but also have a profound effect on why some individuals discover opportunities while others do not.
(Smith et al., 2009)	Tacitness and codification in opportunity identification	Opportunity identification	Tacitness and codification	QUAN	Test hypothesis based on the sample: The Panel Study of Entrepreneurial	Their finding implies entrepreneurial learning: relatively more codified opportunities are more likely to be discovered through systematic search, whereas more tacit opportunities are

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					Dynamics (PSED)	more likely to be identified due to prior experience.
(Holcomb et al., 2009)	Entrepreneurial learning among heuristics, knowledge and action	Opportunity-seeking behaviour	Experiential learning theory and vicarious learning	conceptualization	N/A	An entrepreneur's familiarity of a class of opportunities positively influence the perceived future probabilities of opportunities.

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Table 2 description of data (Participants and their firms)

<i>Participants *Coded names</i>	<i>Venture starts in</i>	<i>First IO (year)</i>	<i>industry sector</i>	<i>Internationalisation percentage and yearly revenue (RMB: Million)</i>		<i>No of staffs</i>	<i>Internationalisation Markets</i>	<i>Prior working experiences</i>
Zhu*	2015	2015	Agriculture	75-100%	< 1 M	38	Australia (2015)	2012-2015 manager media company 2015-2016 Project manager Education
Liang Wen*	2010	2010	Agriculture	75-100%	1-5M	22	Russia (2003 till now) Ukraine (2015)	Before 2000 College teacher (low payment then pushed her to do business) 2000-2009 Manager in charge of exporting
Zhou*	2000	2000	Agriculture	30%	1-5M	26	Burma (2004) Laos (2004) Vietnam (2004) Thailand (2004) Japan (2007) Singapore (2009 to 2010)	Carried family business. Tried other industry while owned his business: 2009 Finance; 2007 Real Estate
Xiao *	1996	1996	Agriculture	50%-75%	>15M	42	Nepal (2008) Philippine (2016) India (2016) Italy (2016) Cambodia (2016)	Just carried the family business since 2015
Wei Chen*	2012	2012	Agriculture	40%	< 1 M	28	Russia (2013) Malaysia (2014) Japan (2014) South Korea (2016)	1994-2005 Company representatives: International business 2005-2010 Works for Thailand owned company
Chu*	2014	2015	Agriculture	60-70%	>15M	150	USA (2016) Australia (2017) Canada (2017) Germany (2017)	Teacher (before 2007) Sales manager (in charge of the small business and bank) since 2017
JinguanLi *	2012	2012	Manufacturing	55%	10-15M	70	Burma (2009) Cambodia (2012)	2007-2008 Engineering manager 2008-2012 Exporting manager, international market representative For Sri Lanka
Lin *	1984	1999	Manufacturing	40%	>15M	138	Malaysia (1999) Gabon (2007) Cameroon (2007) Congo (2008) Singapore (2008) Sri Lanka (2010)	Before 1998, Construction manager
Fu *	2006	2006	Manufacturing	25%-50%	10-15 M	66	USA, Australia, New Zealand	Before setting up his own business, construction manager
Xian *	2004	2006	Manufacturing	25%-50%	5-10 M	64	USA, UK, France, Italy, Norway Afghanistan Brazil	College teacher after complete the bachelor degree
Qiang *	1995	1998	Manufacturing	60-70%	1-5 M	26	Vietnam (1995) Myanmar (2000)	
Mao *	2015	2017	Manufacturing	> 90%	>15M	68	Australia (2017) India (2017)	General Manager (trading) 2011-2013 General Manager (Manufacture) 2015-2017
Ma*	2001	2003	Manufacturing	50%-75%	>15M	150	USA (2003-till) France (2003-till) UK (2003-till) Holland (2003-till)	Family business on construction (1998-1990); trading customs officer (1009-1992); co-founder of a trading company (1992-till); owner of trading clothes (1995); sponsor of 2008 Beijing Olympics
Han *	2016	2016	Manufacturing	50%-75%	< 1 M	21	Lithuania (2016-till) UK (2016-till)	Marketing manager (2014-2015) Family business (unable to carry family business of medical product due to allergy)
Yang *	2002	2002	Manufacturing	100%	1-5 M	48	Australia (2002) but withdraw in 2007 USA (2002) Canada (2002) South Europe (2005) Japan (2017)	1993-1998 State-owned company, sourcing manager (in charge of purchasing) Before 2002, export sales staff in furniture industry
Yuan *	2000	2005	Mining materials	50%-75%	1-5 M	20	United Arab Emirates 2005 (dropped), Africa (dropped), UK (2006) Canada (2008) USA (2010) Congo (dropped)	2000-2017 Exporting electrolytic copper. Before 2004: Real estate (building material); 2005 media
Guo *	2010	2011	Mining and Agriculture	75%-100%	< 1 M	27	Vietnam: export Sulphur mine (2011) Fruit (2015)	Education: Bachelor of international trade (2003) State government representative (2011)
Jinyun Li *	2013	2013	Manufacturing	75%-100%	>15M	38	USA (2013)	Before 2012, Works for government in the statics department for 20 years
Cha *	2009	2009	Manufacturing	75%-100%	10-15M	50	USA (2009) UK (2010) Canada (2010) German (2011) Japan (2012)	Before 2005 Work for Amazon, Marketing researcher (data analyze)
Yang *	1990	1995	Manufacturing	70%	1-5 M	26	Vietnam (1995) Myanmar (2000)	Before 1990 Manger in the shopping mall
Jie *	2008	2012	Manufacturing	25-50%	>15M	170	South Africa (2012) Bangladesh (2016) Canada (2016)	Carry the family business after completing bachelor degree (2015)
An *	1998	2009	Manufacturing	40%	10-15M	60	German (2009) South Korea (2010) USA (2012)	Owned other business Before 1998

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Table 3 Coding schemes: learn to manage the fear of failure regarding international opportunity evaluation

<i>Factors</i>	<i>Emerging Themes</i>	<i>Cluster Themes</i>
View potential failure as a learning opportunity view the loss as learning cost	Behaviour response: changed perception of failure through learning	Learning outcome of managing the fear of failure: the coherence between thinking and feeling concerning international opportunity evaluation
Accept failure can occur anytime	manage negative emotions	
A trying attitude	manage fear of cognitive unknown	
Temporary failure but with the possibility of success in the long run	Manage fear of social stigma	
Closed business experience Overseas fraud experience Lawsuit experience Car accident experience	Experiential learning: reflect challenging emotions	Engaging fearful emotions to gain resilience
Son, mom Peers, teachers, friends Overseas company, staff Overseas client, overseas friends	Social learning: communicate hardship with the trustworthy contact	
Key decision-making and management experience Entering other overseas markets or withdraw experience Overseas Market research experience Overseas living experience	Experiential learning: reflect prior key decision-making experience and overseas experience	Critical reflection of internationalisation experience and Co-creation of contextual uncertainty reduction
Big company's internationalisation Domestic company in the same industry Others' business failure Online platform, Seminar, exhibition	Social learning: vicarious learning from the public internationalisation case	
Industry expert :Financial staff, Lawyer, Audit team/accountant Internal expert: Sales staff, Engineer Professional organisation	Social learning: consult for critical information and knowledge on international market	

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Table 4 Coding examples: learning methods in managing the fear of failure regarding international opportunity evaluation

<i>Learning methods</i>	<i>Illustrative quotes</i>
Experiential learning: reflect challenging emotions	<p><i>“I had been in a car accident before. I did not die, but I did not think it was serious at all. Therefore, I did not have any impact on this mentality. And then I wanted to try to fight. It comes to the end as the same as I expected, the hard-working deposit of the money gone (business failure).” (Han)</i></p> <p><i>As long as I have a peaceful mind, adhere to the principle of guaranteeing the quality of my products, I will not be out of control for failure. In the waiting time, I also need to thoroughly study and evaluate international business opportunities through various aspects of information. (Yang Qiang)</i></p> <p><i>It is also the experience of failure. It is what we mean now, of course, we are afraid of the failure. But we say that we can only sum up the experience from this failure to avoid this same situation from happening. But if this same order comes, I will recall what happened before and we will not let it happen again. Then you can still do it. There is nothing terrifying about it. That is to say, just the result which you can afford: you have nothing to fear if you can afford it. And you will fear if you cannot afford it. (Chu)</i></p>
Social learning: communicate hardship with the trustworthy contact	<p><i>In fact, learning is between people, either you learn from the individual, or the peers, or from your teacher, as long as you have the intentions, you can learn from the much usual exchange of information, as long as you can absorb the essence of their part carefully. (Ma).</i></p> <p><i>I might chat with my friends and listen to their thoughts. Because we do this industry, we may all know each other in the circle. Then we come out, talk about this thing together, and we can work together. The risk will be relatively small. (Xiao)</i></p> <p><i>What did I learn during this process? Right, ah, it should be said that it is to broaden our horizons. We also accepted the advice of many friends. We learn from each other about some inspired multi-angle analysis of international business opportunities. For example, there are many uncertainties with many risks in such a situation, including the fear of failure, which can be considered a psychological disturbance. A personal quality or skill can help me concentrate on learning to receive new information to analyze better and evaluate international business opportunities. (Xian)</i></p> <p><i>So you could go to find a successful person in this industry, learn from them. Just ask. So, the more the better! Because ‘the more’ means that the more information you get, you can absorb and summaries. It means that you gather more information, your judgment accuracy is higher. Your information is less, the less judgment accuracy. This is very important! (Yuan)</i></p>
Experiential learning: reflect prior key decision-making experience and overseas experience	<p><i>“Learning experience, because we do not understand the market of a new country, the learning experience is mainly from my old experience. You make the international trade, you are also a little bit by bit, from small to large (Chu)”</i></p>

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	<p><i>There is certainly some reflection from experience. For example, a market and the other market, there are many differences. As I have just mentioned, from the perspective of international trade, the basic process and the basic way to do business is the same. (Wei Chen)</i></p> <p><i>“For example, what I learn from international trade is the risk control. Risk control! (Chu) Learn to suffer less financial loss. I will not do business when there are too many unstable factors. (Zhou).”</i></p> <p><i>“Learning experience, because we do not understand the market of a new country, the learning experience is mainly from my old experience. You make the international trade, you are also a little bit by bit, from small to large (Chu)”</i></p> <p><i>This is one of my own experience which accumulated over a long period of time, a correct way to judge market positioning, or be more confident. First, I want to conduct a market assessment of this product. (Guo)</i></p>
<p>Social learning: vicarious learning from the public internationalisation case</p>	<p><i>Well, this one, I think it is, I think it is worth us and some domestic enterprises to learn. Yes, I have to learn. So, I think, it does not mean that we must make it from this product or how much to engage in this market. For individuals, I think we must do something suitable for ourselves. (8 Xie)</i></p> <p><i>In relation to “failure in a new international market”, let me say in this way, I did not see any example of success of our Chinese SMEs doing business in international markets. Apart from big enterprises, such as state-owned company, who have a strong financial resource to invest, and the strong support from the government, they might have a small chance to win. For example, you see, many Chinese enterprises came to Australia for mining resource, who gain profit? No! You will hear a lot of examples about failure. (Yuan)</i></p>
<p>Social learning: consult for critical information and knowledge on international market</p>	<p><i>A lot of learning opportunities. To increase the contact from the foreign activities: contact with consulates, lawyers, accounting firms, annual meetings or seminars, as long as I have time to go. (Xiao Lin)</i></p> <p><i>A part of these practices comes from my previous experience, and I will turn to some professional institutions. For example, I will consult with some of the same industry friends, when they meet the same problem how they resolve these risks. Peers’ and the same industry friends’ experiences are the sources of information. (1 Wei Chen)</i></p>

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Table 5 Coding examples: the learning outcome in managing the fear of failure regarding international opportunity evaluation

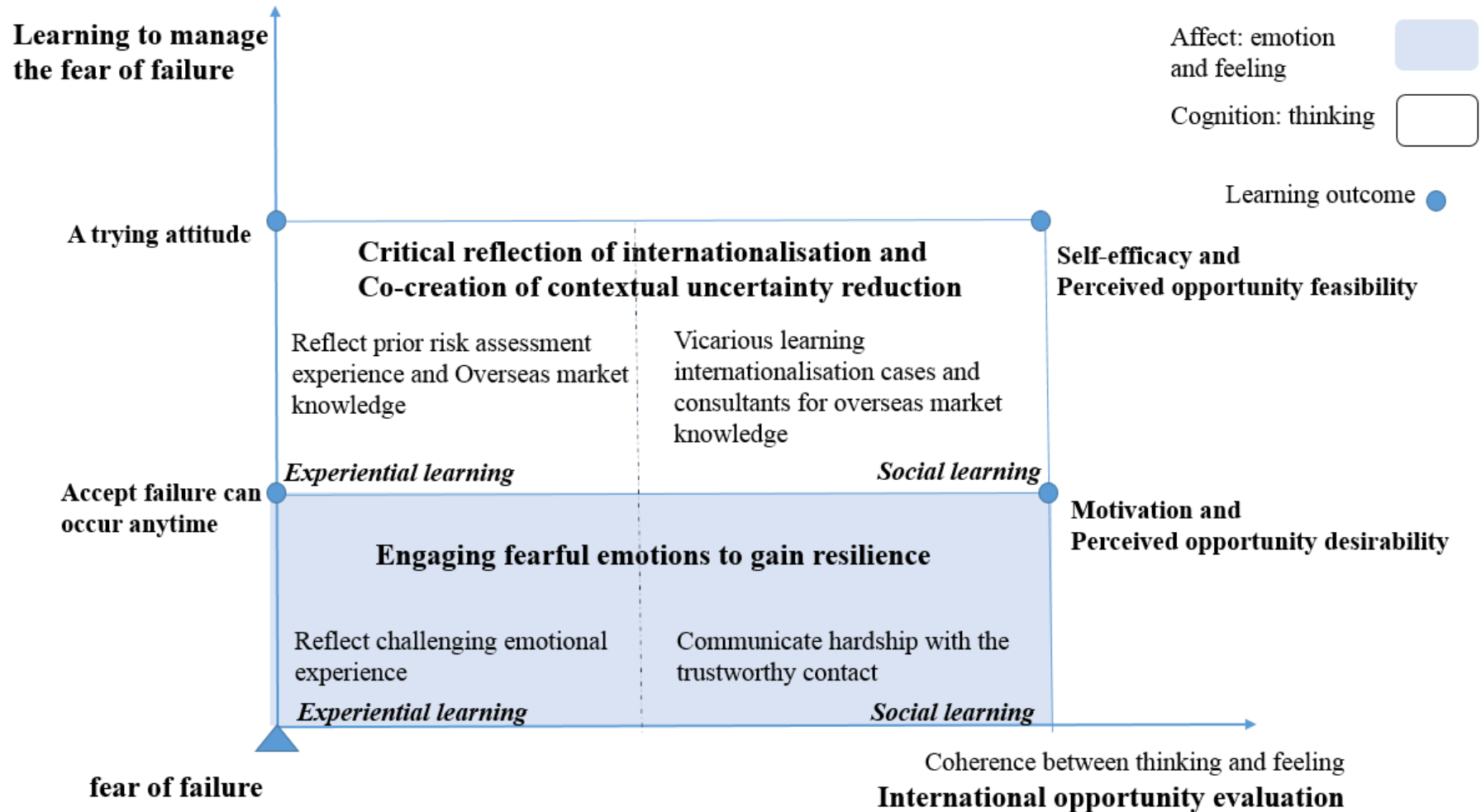
<i>Learning outcomes</i>	<i>indicators to international opportunity evaluation: the coherence between thinking and feeling</i>	<i>Illustrative quotes</i>
Perception of failure	View potential failure as a learning opportunity, and view the loss as learning cost	<p><i>It does not mean anything. For us, we may be wrong now. First of all, we think it is hard to define what this failure means. I think any attitude toward life requires a longer-term process, and then we say we need to accumulate enough experience to do these things. Just say that we are still accumulating experiences in a process. That is to say, a large part of our previous experience of international business, outsourcing through other foreign trade companies, is something we have learned. If we do it ourselves, the cost is definitely something to invest in. Our company's volume indicates that it does not need to be done in the short term. It is now in a strategic position for my company. We did not expect it must achieve a certain result in half a year or within a year. We allow to come and go as a trial and error and gain experience. (Jie)</i></p> <p><i>If the investment failed, we must think in the right direction. Good direction and adjust yourself, you cannot say that you lost in failure. You can view it as the greatest belief, no matter how success you achieved, after the success do not turn up yourself, so state of mind needs to be adjusted (Fu).</i></p>
manage negative emotions	Accept failure can occur anytime	<p><i>For example, maybe when you are especially fear what, then it would happen. The boss will have this feeling that anything can happen. Maybe it would happen, you may feel the risk. In fact, you will amplify its negative effect possibly. The general feeling, according to my experience, is when I am assessing international business opportunities. I think about a worst-case scenario and a best-practice plan. A worst-case scenario, if this is the case, what the worst looks like exactly. It is a big deal to me. Then I step back to solve it. I consider this matter, then I will decide to do this thing. (Chu)</i></p> <p><i>Indeed a profound experience that I passed the obstacle and I feel ease. I think why I feel so worried. In fact, wait until I stand above, and I feel that everything is so calm now...In fact, the problem, in the final analysis, is a balance. Mentality is very peaceful. Yes, peace (Ma).</i></p>

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<p>manage fear of cognitive unknown</p>	<p>A trying attitude</p>	<p><i>In fact, this thing I have also considered, If the overseas market goes to failure, I need a backup plan, So I will not put all my assets into it, if the business fails, it can be considered as an attempt. Because I have done overseas market. Now I have lose the game. I just need to prepare more and start round 2 or round 3.(Han)</i> <i>There are still risks in the world, such as Taiwan, Malaysia, and Thailand. I think this assessment is relatively large. But to do a small thing, I generally take my way as 'from small to large'. After the first try, I look at the future. Try the 'water' (the market) first; I can see the risk after the trial. I think it is the best way to ask by trying. Because I do business where the platform is relatively small. Take this step by step, look at the way to do the business to avoid some of the risks. Nothing else. I did not encounter a particularly significant risk.(Li jinyun)</i></p>
<p>Manage fear of social stigma</p>	<p>Temporary failure but with the possibility of success in the long-term</p>	<p><i>Emotional self-regulation is necessary for me. This is about how I define success and failure. Everybody wants to succeed, but success is not easy. It's too difficult to make my name within one night. Impossible! It's impossible to say I set up my company today then I exploit an IO successfully tomorrow. Everybody moves forward step by step, and they learn a bit by a bit. Personally, I always talk to myself: I'm more successful than other owners at my age. What I need is patience to focus on what I am doing, move forward step by step down-to-earth. I don't want to seize an IO within one night to make myself a millionaire. I just want to ensure what I'm doing is meaningful and contributing to everyone. (Zhu)</i> <i>The final decision should probably be multifaceted. I need to understand it. Learn about these by asking colleagues. There are experts, friends, and all channels now. I also make some comprehensive analysis. This view is very good. That is, I first check the information, and then consult an expert or friend, and then my own comprehensive analysis. (5 Xian)</i> <i>It's such a state of mind, instead of feeling fear about just a single case at a specific time. If I fear, I don't go to the international market. When I talk about business with the clients of the international market, if a failure occurs, I still believe that we have a chance of cooperation in the future. Impossible for everything to be successful. Just like China's bid to host the Olympic Games, the first time application failed but the second time to succeed. If fear, do not have to go to the bid. Impossible for everything goes to a success. I have to accumulate experiences! I accumulate my first failure experience for the next successful accumulation. A lot of things rely on the accumulation, I cannot grant every first attempt for success. It is impossible. (Yuan)</i></p>

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Figure 1 Theoretical framework: empirical findings



3. Gender, Diversity and Indigeneity
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**How does self-identity influence the experiences of floating
populations?
An examination of the Lao Piao group in Australia**

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3. Gender, Diversity and Indigeneity Refereed Competitive Session

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ABSTRACT: *This conceptual article considers the self-identity of the Lao Piao group – the parents of Chinese immigrants in Australia, born under the one-child policy. The need for scholarship in this area follows: the growing number of these parents who float between their home in China, and that of their child in Australia; as well as the personal and social implications associated with this transient lifestyle. This article posits that the social identity theory and the intergenerational support model might help to clarify the experiences of this population, particularly the personal and social implications. This research can help to inform the development of policies and programs that aim to support this and potentially other floating populations.*

Keywords: Migration; theories of identity; elderly floating population; Lao Piao;

Given the economic development and urbanisation of China, an increasing number of young adults are migrating from their small cities and rural villages to large cities for employment prospects, either within or beyond China (Shepard, 2015). Correspondingly, while life expectancy in China is rising, its fertility rate is declining, largely due to its one-child policy – as such, the rate at which China's population is ageing is dissimilar to most other nations (UN, 2010).

This exodus of young adults has cultural implications. For instance, within Confucian philosophy, filial piety – or xiào – espouses familial values. Although xiào is interpreted in diverse ways, it intimates the continuation of the family line, which can manifest in myriad ways. As Ikels (2004) explained:

beyond a shared core of understandings the actual practice of filial piety, both its delivery and its receipt, is situationally dependent and shaped by local circumstances of history, economics, social organization, and demography and by personal circumstances of wealth, gender, and family configuration (p. 2).

This virtue partly explains why an increasing number of Chinese parents follow their adult child to large cities, even if temporarily and even if abroad. These parents represent the Lao Piao group, which is growing in size (Tang, 2011). In 2015, the number of people aged 60 years and over in China who temporarily relocated to a larger city, devoid of the hukou household registration processes, was close to twenty million (National Bureau of Statistics of China, 2016).

This transient lifestyle, whereby mature-age parents float between two nations, is associated with both personal and social implications. Although these parents have opportunity to spend time with their adult child and potentially their grandchildren, thereby contributing to the family and the household, they can also experience personal and social issues. In addition to the health conditions typically associated with age, they might experience: isolation, both in China and Australia; cultural discord; and economic hardship. For these (and perhaps other) reasons, understanding the experiences of this floating population is research-worthy, as findings might help to inform policies and programs that promote their wellbeing.

Accordingly, this conceptual article considers the experiences of the Lao Piao group, as well as the personal and social effects of their transient lifestyle. Towards this aim, it commences with a description of this and related populations. It then argues that the social identity theory and the intergenerational support model might help to clarify their experiences. This in turn can help to inform the development of policies and programs that aim to support this, and potentially other floating populations.

LAO PIAO GROUP

Unlike other groups that relocate permanently or temporarily on only a few occasions, the Lao Piao group relocates temporarily on a regular basis. Analogous to the Bei Piao group, comprised chiefly of young people who temporarily move from a small city to Beijing for employment prospects, these circular migrants are older and transitorily relocate to promote filial piety (He, 2014). Given their generation, they typically had a child under the one-child policy and now float between their home in China and the strange city where their adult child (and perhaps grandchildren) now reside(s) (Zhang, 2017).

There is limited research specifically about the Lao Piao group. Following the introduction of this term (Tang, 2011), research has considered: the factors that contribute to this phenomenon, including cultural tradition (Wang, 2007); members' living conditions (Liu, 2016); as well as their life status, which is shaped by their relationship with their adult child, their perceptions of their foreign, temporary home, and their post-retirement employment experiences (Zhang, 2017). Collectively, these

studies offer limited advice on the experiences of the Lao Piao group, and limited guidance on the factors that help and hinder the quality of life of its members.

Because of the limited research, an understanding of group experiences might be inferred from related studies. For instance, among Western nations, the largest proportion of the Chinese diaspora, as a percentage of a country's total population, can be found in Canada, New Zealand, and Australia (Poston & Wong, 2016). Accordingly, these might be the nations that members of the Lao Piao group regularly visit. This is particularly because the Chinese residents of these three nations are typically young adults (ABS, 2018; Statistics Canada, 2007; Stats NZ, 2014). As such, research that helps to clarify the experiences of the Lao Piao group is likely to have international value.

In the absence of empirical research, to better understand some of the challenges the Lao Piao group might experience, lessons might be garnered from relevant research. This might include studies on migrants of Eastern-descent to Western nations. For instance, after examining the life quality of older Chinese people in Melbourne, Tsang and colleagues (2004) found that a good quality of life was associated with good health, independence, strong ethnic community and family support, low expectations, no worries, and a sense of the family's love and respect. Similarly, Chow (2012) investigated the health service needs of elderly Chinese immigrants in Canada and concluded that ethnic nursing homes, senior centres that provide programs and services, and homemaker services were respondents' major service needs. More recently, Corlin and colleagues (2014) compared the health of first-generation, Chinese immigrants with North American residents and reported that Chinese immigrants were less likely to have asthma or cardiovascular disease, had lower body mass index (BMI), lower inflammation biomarker levels, lower average sex-adjusted low-density lipoprotein (LDL) cholesterol, and higher average sex-adjusted high-density lipoprotein (HDL) cholesterol. The lower asthma prevalence among the Chinese immigrants be partially attributed to healthier diets, more physical activity, lower BMI, and less exposure to cigarette smoke. And first-generation immigrant status may be protective even after about two decades. Together, these findings suggest that the Lao Piao group might also experience personal and social needs that warrant attention.

Given the growth of the Lao Piao group, and the challenges associated with circular migration, theoretically-informed research is required to understand the experiences of this group and how

members might be better supported. Although migration literature is peppered with an array of theories and models, two appear to be particularly relevant to the Lao Piao group and its transitory lifestyle. These include the social identity theory and the intergenerational support model. While the former can explain how group members perceive themselves in relation to others, the latter can explain some of the reasons for the transient lifestyle. For these reasons, each is discussed in turn.

SOCIAL IDENTITY THEORY

Tajfel (1978) introduced the concept of social identity, which denotes a recognition that a person belongs to certain social groups, which have personal and social significance. Social identity theory is premised on three assumptions. First, people strive to maintain and improve their self-esteem and a positive self-concept. Second, group membership can enhance self-esteem and self-concept. And third, status and prestige are determined by the attributes associated with the groups to which a person belongs, or is excluded from.

Social identity theory has been used to understand migrant experiences. The basic premise of social identity theory is that people carry with them a repertoire of the categories to which they belong, such as gender, nationality, and/or political affiliation. Membership of each category describes and prescribes personal and social attributes as a member of particular groups. In turn, these attributes shape how individuals think, feel, and behave (Hogg, 1995).

Individuals can assume different identities, depending on what an situation might require to optimise a sense of inclusion (Stryker, 1994). Identity negotiation refers to the process of conferring meaning to the elements that constitute identity, whereby explicit or tacit agreements are reached regarding who is who during interactions with others (Swann, 1987) . This implies that social categorisation and self-identity can conflict, depending on a person’s social situation – like a new immigrant to a foreign setting.

Social identity is structured around a collective sense of ‘us’ versus ‘them’, and self-identification refers to an individual sense of ‘me’ versus ‘you’. The theory addresses questions related to plural identities across different contexts, and how these identities are negotiated with reference to expectations, conventions, and protocols, like the norms and laws of a foreign setting. These questions

include: how individuals (re)construct identity; how they engage and interact with groups to which they identify, and do not identify with; and how they use and do not use space (Simon, 2004).

Despite its value, the limitations of social identity theory are recognised. For instance, the original studies involved highly-contrived groups within a laboratory setting (Schiffman, 1992). Additionally, when the research conditions were altered, the findings contradicted the tenets of the theory (Rabbie, 1987). Furthermore, given the complex circumstances of many migrants, the micro-focus of social identity theory (at the individual level) might not have the capacity to accommodate institutional logics, including (but not limited to) the policies, citizenship regimes, hegemonic customs, and values and within both the birth-nation and the new home (Pessar, 2003; Vermeulen, 1994). For this reason, additional approaches to aid an understanding of the Lao Piao group are warranted.

INTERGENERATIONAL SUPPORT MODEL

Intergenerational support refers to the different ways that different generations within a family demonstrate mutual assistance (Mu, 2002). It encompasses (but is not limited to) ‘companionship, talking about daily events, emotional support, practical support, giving advice, and financial assistance’ (Bangerter, Polenick, Zarit, & Fingerman, 2016, pp. 921-922). The intergenerational support model helps to clarify the reciprocity and effects associated with such support, with reference to motives and influential factors. Each is addressed in turn.

Motives

For personal, social, and economic reasons, intergenerational relationships are thriving, internationally (Silverstein & Attias-Donfut, 2010). Contrary to the belief that nuclear families are the norm, intergenerational relationships are alive and well. Urged by globalisation, younger generations marry and establish nuclear families, yet continue their relationships with older family members who provide practical, social, and economic support. However, they are also reciprocal – although younger family members might maintain a watchful eye over their older family members, the latter can also benefit from their key roles within the family, which might include childminding, if not childrearing.

Intergenerational support is especially evident in China – the birthplace of Confucianism (Zhang & Li, 2005). According to Confucianism, family members are connected through mutual interdependence over the course of a lifetime. Lifelong loyalty and maintaining family harmony are

expected. Adult children, particularly the eldest son and his wife, are expected to care for their elderly parents, materially, emotionally, and spiritually (Hwang, 1999). Although parent-child relationships in Asian countries are now relatively less hierarchical (Chen, 2000), family obligations remain paramount and modernisation has not obliterated Confucian norms (Trommsdorff, 2007; Yeung, 2007; Zhang, 2005; Zhang, 2004).

Three key models help to clarify intergenerational support. These include: the power and bargaining model; the mutual aid/exchange model; and the corporative group model. The power and bargaining model suggests the extent to which parents receive support from children or other family members is related to their control of resources, such as the property (Hjalm, 2012). The mutual aid/exchange model suggests intergenerational exchanges are premised on reciprocity, whereby both parties benefit. In fact, the more that is given, the greater they return (Cox, 1987). The corporative group model suggests family members behave in ways to chiefly to maximise individual interests (Becker, 1974). More specifically, family resources are controlled and allocated by an impartial family member, like an elderly member, to achieve Pareto optimality.

Despite the value of these models, they do not explicitly account for gendered divisions of labour, which is typical in China (Lee, 2014). Although the cooperative group model might reflect the deference that younger Chinese family members often demonstrate to their seniors (Lee, 1985), the ways in which such deference manifests is influenced by gender. As a patrilineal system, the Chinese culture typically requires sons (and their wives) to care for his parents (Nadkarni, 2008).

Within China, intergenerational support extends beyond the dyad of young and old adults. Given the importance of filial piety, it also encompasses the recent additions to a family, like the children of the young adults (Fei, 1983). This represents a point of difference from some Western societies in which intergenerational support is dyadic.

Influential Factors

Intergenerational support is shaped by different factors. These include: the personal resources of the different generations, including their financial situation (Bo, 2016); the family structure, including the number of children (Yin, 2017); the context, particularly whether the generations reside

in urban or rural areas (Li, 2017); and the availability of supportive social systems, like welfare regimes (Zhang, 2017).

Although several studies have investigated the motives and impact of integrational support in Asia, less is known about the effects of integrational support within the Lao Piao group, particularly those who regularly travel abroad to Western nations, like Australia. While they acclimatise to their new and strange surrounds, many are required to: negotiate their different roles within their family and the community; reconcile Western conventions and Confucian norms; managing complex health issues in the context of a complex Western health system (Trommsdorff, 2007). As a multicultural, welfare state that prizes its relationship with China (Oliver, 2018), this is a challenge that Australia cannot ignore.

DISCUSSION

This theoretical article considered the self-identity of the Lao Piao group, which floats between their home nation of China, and the strange, international Western location where their adult child (and perhaps grandchildren) now reside(s). The reason for this focus is threefold. First, the Lao Piao group is growing in size, particularly in Australia. Second, given their age and transient lifestyle, they are likely to experience complex personal and social issues. And third, Australia recognises the importance of healthy economic relationship with China (Oliver, 2018).

Despite these reasons, there is limited scholarship about the Lao Piao group. It is therefore difficult to develop policies and programs that aim to support this and potentially other floating populations. As such, this article argued for theoretically-informed research to examine and understand their experiences, the issues they experience, and how these might be appropriately addressed. Two approaches hold promise – namely, the social identity theory and the intergenerational support model. While the former has the potential to explain how members of the Lao Piao group perceive themselves in relation to others, which contributes to their wellbeing (Askham, 2007; Caprara, 2006), the latter can clarify reasons that contribute to this transient lifestyle. Given the need to understand why and how the Lao Piao group manage their transient lifestyle, as they float between Eastern and Western nations, particular methodologies, which are conducive to qualitative methods, are likely to be helpful. These

might include (but are not limited to) case study methodology and ethnography, both of which can illuminate the lived experiences of group members and their families.

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No 7: Leadership and governance
Competitive session

THE IMPORTANCE OF PEOPLE BEHAVIOUR IN PROJECT GOVERNANCE

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No 7: Leadership and governance Competitive session

THE IMPORTANCE OF PEOPLE BEHAVIOUR IN PROJECT GOVERNANCE

Abstract: *People behaviour is of great concern for Project Governance. While a lot of research has been done to determine the structure and processes for governing projects, little is known about the influence of behaviour when governing project. Four case studies were chosen to be analysed based on the success rates and the varying levels of PG demarcation. The practitioners from the four companies working in different contextual setups were interviewed. The interview included their perceptions on the importance of behavior of people in PG. The findings revealed number of factors would benefit on how people prepare for and respond to change. Analysis of the data showed that at the heart of an organisation for governing project are people.*

Keywords: Project governance, people behaviour, top management, people function

INTRODUCTION

It is widely accepted that Project Governance (PG) plays an increasingly important role in project outcomes, especially within IT projects (Bekker & Steyn 2009; Bowen et al. 2007; Jenkin & Chan 2010; Müller 2009; Sherma et al. 2009; Turner & Keegan 2001; Van Grembergen & De Haes 2008 & 2009). A study on project management and technical methodologies found that more than half of the project failures were due to lack of carefully designed PG (Young, 2006). Issues such as lacking structures, processes and / or inadequate skills of people in governance roles were shown to be directly linked to project failure (PMI 2009).

In order to deliver a successful project outcome, the Project Manager needs to carefully identify and take into consideration many correctly identified relevant factors. To understand and identify such relevant factors requires the Project Management (PM) is dependent upon being able to understand and correctly interpret the many contexts of the culture and the organisation. Gardiner (2005) explains that

the factors, seen as deliverables, must be understood and correctly placed and aligned for a project to succeed. While research presently discuss how this is done there is little discussion about what the factors are on a microlevel. PG literature shows that factors affecting the project are categorised under three main themes, structure, process and people (Gardiner, 2005; Toomey, 2009; Van Grembergen & De Haes, 2009). This research aims to focus on the people function. It sets put to identify important factors that may affect how the people function contributes to project outcomes. For practitioners, the research offers important insights for managers and others working with governance within organisations.

The purpose of this research is twofold, it firstly aims (1) to enrich the understanding on the initial set of practices (focusing on the people function) within the PG framework and (2) to identify how people mechanism can improve project performance within PG framework. To accomplish this, we have decided to provide a broader sampling of people, originating from differing contexts (both geographical, cultural and organisational) ensuring that there is less chance of a bias among the respondents. This paper thus aims to look not just at one cultural and organisational context but at two different ones using a case study approach. Consequently, the main research question is as follows “*What can people do to improve project performance within PG framework?*”.

LITERATURE REVIEW

This section provides a literature review of the governance, management and PG used in the study. The term of governance and management are discussed and expanded on to place the research under the right topic banner. The governance and management constructs have previously not been well-established in literature, since there is inconstancy in regard to the factors included and an ambiguousness in regard to where the boundaries between PG and PM. We will thus begin the literature review by distinguishing project governance and project management.

Distinction between Governance and Management

As noted under definitions, the word “governance” and “management” are often used without clearly identifying their boundaries. Governance is often misused in describing processes and activities that are actually management, not governance. Turner and Keegan (1999) suggested that PG was the means to acquire order and then the stakeholders can recognise the common interests among underlying threats and chances. This clearly differentiates PG from PM. Bekker and Styn (2009) define that the term PG as a set of management systems, rules, process and structures that provide the framework within which decisions are made for project development and for project implementation. PG is used in relation to PM and project performance improvement strategies. It can be deployed using a mixture of various structures, processes and people functions (Van Grembergen & De Haes, 2008). PM, however, is usually focused on classical functions such as planning, organising and controlling. In general, PM is concerned with making decisions about processes and functions set by the governing body for improving operational efficiency and effectiveness (Toomey, 2009). PG, on the other hand, is a set of rules, relationships, systems and processes by which authority is exercised and controlled in organisations (Too, Le, Weaver and Bourne, 2017).

Project governance

Organisations can be deployed PG using a mixture of various structure, processes and people mechanisms (Van Grembergen & De Haes, 2008). PG focus on three core functions, structures, processes and people. This paper will focus on the third function that called people. People is the least researched and it effect on PG is not often discussed (Van Grembergen & De Haes, 2009). In PG, the board and top management defines the roles and responsibilities of the involved people clearly and make sure that such roles and responsibilities are clearly understood throughout the organisation. The PG, effect on people refers to the formalisation of roles and people (employee) responsibilities (Van Grembergen & De Haes, 2008). The people mechanism, thus, refers to the people who work in the project and provide action and competences (Toomey, 2009). The people mechanism is spread over both governance level and management level.

The significant of people function in projects

Projects are managed using teams in a work environment, the PG are the roles and the limits of what the teams can and are allowed to achieve. Each project is unique and require team with certain set of skills to meet project outcomes. To meet outcomes, there is a need to have the right people and right skills within the team (Anantatmula, 2010). In many organisations, people in project team are generally engaged in more than one project, are generally chosen because they have performed well in other project or because they have less work scheduled (Kerzner, 2006). This leads to projects that run a higher risk of failure than they would do should they adhere to PG best practice.

Anantatmula, (2010) suggested that the importance of human involvement in projects is substantial. First, top management is needed and top management must provide commitment to govern the project and the people involved (Amoako-Gyampah, Meredith, & White, 2018). Pinto & Slevin (1989) stated that specific so called “project champions” can help project managers generate the organisational support and obtain the corporate resources they need to realise their projects. These people need to be carefully identified, entrusted and empowered. There is also a need to ensure that enough attention and time is spent with the people involved in the project, since there is a stated correlation between time, attention and positive project outcomes (Pinto & Slevin, 1989). Further, to achieve better alignment and agreement on the project, humans require a structured approach to project team relationship building. Hartman’s (1999) research showed that through a structured approach to team relations, trust in project management is created. It is also important that those managing the projects find what people and organisations need to work together in order to deliver projects more effectively. To establish trust in project management often require project manager and top management to open up and have transparent communication for building their relationship and trust one another. Trust would then lead to collaboration and teamwork.

While PG often discuss IT hardware needed to succeed with a project, Anantatmula (2010) noted that while hardware is important it is not enough to provide a successful project outcome. To do so requires the people to adhere to instructions and align with project goals and project processes (Crawford, 2006 and Thamhain, 2004a). Van Grembergen & De Haes (2008) stated that even if an organisation has all

governance structure and processes in place, the people function is important since it helps ensure that organisations can achieve expected project outcomes. Toomey (2009) explained that process, structure and IT should be designed with a thorough understanding of the people who are in the project, that people in the project can be developed, aligned, educated and coached so that they can play their part most effectively. It is evident from observations that the people function in PG play a vital role in project performance and project outcomes and that it needs to be acknowledged as a key factor influencing both PG and PM (Thamhain, 2004a; Crawford, 2006; Anantamula, 2010; Kerzner, 2006; Van Grembergen & De Haes, 2008 and Toomey, 2009).

The need of People

The role of the board, where to highest authority of the people function sits has seen increased demands for clarity of projects. These demands are driven by the long-term failure of organisations to resolve poor performance in the delivery of projects, combined with increasing dependence on IT for their day to day operations. Many cases reported that new initiatives often failed to consider the people and their perceived competences. Instead projects were assumed to work should the technical competences be present in the organisation. This fails to take into account that people are developed not just as individuals whose attributes, skills and knowledges (ASK), the skills function, determine their ability to function in projects but also their values, behaviours and ability to problem solve, the people function. Little attention has been paid to the people function and thus some projects struggle to achieve the expected outcomes despite the PM being appropriate and the resources provided. The people function is thus forgotten and its link to successful project outcomes are often forgotten. Using Human Resource Management theory we can see that in talent management (TM), there is a clear link between identification of the best fits (providing the right people whom align with the team of people performing the task) and not just adhering to best practice (using the people most suitable, best experienced for the task) and thus the effect that the people function plays on project outcome is dependent upon how it is governed. Do they believe in best fit or best practice (Lewis & Heckman, 2006). It is important to note that process, structure and IT should be designed with a thorough understanding of the people who are

in the project (best fit), and not just to ensure that the best processes and people are employed (best practice).

METHODOLOGY

With this research aiming to investigate people mechanisms within PG frameworks in an international context, using multiple sources of evidence will provide a better overall validity and be more useful for practitioners (Saunders et al. 2009). Stake (2006) explained governance-related research is suited to adopt multiple case studies if the researcher attempts to understand patterns across organisational and cultural boundaries. Using a multiple case study approach provides several benefits, it allows the researcher to be close to the studied objects, enabling a rich understanding of the context of the research and the processes being recognised while also allowing the researcher to seek understanding from more than one specific context, providing an understanding that allows for multiple contextual views (Halinen and Törnroos 2005; Jenkin and Chen 2010). Despite this, Stewart (2012) noted that multiple case studies are rarely used in PG and recommended that new research attempted to use multiple and culturally diverse cases. Thus, the choice of multiple case studies was made, adhering to the suggestion by Stewart (2012) and allowing the research to elicit findings from more than one context. This provides the additional benefit that a comparative analysis can be undertaken allowing the researcher to compare and contrast the findings from several case studies across organisational and cultural and national boundaries. This study will provide an addition to present data by showing how PG and project outcomes is affected by organisational, cultural and national contexts.

The selection of cases was made from companies in New Zealand and Malaysia. Choosing cases from two countries (one English speaking developed country and one Asian country striving to reach developed country status) allows the study to provide a comparative cross-national perspective on how factors that influence success is identified and if it differs between the two cultural and national contexts. The organisations chosen had recently completed an IT project or had project management as their main operational activity. In this research, the different organisation has its own unique strategies and integration processes. A small sample group of respondents were selected from each organisation, with

respondents being Chief Information Officer (CIO), Project Management Officer (PMO), IT director, Project manager and Business managers.

Insert Table 1 about here

Data collection was made using unstructured in-depth interviews and document collection. The purpose of unstructured interviews is gathering as much information as possible on the research topic from the respondents without interference from the researcher (Eriksson & Kovalainen 2008; Collis & Hussey 2009). The data analysis followed the steps of transcription of the interviews, analysis of the interviews using narrative analysis, comparative analysis, and the cross-case analysis.

RESULTS AND DISCUSSION

As mentioned, the objective of this research is to find out “*What can people do to improve project performance within PG framework?*”. The result presents four cross-case analyses from the findings found in the studies. This research results have a number of important implications. The respondents expressed their views about people behaviour in PG. The following key points were identified.

Based on this cross-case analysis, the study has confirmed that top management are usually the people who initiate the project, are responsible for the funds invested in the project and ultimately determine the business benefits that will be obtained through the project. Projects are part of the larger organisational environment, and many factors that might affect a project are out of the project manager’s control. ***Top management commitment*** is crucial. One example from a company in Malaysia, reported that often the requirement submitted to the top management often took a while to get the approval through. Employee at the lower level role does not have the authority to make changes to the project requirements. This requires commitment from the top management. The organisation suffered data loss and increased cost. When comparing to the companies in NZ, top management commitment is always in place from the beginning to make sure project managers have the right people with right skills recruit

to deliver the projects. If project managers have the top management commitment, they will also have adequate resources and will be able to focus on completing their specific projects. The necessity of top management commitment must be considered seriously. Top management must be committed to providing support to the project decision making (Amoako-Gyampah, Meredith, and White, 2018). Top management can provide guidance for project managers to run the project with confidence and to take projects development seriously. Weill and Ross (2004) also indicated that senior management (which also refer to top management), clarifying priorities and demonstrating commitment usually get a lot of attention in the organisation.

Apart from commitment, *top management engagement* must be also present. Often, project managers are expected to commit as well as engage in the project to completion. Likewise, the top management as well as organisation should be expected to do the same. One example from Company from Malaysia explained that the organisation was not making their job easier because the organisation did not receive the budget allocation. As far as the respondent was concerned, the budget has been sitting at the top management level and did not get approval on time thus the project fell into custard and the project manager and project team could not plan and make decision for better implementation. In order to keep top management engaged in the project, the first step is making sure that top management are provided with the latest project status. Project managers are responsible for making sure that project team members follow through on the commitments to keep top management updated and engagement from top management is also critical to the project success. This study exposed that the project manager will need a strategy to keep top management engaged if they are becoming distracted. Without top management commitment and engagement, the study showed that many projects will fail, the project team does not have a strong foundation to stand on and complete the project (Kerzner, 2006).

The company from New Zealand point out that projects should have a *project champion* who acts as a key advocate for the project. A champion would be a person with leadership skills and who is confident and motivated to steer the project forward towards achieving the agreed outcomes (Pinto & Slevin, 1989). The champion must have *effective communication* with project teams, top management as well

as with the clients in order to have an effective PG. A respondent from company in Malaysia gave an example of how an employee decided to implement the system without the top management approval. This was due to inadequate communication and caused monetary loss to the organisation and caused frustration to staff. As proposed in these studies (Turner & Keegan 2001; Lambert 2003; Van Grembergen & De Haes 2009, Elbanna, 2013;), this study confirmed that the key to project success is to have open communication internally and externally. The first critical step in developing and delivering effective PG and communication is identifying, classifying, and understanding the various stakeholders, their specific role in governance, their information needs, and their ability to influence and affect outcomes.

Apart from effective communication, *responsiveness* is absolutely critical for creating better relationships, trust, and rapport between stakeholders and the personnel involved in projects. A few respondents from Malaysia reported similar frustration when receiving a message through email message or through conversation, respondents were hoping to get communicated back and fore until decision was reach. Although, responsiveness has not been mentioned in any of these PG literatures. Pitagorsky (2015) mentioned that the need of responsiveness to keep the communication floating is essential. This aspect can be looked at in the further research. A good example about having effective communication and responsiveness given by Company NZ 1 has indicated that their stakeholders as well as project team members are communicative and responsive to make sure they understood and agreed on the same terminology.

This study is justified as the human interactions required in any organisation or project setting fundamentally require an element of *trust* (Hartman, 1999). Often trust which is required in people, played an important role when business talking is initiated at the strategic level as confirmed by the Senior Transition Manager from NZ 1. This because the respondent is the customer facing, relationship building is very important to make sure people to trust the respondent for transiting their office into our support. At the same time, internal staff that have been involving in the work are equally important to

the respondent to trust. This trust helps to ensure transparencies and accountabilities of financial information, operations and projects. Trust is important to the practice of project management, project governance and impacts on eventual project success. Project managers need to trust their project team members to collaborate, network and team building. Within the project setting, Pinto et al. (2008) stated the way in which trust improves project relationships is identified. It enhances a variety of intra-organisational relationships, including project team, top management support and coordination across functional departments. Top management and project managers can then manage changes and mitigate conflicts, a deterrent to project performance and transforming project stakeholders into an organised project team. Project managers and project teams are better motivated to deliver the projects when there is PG.

When trust is present, people are motivated by challenges and opportunities to further escalate their career goals, those who are assigned to project teams are almost always interested in achieving personal as well as professional goals. This means that project managers should understand the personal aspirations of their project team members and support them in their goals. As top management also play an important role in motivating and controlling project management to simultaneously grow as professionals and complete their project responsibilities.

All four companies mentioned and agreed that when an organisation must be clearly structured and the top management first need to sort out their roles and responsibilities when translated into measurable project outcomes, becomes an important human factor. Nonetheless, not many organisations have a formal process of evaluating project performance. In order to get involved in decision making. Even when PG is adopted, top management needs to carefully place the governance around the project. They have to decide what parts of PG fit the project, how they apply and use them in an appropriate manner to ensure project managers and project team are following the guideline to deliver projects.

CONCLUSIONS

This research study was carried out to enrich the understanding and the importance of people behaviour in Project Governance. We consequently set out to identify the factors that highlight and result from the thematic analysis and to understand how knowledge of these factors can be potential benefiting IT and business strategy. The respondents in our sample represented the significant initiative roles in relation to project management. Each role acknowledged the necessity of reference points external to their level in the enterprise as being a necessary requirement for better project performance.

In comparison of New Zealand and Malaysia companies, the study found both countries understood the people behaviour plays an increasingly important role in IT projects (Bekker & Steyn 2009; Bowen et al. 2007; Jenkin & Chan 2010; Müller 2009; Sherma et al. 2009; Turner & Keegan 2001; Van Grembergen & De Haes 2008 & 2009). Each company should have a set of standard people mechanism within a PG framework would help improving project performance (Müller 2009; Van Grembergen & De Haes, 2008 & 2009).

The result suggested that people mechanism has a positive impact on project performance with these factors: First, it is important to get the top management and project manager to fully commitment and engagement to the project. Second, communication is the key to project success developing and delivering effective PG and communication is identifying, classifying, and understanding the various stakeholders, their specific role in governance, their information needs, and their ability to influence and affect outcomes. Communication is one important factor, top management, project manager, project team members and all stakeholders must be responsiveness. This is absolutely critical for creating better relationships, trust, and rapport between stakeholders and the personnel involved in projects. All in all, these factors mention above require trust between body of governance and management. Trust is important to the practice of project management, project governance and impacts on eventual project success.

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Table 1: Sample Company Profile Descriptions

	Company NZ1	Company NZ2	Company MY1	Company MY2
Company Profile	One of the large IT companies in NZ (infrastructure service sector)	One of NZ's fastest growing IT companies. (service sector)	One of the largest holding companies in Malaysia	Small and rapidly growing. Fully-integrated poultry producer
Respondent position	Senior Transition Manager, Project Management Chief, Quality Assurance Manager and Project Manager	General Director, Chief Information Officer	General Director, Project Manager, System Integrate Manager	General Director, IT Director, Senior Software Developer
Knowledge of project process	More than 10 years of project management/ processes and provide trainings	More than 10 years of IT implementation /project management	More than 10 years of IT implementation /project management	Less than 10 years of IT implementation experience as well as PM processes
Knowledge of project governance	Write and use governance to run projects and business to keep up with standards and quality assurance	Attempt to use other standards to manage implementation and run projects.	Attempt to use other standards as a guideline to manage their project	Attempt to use other standards to manage the implementation and to run projects.
PG use in the organisation	Yes	No	Yes	No

Stream Number #3 Gender, Diversity and Indigeneity

Interactive Session

Abstract in Program

**Moving from the fringe of economic existence – innate challenges for
Aboriginal and Torres Strait Islander businesses in Australia**

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Moving from the fringe of economic existence – innate challenges for Aboriginal and Torres Strait Islander enterprises in Australia

ABSTRACT:

Aboriginal Australian enterprises are actively engaging with the economic engine as a vehicle for overcoming historical policies that previously excluded them from commerce. Many such enterprises exist as partnerships with non-Indigenous Australians. The definition of an Aboriginal Australian enterprise is contested. Australian Government Departments and Indigenous agencies responsible for implementing strategies, programs and initiatives to advance Aboriginal Australian enterprises, necessitate majority ownership by an Aboriginal Australian for certification. Opinion amongst the Aboriginal Australian community is challenged. This paper postulates that for Aboriginal Australian enterprise owners, fifty per cent equity significantly influences managerial control and strategic influence including cultural values. Our thoughts are more suggestive than conclusive to describe an alternate view to develop a larger research enquiry along those lines.

KEY WORDS: Indigenous/ First Nation /Aboriginal/ Māori management and organisations

An iconic metaphor for Aboriginal and Torres Strait Islanders resides in the notion of the ‘fringe’. Colonial paintings always portrayed the Indigene at the periphery of the image and in many Australian towns, Aboriginal people escaping the draconian mission existence lived on the margins of towns and were euphemistically and colloquially known as ‘fringe-dwellers’. Academia promulgates the fringe by placing genuine Aboriginal and Torres Strait Islander perspectives on the boundary. While academic literature on Aboriginal Australians abound across multiple disciplines in particular, anthropology and sociology (Dodson, 2003), in comparison that focus reduces significantly in relation to Aboriginal Australian enterprises (Foley, 2005; Willmetts, 2009). While a litany of studies suggesting Aboriginal Australian people represent the most researched target of academia (Dodson 2003) it is usually the outsiders’ perspective imbued by the vestiges of colonialism. This is starkly evident in scholarly discourse pertaining to the notion of Aboriginal Australian enterprise written with an Indigenous voice which Foley (2013) purports as few and far between. The reality is for Aboriginal and Torres Strait Islander peoples, the establishment of a vibrant corporate class is critical in the economic and social liberation so as to break the cycle of welfare dependency. This paper is written by two Aboriginal academics, a Yawuru man from Broome, Western Australia and a Guditjamara man from Western Victoria, writing with an Indigenous voice.

The body of literature pertaining to Indigenous enterprises emerging from Canada, New Zealand and the United States (Mantonya & Wall, 2007; Schmitt, 2013; Warren, Mika, & Palmer, 2018; Willmet, 2009) surfaces common threads and themes. The First Nations people of these countries in conjunction with Australian Aboriginals are referred to as the CANZUS states (Gover, 2015). Drawing from the Canadian, New Zealand and United States Indigenous experience offers valuable insights in studying Australian Aboriginal enterprise due to the shared lived experiences of British colonisation, including the removal of lands, human rights violations and the exclusion of economic engagement. Drawing on this literature this paper first provides a historical, political and socio-economic context to Australian Aboriginal enterprise, second, it explores definitions of Aboriginal enterprise in Australia, third it draws on the research emerging from the CANZUS states and questions in an Australian context what would be the unpinning values of a successful Aboriginal enterprise and finally we identify key research questions. Aboriginal Australian and Indigenous Australian are used interchangeably throughout this paper as inclusive of both Aboriginal and Torres Strait Islander people, the First People of Australia.

THE HISTORICAL CONTEXT OF AUSTRALIAN ABORIGINAL ENTERPRISE

Australian Aboriginal enterprises have existed in some instances for more than 40,000 years. Over that time some 650 Aboriginal nations actively traded across the length and breadth of the Australian continent. Leadership decisions by Elders were drawn for geographical boundaries between nations that defined trade routes. The notion of ‘crossing borders’ “was prohibited without invitation or permission from the neighbouring clan” (Peters, 2017, p. 30) and in these ‘trade’ routes, the paths our enterprising forefathers walked, have become known today as ‘songlines’ utilised through traditional ‘Dreaming’ stories as a method of knowledge transference. The travel of these paths criss-crossed the continent for thousands of kilometres as a response to seasonal change, food sources, ceremony and trade. Trade items included pearl, ochre, wooden implements, green stone and smoked eels. International trading partners included the Qing Dynasty from China and the Makassins of Indonesia. A complex and well-orchestrated Aboriginal economy flourished.

The arrival of the First Fleet in 1788 soon signalled the subjugation of the Aboriginal peoples, as the British came to dominate every aspect of the colonies, we soon became strangers in our own land. Removed from our land, murdered, raped, denied language, imprisoned and sold into slavery, we were treated as sub-human. Successive multi-generational trauma was experienced through the removal of children through a strategy of assimilation. Those not worth saving, the full bloods, the black ones, were representative of a dying race. Denied access to education, role models and a fair days pay, existence was in the margins at the grace of his/her majesty, servants and subjects, the only accessible economy available was that of the welfare economy.

The 1967 Referendum confirming the inclusion of Aboriginal Australians in the census was but one anecdote in a decade of change, ending in the early 1970's. The Referendum, whilst symbolically significant, was far less so in practice. It did not bestow citizenship on Aboriginal Australians, it did little for wage equality nor did it give the right to vote. The ensuing Commonwealth policy eras comprised Self Determination followed by Self-Management. During this time, the High Court of Australia recognised in the Mabo case of 1992 that the concept of Terra Nullius was a fictional myth and that Aboriginal Australians had land rights (ownership). Importantly, recognition of Native Title predates the assertion British sovereignty.

With the benefit of hindsight, the ushering in of a new interventionist policy era by the Commonwealth has done little for overcoming Indigenous disadvantage when compared to non-Indigenous Australians in the areas of economic participation, education and training, governance, leadership and culture, healthy lives, early child development, home environment, safe and supportive environments (Australian Government, 2016). Two hundred and thirty years of colonial oppression, has created the current social and economic dilemma, regenerating itself, creating a considerable impediment. The objective is to integrate the populace of Aboriginal Australians into contemporary society. Economic participation provides but one such opportunity; requiring, the redressing of social and economic predicaments to ensuring sustained success. Successfully establishing, maturing and expanding, Aboriginal Australian enterprises in conjunction with fostering new market entrants by the next generation of Aboriginal Australians provides the opportunity to promote economic

independence, whilst empowering them to aspire to further self-determination (Foley, 2013). Aboriginal Australians, are best positioned to address the lived experiences of social, cultural and economic disadvantage more effectively than government instituted intercession (Foley & Frederick, 2006). That is why the authentic Aboriginal voice is essential to success.

The Australian Federal Government has more recently moved to a policy mandate incorporating both ‘Self Determination’ and ‘Self-Management’. Recognition of past policy failure lies at the forefront of such a decision. Furthermore, this era has ushered in an era of greater understanding that Aboriginal Australians engaged in the economic machinery of the day are better positioned at reversing the historical social impediments of dis-advantage.

WHAT IS AN ABORIGINAL AUSTRALIAN ENTERPRISE?

Gaining agreement on what is an Aboriginal Australian enterprise, let alone its operating parameters and measures of what constitutes success is challenging. Contention lies with the definitional disputation existing amongst Aboriginal Australians, Indigenous agencies and Australian Government Departments (Foley, 2014). The first step is to define who is an Aboriginal Australian. Aboriginal Australians have been classified incessantly since the time of European settlement and this has been subject to contentious and considerable debates. The arrival of settlers, colonisers and invaders, over time, has led to over 60 government definitions of Aboriginality (Commonwealth of Australia, 1991; McCorquodale, 1997). Such descriptions were both disparaging and de-humanising. Indeed, the mother of one of the authors was classified by the West Australian Government in multiple communications in the 1940’s, interchangeably being referred to as half-caste and quadroon.

It can be argued that the multiplicity of definitions utilised have been largely based on racist sentiment, administrative convenience or a mixture of both with the terminology being influenced by concepts such as blood quantum, race and self-identification with varying degrees of acceptance depending where one sits on the racial divide (Foley, 2013; Foley & Hunter, 2013). The latter part of the twentieth century has realised a three-part legal definition under common law that an Aboriginal Australian and Torres Strait Islander person is: (1) a person of Aboriginal or Torres Strait Islander

descent who; (2) identifies as being of Aboriginal or Torres Strait Islander origin', and who is; (3) accepted as such by the community with which the person associates (Aboriginal and Torres Strait Islander Commission (ATSIC), 1998; Australian Government, 2003).

To be constituted as an Aboriginal Australian enterprise, organisations need to be both owned and controlled by Aboriginal Australians, to add to the complexity various Australian Government Departments and Indigenous Australian agencies have differing definitions of the aforementioned. Across the spectrum of Australian society there is confusion and disagreement as to what defines an Aboriginal Australian enterprise between government, industry bodies, corporate Australia and Aboriginal Australians surrounding majority ownership and control. The Australian Bureau of Statistics (2012) (ABS) attempted to gain consensus by providing two working definitions; (1) An Aboriginal Australian owned enterprise where a minimum of one owner identifies as being an Indigenous Australian; (2) An Aboriginal Australian owned and controlled enterprise that is majority owned by Indigenous Australians. The second point, necessitates requiring greater than 50% majority ownership which is at the exclusion of partnerships and joint ventures where one individual is a non-Aboriginal Australian. The ABS have further set parameters for both these definitions to apply only to small-medium enterprises, those with less than 200 employees at the exclusion of large enterprises. The exclusion of large enterprises is linked to complexities in assessing ownership, purporting to protect genuine Aboriginal Australian enterprise from unscrupulous operators who are impersonating or are tokenistic in their claims of being an Aboriginal Australian enterprise (Haynes, 2010). When considering other commercial enterprises, the degree of control, influence, power, board participation and managerial influence one can achieve with far less than a 50% equity in the organisation provides an area for consternation (Foley & Hunter, 2013). The authors suggest analysis of large corporate Aboriginal Australian entities and their ownership appears to be an area worthy of future research.

Key Aboriginal agencies and industry administrators, Indigenous Business Australia and Supply Nation apply a strict definitional approach in certifying Aboriginal enterprises. Following overseas research by Willmet (2009), Supply Nation adopted a stringent certification process requiring majority ownership, control and key decision makers being Aboriginal Australian. The

greater than 51% equity classification as an Aboriginal Australian enterprise is somewhat restrictive and could be interpreted as protectionist in nature. Foley and Hunter (2013) propagate this line of thought and it is particularly relevant for those organisations established as partnerships where one partner is a non –Aboriginal Australian. Supply Nation and Indigenous Business Australia, specifically established to foster the economic growth of Aboriginal Australian enterprises, strictly adhere to the 51% or greater majority owned definition on the basis that such ensures program integrity having the greatest effect in promoting Aboriginal Australians economic impact (Willmetts, 2009). On the contrary, Foley and Hunter (2013) suggest a 50% equity will achieve similar outcomes whilst broadening the impact that the benefits of economic engagement will bring to Aboriginal Australians. Identifying an Aboriginal Australian enterprise forms a crucial component on any future research regardless of enterprise category or locational factors. Some may interpret the current percentage criteria as exclusionary in nature, and likely to have led to under counting of genuine Aboriginal Australian enterprises (Hunter, 2016). For, government, Indigenous agencies, private sector and Aboriginal Australians alike, “ ...it remains surprisingly difficult to adequately define an Indigenous business ... ” (Foley & Hunter, 2013, p. 67).

CLASSIFICATION OF ABORIGINAL ENTERPRISES

Willmetts (2009) identifies a disjointed range of stakeholders operating with limited coordination in developing and implementing strategies, programs and initiatives to benefit Aboriginal Australian enterprises over the last twenty years. Importantly, he advocates this group should be under Indigenous guidance. This is highly evident in the definition of an Aboriginal Australian enterprise. The ABS definition of an Indigenous business is designed to align with its generic business definition which reads: Aboriginal Australian enterprises exist in every shape and size, adapting to meet the unique geographical, industry and operating parameters they operate in. The diverse commercial environment witnesses a multitude of organisational structures such as sole proprietorships, partnerships and corporations. Just as there is diversity in organisational structure so too is there diversity in classifying size with small, medium and large entities operating locally, nationally and internationally. Categorisation across world markets is influenced by a range of

criteria including but not limited to employee numbers, capital investment, industry sector and annual fiscal turnover. (Australian Taxation Office, 2017; Storey, 2016).

Aboriginal Australians experience considerable disadvantage when compared to other Australians across all socio-economic indicators, including economic development (Australian Government, 2016). Small enterprises are of relevance to Aboriginal Australians as they are often the stepping in point for self-employment, providing a vehicle for redressing socio-economic disadvantage whilst promoting self-determination. Adding to the aforementioned is the increased incidence that Aboriginal Australian small enterprises, are far more likely to employ other Aboriginal Australians (Collins, Morrison, Basu, & Krivokapic-Skoko, 2017). Hunter (2014) is emphatic in his appraisal, stating, “Indigenous businesses are still about 100 times more likely to employ an Indigenous Australian than non-Indigenous businesses’ (p. 16). The importance of the previous is the multiplier effect that establishing and subsequent transitioning to a sustainable Aboriginal Australian commercial entity has directly and indirectly across the full spectrum of Indigenous disadvantage.

The ABS (2010) definition is at the exclusion of most community corporations on the basis that they are not for profit and not therefore engaged in productive activities. This has also been used for a method of exclusion by scholars (Foley, 2006; Foley & Hunter, 2013). Contrary to this approach is Pearson and Helms (2013) who highlight the Gumatj Corporation (GC) described as a “... not for profit entrepreneurial venture ... pursuing sustainable economic development and ultimately independence from Australian Government welfare, and subsidies” (p. 53). The GC is but one example of the changing nature of social entrepreneurship at the community corporation level further substantiating the need for more research.

CANZUS

The ‘western settler’ states of Canada, Australia, New Zealand and the United States draws derision in certain quarters but is employed in the language of the United Nations becoming the genesis of the term CANZUS (Gover, 2015). The CANZUS grouping includes the following Indigenous peoples: First Nations/Metis/Aboriginal/Canada, Aboriginal and Torres Strait Islanders /Australia, Māori/Aotearoa/New Zealand and Native American/Turtle Island/ United States.

Collectively CANZUS projects a rich source of scholarly literature in the Indigenous enterprise space that complements and contributes to the context of Aboriginal Australian enterprise experiences. The comparative lens applied to CANZUS states is an area of research offering a world view of some Indigenous peoples' enterprise experiences by way of comparison and contrast.

North America

Analysis of the Canadian and United States of America (US) context focuses on the Minority Business Enterprise (MBE) Certification criteria pertaining to ownership. To qualify as an Indigenous business, important factors such as legislation, regulations and associated strategies are outside the scope of this paper. These are complex and varied given the composition of both countries and the diversity amongst US states. In North America, Minority Business Enterprise (MBE) Certification is assessed across multiple tiers of government and third-party certifiers. A successful MBE Certification process includes application, site visit and subsequent approval as a certified supplier. Re-certification is an annual process. Two of the more noted certifying organisations are the Canadian Aboriginal and Minority Supplier Council (CAMSC) and National Minority Supplier Development Council (NMSDC) (Willmet, 2009). A key criteria of MBE Certification is that the enterprise be " ... 51 percent owned, managed operated and controlled by an ethnic minority (EM) or a group of minorities" (Willmet, 2009, p. 37).

MBE Certification is reported to primarily increase the networked opportunity to access Government and corporate procurement opportunities which are influenced by its diversity policies and strategies pertaining to supply chains. Canada advocates the Procurement Strategy for Aboriginal Business (PSAB) which aims to increase federal government contracting opportunities for Aboriginal businesses comprising First Nations, Inuit and Metis.

New Zealand

Closer to Australia, Aotearoa (New Zealand) does not have a readily agreed definition of what is a Maōri enterprise (Mika & O'Sullivan, 2014). A search of the following agencies, The Treasury, Te Puni Kōkiri, Ministry of Primary Industry, Callaghan Innovation and New Zealand

Trade and Enterprise was unable to identify a comparative definitional construct from these key agencies. General consensus does include identity, values and ownership with the prevailing modus operandi being self-identification (Harmsworth, 2005; Mika & O'Sullivan, 2014). As others have previously suggested Māori enterprise classification is a more holistic approach (Foley, 2014).

Descriptors constituting a Māori business can comprise legal, economic and cultural attributes. Common threads pervade amongst key authors including elements of what constitutes a Māori enterprise include: (a) Māori people operate and control the business (inclusive of mixed – Māori and non-Māori – owners), (b) Māori representation of staff group, (c) Tikanga (cultural practice) as well as kaupapa (ideology) influence the Māori organisational enterprise, and (d) Māori obligation, accountability and responsibility can be to a broad family grouping in addition to internal and external customers (e) Structure and legal entity (Durie, 2002; Harmsworth, 2005; Mika & O'Sullivan, 2014). Importantly Māori enterprises are reported in the literature as organisations with 50 percent or more Māori ownership. Equally important are organisations operating as they see fit, “ ... according to the identity (whakapapa), values (tikanga) and ownership (mana) interests of their members, whether constituted under traditional tribal institutions or more recent institutional arrangements” (Mika & O'Sullivan, 2014, p. 8).

What Does Success Look Like?

Both Foley (2006) and Altman (2001) suggests that the drivers of success for small enterprises whether they be Aboriginal Australian or otherwise are likely to be similar. Alternatively, the rate of small enterprise failure is rather acquiesced to all ‘start ups’ regardless of whom is the owner. An additional caveat, is that some Aboriginal Australian entities also incorporate a unique additional characteristic, that of a cultural approach to economic development.

The structures of Aboriginal Australian enterprises vary, and include community-owned corporations, individually-owned entities, for profit and not-for-profit enterprises and partnerships, some with majority Indigenous ownership equating to 51% or greater, some with less. Equity greater than 50% of an Aboriginal Australian enterprise is considered a significant factor in ensuring strategy,

resource allocation and control of decision-making sets the foundations leading to greater self-determination. Altman (2001) suggests there has been inadequate analysis as to the reasons for success and failure of Indigenous enterprises with limited data for comparison to non-Indigenous businesses. Evidence focuses upon Indigenous visions and aspirations, investment decisions, managerial capacity, poor organisational calibration, lack of strategic acumen and governance (Altman, 2001). None of the above constitutes characteristics unique to Aboriginal Australian enterprise failure and reflect the systemic challenges facing all small enterprise ‘start ups’ across multiple industry types and locations. Equally vague are contributing elements to Indigenous enterprise success which may include: (A) joint ventures; (B) quality of management; (C) competency of boards of management and; (D) commercial concessions, monopolies or competitive advantages (Altman, 2001). Altman (2001) proffers targeting skill acquisition through the investment in human capital accompanied by establishing an economic foundation of viable Indigenous businesses. The formal attainment of business qualifications is well supported in the literature however the latter notion is somewhat vague (Bajada & Trayler, 2014). These rather generalised, albeit agreeable assumptions may reflect the complexity and diversity of the discourse. “Just as there is no single explanatory of failure there is no single explanatory of success” (Altman, 2001, p. 18). Bodle & Brimble (2018) state that Australian First Nation enterprises are underperforming relative to non-Indigenous enterprises. They proactively espouse performance can be improved with greater focus on financial and commercial literacy, accompanied by supportive management structures, utilising strategic human resource management practices with appropriate accountability mechanisms in place to counter the often-espoused conflict between commercial and cultural objectives. This sentiment recognises “...the competitive edge of Indigenous business is often precisely the result of mixing of the commercial and cultural ... “ (Altman, 2001, p. 20). Alternatively, Foley in contrast counters that “Indigenous Australia cannot be compared, judged in a Western model” (2000, p. 22).

CONCLUSION

It is evident that the value systems that underpins definitional categories of what is an Aboriginal enterprise in Australia are in fact western values imposed through government or quasi-

independent funding and certification agencies. Critics of Keynesian economic principles who naturally decry government intrusion into capitalist practise would be energised by the dissonance evident in these programs intended to move Aboriginal and Torres Strait Islander peoples from the fringe of the economy.

The law of unintended consequence spawned by a bureaucratic intervention colliding with the free market are no more evident than in the interpretative variants of what constitutes an Aboriginal enterprise. Chronic inconsistency existing between all the significant players, the IBA, ATO, ABS and Supply Nation have done little to elevate the economic base for Aboriginal and Torres Strait Islander peoples in Australia. Greater input from the Aboriginal corporate sector and independent representative bodies may be of benefit in influencing the contested notion of what constitutes an Aboriginal enterprise in Australia. The ultimate objective is to influence both enterprise operators and policy makers, supporting the expansion of Indigenous Australian enterprises enhancing the social and economic conditions experienced by Aboriginal Australians so they can thrive and prosper comparatively to non-Indigenous Australians.

Expansion of Indigenous Australian enterprises is critical for fostering Aboriginal people's independence, self-actualisation and realising social and economic predictors of success, allowing for the exploration of new boundaries of self-determination (Altman, 2001; Foley & Hunter, 2013). Until which point in time the definition of an Aboriginal enterprise further embraces the many entities existing outside the Supply Nation certified definition, the benefits of policies will not be fully realised to the detriment to the very entities the very policy was established to assist.

Emerging Research Questions

What is the perceived definition of an Aboriginal Australian enterprise?

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Stream 15. Technology, Innovation and Supply Chain Management

Stream 11. Project Organising

Interactive Session

Dynamics of Stakeholder Interaction and Perception in Project Management

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Stream 15. Technology, Innovation and Supply Chain Management

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Interactive Session

Dynamics of Stakeholder Interaction and Perception in Project Management

Abstract: Perceptions of individual stakeholders can change when they interact with other stakeholders in a project. In line with the increasing number of studies of project individual stakeholders and stakeholder interaction in recent years, this research provides deeper insight into the changing perceptions of individual stakeholders while engaging in stakeholder networks. Philosophically, this research draws upon the core idea of social constructionism paradigm which claims that people’s ‘realities’ are ‘constructed’ through their social interaction with others. Within this paradigm, the research draws upon the Personal Construct Theory which seeks to elucidate the constructs that underpin people’s thinking. The Repertory Grid Technique, developed from Personal Construct Theory, is used to map and analyse individual stakeholder perceptions using a New Zealand case study.

1. INTRODUCTION

The concept, framework, philosophy and processes of the stakeholder approach have become an integral part of organisations and management (Freeman, 2010). The field of project management has also acknowledged the importance and complexity associated with managing multiple stakeholders during the life of a project (e.g. Elias and Zwikael, 2007). Understanding stakeholder behaviour and managing stakeholders effectively are now considered to be key success factors in project management (Beringer et al., 2013).

While managing stakeholders in projects, experts have noted the phenomena of stakeholder dynamics in which stakeholders change their perceptions, interests and behaviour during the project (Elias et al., 2001). Interactions between different stakeholders that develop within stakeholder networks (Rowley, 1997) can contribute to a change in stakeholder perceptions towards the project. Such changing perceptions of individual stakeholders due to their interactions with other stakeholders present a complex issue as this affects the effectiveness of project management. This study aims to explore this issue in detail.

This study will base its theoretical framework on Personal Construct Theory (Kelly, 2002) as this theory argues that people’s perception is shaped by their interaction with others. The Repertory Grid Technique which was developed from Personal Construct Theory will be used to represent graphically how stakeholders “construe” the projects. Follow-up questions about the causes of the

changes in stakeholders' thinking "constructs" will shed light on how interaction affects stakeholders' perception of projects.

The paper begins with a broad review of existing literature on stakeholders in organisations and projects followed by a specific review of stakeholder perceptions in projects. Then the research paradigm of Social Constructionism, Personal Construct Theory and the Repertory Grid Technique are presented. This is followed by an illustration of how data was collected and analysed using the Repertory Grid Technique for a New Zealand case study. Finally, the findings and conclusions that were derived from this study are presented.

2. LITERATURE REVIEW

Overview of Classical Stakeholder Literature

In 1963, the Stanford Research Institute first introduced the concept of stakeholders as "those groups without whose support the organisation would cease to exist" (Freeman, 1984). This concept was then developed in four main academic fields: corporate planning, systems theory, corporate social responsibility and organisation theory (Freeman, 1984). In his landmark book, Freeman (1984) proposed a now-classic definition of stakeholders: "a stakeholder in an organization is any group or individual who can affect or is affected by the achievement of the organization's objectives". In parallel with that, Freeman (1984) proposed three levels of stakeholder analysis: rational, process and transactional. Following on from Freeman's (1984) book, Mendelow (1991) proposed the power/interest matrix to analyse strategies to manage stakeholders. Donaldson and Preston (1995) then made a significant contribution by identifying three main approaches of stakeholder research: descriptive/empirical, instrumental and normative. Some later researchers supported convergent theories which unify these three approaches (for example, Jones and Wicks, 1999) while others argued for divergent theories (for example, Freeman, 1999). Researchers have also called for more empirical research of stakeholders (Freeman, 1999). Since then, empirical research has been following different approaches, including the three approaches which are described below.

Recent Trends in Literature

(i) From stakeholders as groups to individual stakeholders

According to Freeman (1984), stakeholders consist of group and individual stakeholders. The review of recent empirical stakeholder studies in organisations generally and projects specifically shows a shift in focus from stakeholders as groups to individual stakeholders.

Research a decade ago mostly focused on group stakeholders (e.g. Kochan and Rubinstein, 2000; Friedman and Miles, 2002; Buysse and Verbeke, 2003; Brammer and Millington, 2004; Easley and Lenox, 2006; and Jones, Felps, and Bigley, 2007) while recent research focuses more on characteristics of individual stakeholders. Examples are Cennamo, Berrone, Cruz, and Gomez-Mejia (2012), York, O’Neil, and Sarasvathy (2016), Crilly, Zollo, and Hansen (2012), Sloan and Oliver (2013), Bridoux and Stoelhorst (2014), Bridoux and Stoelhorst (2016) and Bosse and Coughlan (2016)

The shift in interest from group to individual stakeholders is also reflected in different topics of stakeholder studies in projects. The first such topic is stakeholder involvement and engagement. Studies of this topic ten years ago focused more on group stakeholders (e.g. El-Gohary et al., 2006) while recent studies focus more on individual stakeholders (e.g. Heravi, Coffey, and Trigunarsyah, 2015; Butt, Naaranoja, and Savolainen, 2016; and Purvis et al., 2015). The second topic is stakeholder identification and stakeholder analysis. Here, a shift of focus from group (Achterkamp and Vos, 2008 and Sallinen, Ahola, and Ruuska, 2011) to individual stakeholder is also evident (e.g. Aaltonen, 2011).

(ii) From dyadic to network approaches

In his influential paper, Rowley (1997) has defined a dyadic approach as a relationship between an organisation and a certain stakeholder and a network approach as the interaction of stakeholders. He also called for more stakeholder studies following network approaches as they better reflect the interaction of stakeholders in reality. Since Rowley’s (1997) call, there have been shifts in empirical stakeholder studies from dyadic to network approaches in both stakeholders studies in organisations and also in projects.

Insert Figure 1 about here

More than a decade ago, many stakeholder studies in organisations followed dyadic approaches (e.g. Friedman and Miles, 2002; Eesley and Lenox, 2006). After that, there have been more studies which partly involved interaction of stakeholders (e.g. Rowley and Moldoveanu, 2003; Pajunene, 2006). While these studies seemed to signal the shifts to network approaches, these approaches have become more obvious since 2010 with studies such as Werder (2011), Weitzner and Deutsch (2015) and Dorobantu et al., (2016).

Stakeholder studies in projects have also emerged gradually from just partly including to completely focusing on network approaches. Examples of studies which partly include network approaches are Olander and Landin (2005) and Aaltonen, Jaakko, and Tuomas (2008). Following on from these studies, there seemed to be an obvious trend of studies of network approaches since 2010. This trend can be seen in the applications of network theories to study stakeholder networks in projects (e.g. Loufrani-Fedida, 2014; Yang et al., 2016; Yang, Shen, Ho, Drew, and Xue, 2011). The trend can also be seen in the way in which researchers used relationships among stakeholders to describe the “environment” of companies (e.g. Aaltonen and Sivonen, 2009; Aaltonen and Kujala, 2016) or to study stakeholder priority (Yang, 2014) and issue priority (van Offenbeek & Vos, 2016).

In summary, there have been strong shifts from dyadic approaches to network approaches of stakeholder studies in both general organisations and projects.

(iii) From static to dynamic approaches

The dynamics of stakeholders were mentioned by Mitchell, Agle, and Wood (1997) when they explained changing stakeholder salience using three stakeholder attributes of power, legitimacy and urgency. Stakeholders dynamics then have been emphasised in studies like Aghalaya et al., (2012) who proposed applications of systems dynamics for understanding of stakeholder behaviour and Elias (2016) who used the concept to analyse lean six sigma projects. Following on from this, other empirical stakeholder studies in organisations and projects have focused on the dynamics of stakeholders. First, studies looking at changes of stakeholders in organisations have shifted their focuses from changes which is from one type to another type (e.g. Friedman and Miles, 2002) to ongoing changes (e.g. Bundy et al., 2013). Similarly, while more than one decade ago, stakeholder studies in projects only partly investigate stakeholder dynamics, more recent studies focus on this

completely. Examples of studies which partly investigate stakeholder dynamics are Olander and Landin (2005) and Boonstra (2006). Meanwhile, the ways in which stakeholders change are the focuses of many recent studies. Examples are Aaltonen et al. (2015), Aaltonen and Sivonen (2009), Eskerod and Vaagaasar (2014), Jepsen and Eskerod (2009) and Missonier and Loufrani-Fedida (2014). In summary, the dynamic approaches which emphasise the ways in which stakeholders change have become prominent in stakeholder studies in both organisations and projects.

Stakeholder Perception of Projects

Project success, project management and project performance are three topics related to the broad literature on projects. Here an attempt is made to review these concepts and clarify the concept of “stakeholder perception of project” in this study.

Researchers first have tried to differentiate project success from project management. A project is considered to be successful if the project “meets the technical performance specification and/or satisfaction concerning the project outcome among key people in the parent organisation, key people in the project team and key users or clientele of the project effort” (De Wit, 1988). Meanwhile, project management is “the application of knowledge, skills, tools and techniques to project activities to meet project requirements” (Guide, 2004). A project can be viewed as “successful” despite poor project management and vice versa (De Wit, 1998). Recently, developments of these two concepts have been made.

Specifically, recent studies have focused more on different stakeholder perceptions of project success and considered project success both when projects are completed and after that. First, studies have found that stakeholders do not have a common perception of project success (Davis, 2014). Individual stakeholders with different experiences and in different organisation types have different perceptions of project success (Toor & Ogunlana, 2010). More indicators of project success besides the three traditional indicators of time, budget and project specification have been proposed (e.g. Toor and Ogunlana, 2010 and Davis, 2016). Second, studies of stakeholder perception of project success after project completion have been especially called for by researchers (e.g. Jugdev and Muller, 2005). A project performance framework which consists of three factors: “project management success”, “project ownership success” and “project investment success” has been proposed by

Zwikael and Smyrk (2012). These three factors respectively reflect the effectiveness of project management during the implementation of projects, the satisfaction of owners with the project outcomes and the satisfaction of owners with the long-term benefits of the project outcomes.

Based on the above review, stakeholder perception of “projects”, which is the focus of this research, consists of three components. They are stakeholder perception of project management, stakeholder perception of the project outcomes, and stakeholder perception of the long-term benefits of the project outcomes. Furthermore, as current studies mostly focus on stakeholder perception only at the completion of projects or after that (Turner & Zolin, 2012), this research focuses on the changes of stakeholder perception during the implementation of projects.

In summary, considering the three trends in stakeholder literature and their applications in project management literature, this review found that more studies are required that focuses on individual stakeholders, stakeholder networking and stakeholder dynamics. There is a research gap in the literature on individual stakeholders who change their perceptions while engaging in stakeholder networks. This is particularly relevant to their perception of project success, project management and project performance.

3. METHODOLOGY

Social Constructionism

The research paradigm of this research is social constructionism. In social constructionism, reality depends on how people perceive it and people’s perception of reality depends on people’s relations and negotiations (Gergen, 2015). Social constructionism also argues that people rely on a number of traditions of sense making to describe their reality (Gergen, 2015). The importance of “continual and cohesive” communication in sustaining knowledge of reality is also emphasised by Gergen (1985) and Berger and Luckmann (1991). Berger and Luckmann (1991) also argued that the knowledge of reality can be altered by favourable social and conceptual conditions. The concept of knowledge creation was then elaborated more by Shotter (1997) who argued that people’s thinking is constructed moment by moment as they interact with people. Social constructionism therefore is in line with this research which focuses on how stakeholders’ interaction affects their perception of projects. In the next

section, Personal Construct Theory which proposes a way to describe changes of people's thinking is presented.

Personal Construct Theory

Personal Construct Theory was developed by George Kelly, a clinical psychologist and educator. The theory he proposed in 1955 is a way to understand people's thinking as well as how the thinking is established. In particular, according to the theory, every layperson can be considered as a "scientist". As "scientists", people constantly develop "hypotheses" to understand, predict and control their realities. These "hypotheses" are built from what Kelly describes as "systems of constructs" (Kelly, 2002). These systems of constructs are not fixed but kept testing and revising. Kelly called this testing and revising "validation" and "invalidation". A construction is validated when people's predictions and the outcomes as experienced are compatible. On the other hand, a construction is invalidated when people's predictions and the outcomes are incompatible. Validation and invalidation affect not only the particular constructs which were involved in the original predictions, but also affects related constructs (Kelly, 2002). He also described favourable and unfavourable conditions for the formation of new constructs. Favourable conditions include providing validating data, introducing "fresh elements" which do not disrupt people's "core" constructs, and using "experimentation" to control other "variables". On the contrary, unfavourable conditions are using old materials, using "threats" which disrupt people's "core" constructs, and not using "experimentation". In summary, Personal Construct Theory discusses how people's concepts of the reality are shaped and much of the discussion involves the interaction of people. This makes the theory suitable to study the dynamics of interaction and perception of individual stakeholders of projects. The Repertory Grid Technique which was developed from this theory will be used for this research and a description of the technique is presented below.

The Repertory Grid Technique

The Repertory Grid Technique is an interview technique to elicit people's perception of certain things (Kelly, 1955). The characteristics of the technique as well as their applications in project management research have shown that the technique is suitable to describe the changes in individual stakeholders' perception of projects.

When using the Repertory Grid Technique, a set of four to eight elements related to the research topics is chosen by interviewers or interviewees. Then, the interviewees are asked to think of characteristics to compare these elements. This process is called construct elicitation (Fransella, Bell, & Bannister, 2004). The construct elicitation can be full-context forms and minimum-context forms. Triadic elicitation is one of the most popular minimum context forms. The triadic elicitation involves presenting sets of three elements and asking interviewees to identify the similarities and differences among them. The elicitation is done until no new construct emerges (Curtis et al., 2008). A technique called laddering can also be used to explore the meaning of the constructs as well as the relationship among the constructs (Curtis et al., 2008). After the constructs have been elicited, the interviewees are asked to assess the elements according to the constructs. The assessment can be in terms of dichotomizing, rating or ranking (Fransella et al., 2004). Among them, rating is argued to be the best one for linking elements with constructs (Curtis et al., 2008). An example of a repertory grid with ratings is presented below.

Insert Figure 2 about here

The Repertory Grid Technique is argued to be a good interview technique to elicit answers from the interviewees without the biases of interviewers’ frame of reference (Reger, 1990). The technique is also suitable to describe the changes in an interviewee’s perception over time (Tan & Hunter, 2002). These changes can be described by the changes in either the content of the constructs or the ratings or both (Jankowicz, 2003). The raw data which is elicited by the technique can be used for both qualitative and quantitative analysis (Curtis et al., 2008; Tan & Hunter, 2002). An example of qualitative analysis is content analysis. Examples of quantitative analysis are cluster/correlation analysis, and principle component analysis (Curtis et al., 2008). An example of a principle component analysis of a repertory grid is presented below.

Insert Figure 3 about here

The Repertory Grid Technique has been used in many studies of project management. The technique has been used to both elicit answers from the interviewees and analyse those answers quantitatively and qualitatively (Tan & Hunter, 2002). For example, Wagner et al., (2015) used this

technique to study factors that impact the efforts of enterprise application integration while Medina and Francis (2015) used this technique to study characteristics of a good project manager. Laddering techniques were also used to clarify meaning of constructs (e.g. Pankratz et al., 2014). Qualitative analysis such as content analysis and categorising was also used to analyse the data elicited from respondents (e.g. Wagner *et al.*, 2015 ; Medina and Francis, 2015).

Methods

This research will collect data from a project case. This case study will be used as an instrumental case study to provide insights into the research topic (Stake, 2000). Data will be collected from interviewing four members of the project before and after the three monthly meetings of the project.

The interviews before the first meeting are expected to be the longest one. These interviews consist of two parts. In the first parts, the Repertory Grid Technique will be used to interview the participants about their perception of projects. The interviews will use six elements: “*The ideal project*”, “*The bad project*”, “*This project*”, and three other projects in which the participants have worked. Triadic elicitation will be used to elicit participants’ thinking constructs of these projects. For each set of three projects, the participants will be asked: “*What makes any two of these projects similar and different from the third?*” The elicitation is done until no new answer comes up. In the second parts, reflection questions will be used to ask the participants about why they come up with the constructs in the first parts.

Following on from the first interviews, the interviews after the first meeting, before and after the second and the third meeting will be similar. In these interviews, to avoid the biases which can be caused by the first interviews’ repertory grids, the participants will be first asked whether they have any concern about the project and the reasons for those concerns. Then, the participants will be asked to re-rate the repertory grids which they have produced in the first interviews. Along with these re-ratings, the participants will be asked to reflect on what happened in the project or in the meetings and how this impacts their re-ratings. Outlines of the data collection methods are presented in the figure below.

Insert Figure 4 about here

For the purposes of illustrating the expected findings and data analysis, a pilot study was done. In this pilot study, data was collected from a project in a university in New Zealand. The project was about exam redesign with the objective of improving the quality of examination process in the university. The pilot study specifically focused on a sub-project which was called the Exam Supervision Improvement Project. This sub-project focused on reviewing and improving the quality of exam supervision in the university. Data was collected from interviewing three project members before and after a session of this sub-project. This session involving multiple stakeholders was named the Exam Supervision Review Session which focused on reviewing exam supervision in the university. The three participants included the project leader, and two project members. These participants had different levels of experience in exam supervision. The summary of data collection of the pilot study is presented below.

Inset Table 1 about here

The interviews before the meeting used triadic elicitation with six elements. Three of the elements used were *ideal exam supervision*, *bad exam supervision*, and *exam supervision in our university*. The other three elements consisted of *exam supervision in two other universities* which the participants have worked for and *IELTS exam supervision*. The result of the elicitation was a repertory grid for each participant. The participants were also asked why they came up with the constructs in the grids. After the meeting, each participant was asked to re-rate his/her grid or add new constructs to the grid. The participants were then asked to explain for the changes which they made to their grids.

4. FINDINGS AND ANALYSIS

Rep Plus VI.1 software was used to analyse and compare the repertory grids of each participant before and after the meeting. Explanations of participants for the constructs and the changes were also analysed to identify how stakeholder interaction affect the participant perception.

The first participant, named A for anonymity, was the project leader. The interview before and after the meetings reveal that there was no change in her perception of exam supervision. The reason for this can be explained using her quote: *“because I was so experienced in exam supervision*

in this university, the meeting did not provide me anything new to change my thinking". Her repertory grid and the principle component analysis of the grid are presented below.

Insert Figure 5a and 5b about here

The second participant (B) was a project member. Although she had some experiences in *exam supervision*, she was less experienced than A in the current university. The comparisons of her repertory grids before and after the meeting reveal minor changes in her perception of exam supervision. The comparisons are presented in the figure below.

Insert Figure 6a about here

According to the figure, B changed her ratings regarding the *exam supervision at current university* in two constructs and added two new constructs to the whole grid (Table 2). She explained that the information she received in the meeting changed those aspects of her thinking. These changes affected her perception of the exam system in the current university as well as exam supervision in other related universities. In figure 6b, the arrow describes the shift of her perception w.r.t current university in the principle component analysis graph after the meeting.

Insert Figure 6b and Table 2 about here

The third participant (C) was a project member. She was the least experienced among the three participants. The comparisons of C's repertory grids before and after the meeting reveal that there were considerable changes in her ratings (Figure 7a). She has also added three new constructs after the meeting (Table 3). These changes affected not only her perception of exam supervision in the current university but her perception of exam supervision in other universities which she has experienced. The arrows in Figure 7b describe the shifts of her perception in the principle component analysis graph.

Insert Figure 7a, Figure 7b and Table 3 about here

The analyses of the reasons why participants came up with the constructs before the meeting reveal that many of the constructs were from the participants' experiences in their previous projects. The less experienced the participants were at the current project, the more the participants used their experiences in the past to construct their perception of the current project. For example, C with the least experiences in the current university derived completely her perception constructs from her experiences in other universities. Meanwhile, A and B with more experiences in the current university derived their constructs from both their experiences in the past and in the current university. This signifies the importance of the stakeholder interaction in the past on the stakeholder perception of the current projects. This also highlights the importance of considering the temporal aspects of the stakeholder concept.

The analysis of participant explanations for the changes after the meeting reveals that the changes were the results of participants' efforts to validate the information which the participants received in the meeting. Some ratings were unchanged because either information related to the constructs was not mentioned in the meeting or the information is in line with what the participants thought before the meeting. Some ratings were changed because new information related to those constructs was mentioned in the meeting. Besides, the more experienced the participants were in the current project, the less their perception changed after the meeting. The meeting also made the participant perception more convergent. Specifically, among the three new constructs of C after the meeting, "safety instructions" is the construct which has been mentioned by A and B before the meeting.

5. CONCLUSIONS

Overall, three broad conclusions can be gathered from this study. First, this study demonstrated that stakeholder perception can change with stakeholder interaction in projects. Specifically, it solidified the focus on individual stakeholders (e.g. Bridoux and Stoelhorst, 2016) who changes their perception (e.g. Elias, 2016) while engaging in stakeholder networks (Rowley, 1997). Second, it illustrated that the Repertory Grid Technique (Kelly, 1955) is an appropriate technique to capture the changes of stakeholder perceptions in projects. Finally, this study is only a pilot project. Further research is

required by analysing larger projects, considering a wide range of stakeholders and employing an in-depth analysis for generalizable results.

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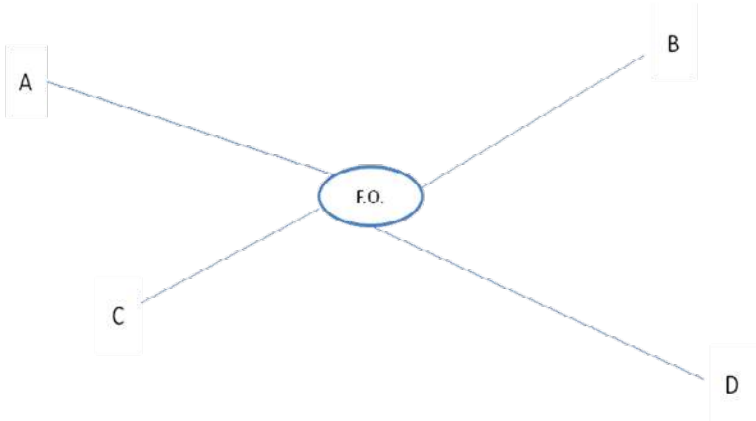
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APPENDIX 1: FIGURES

Figure 1: Pattern of relationships (Source: (Rowley, 1997)) Graph 1: dyadic approaches, Graph 2: Interaction approaches.

Graph 1



Graph 2

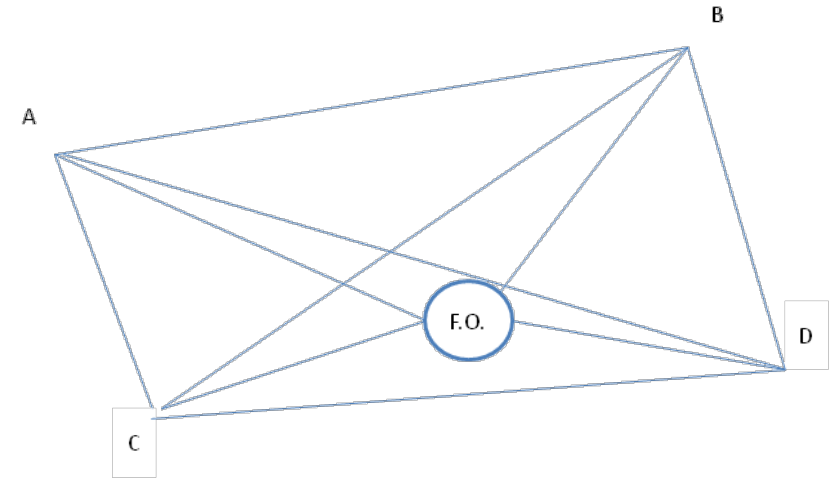


Figure 2: An example of construct rating in a repertory grid (Source: Jankowicz, 2003)

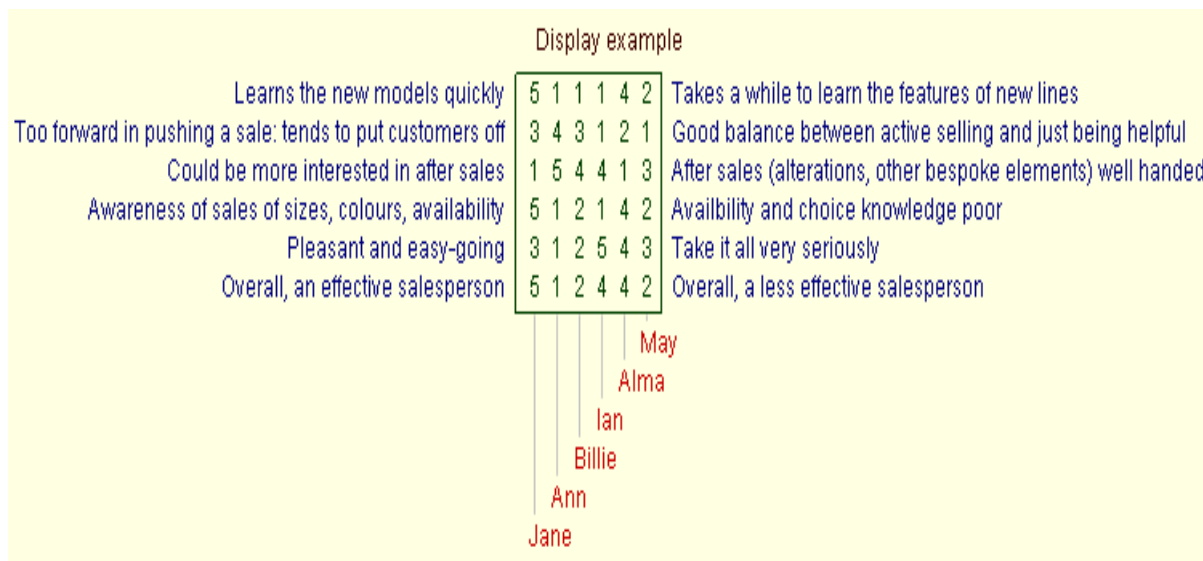


Figure 3: An example of a principle component analysis of a repertory grid (Source: Curtis et al., 2008)

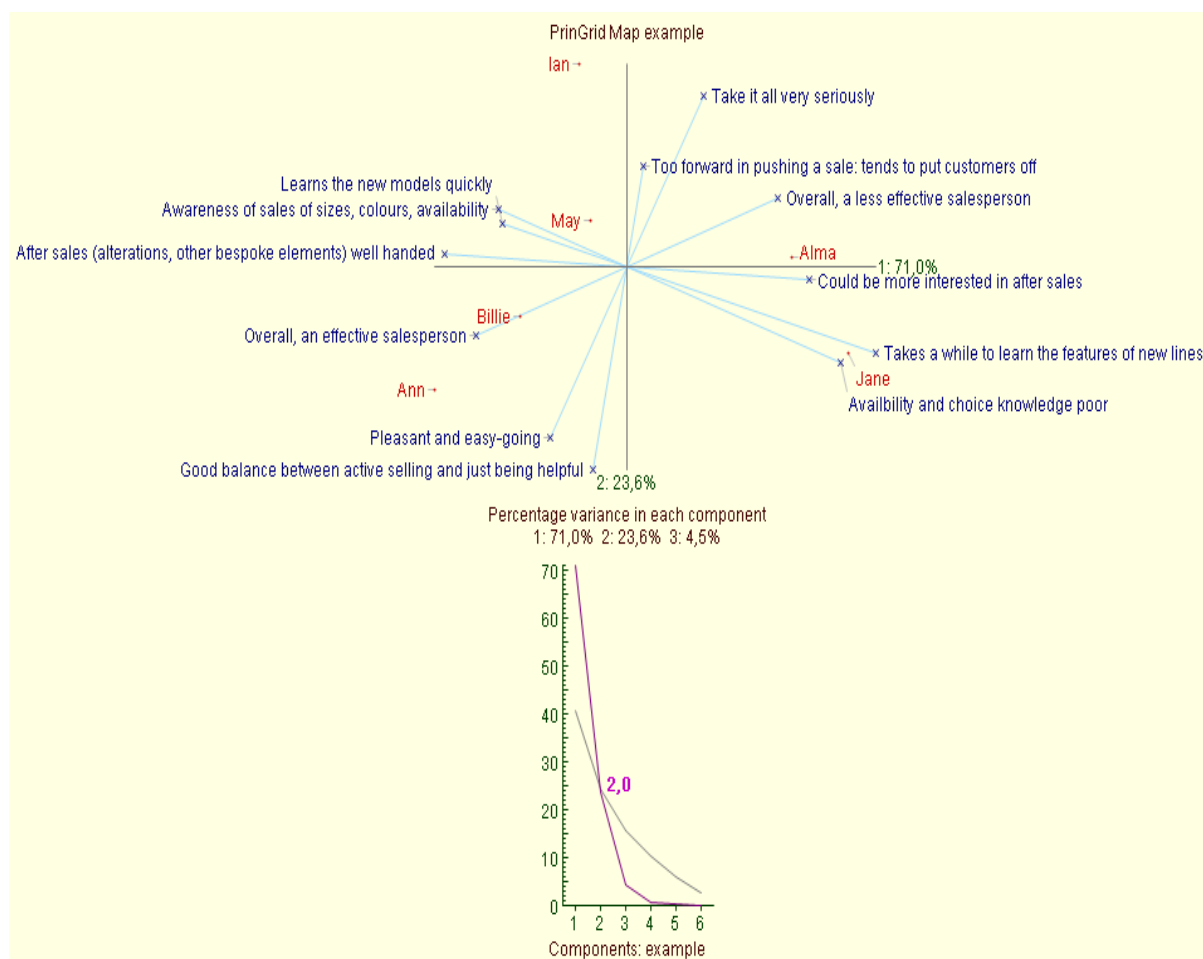


Figure 4: Outlines of data collection plan (for 1 participant) in the main study.

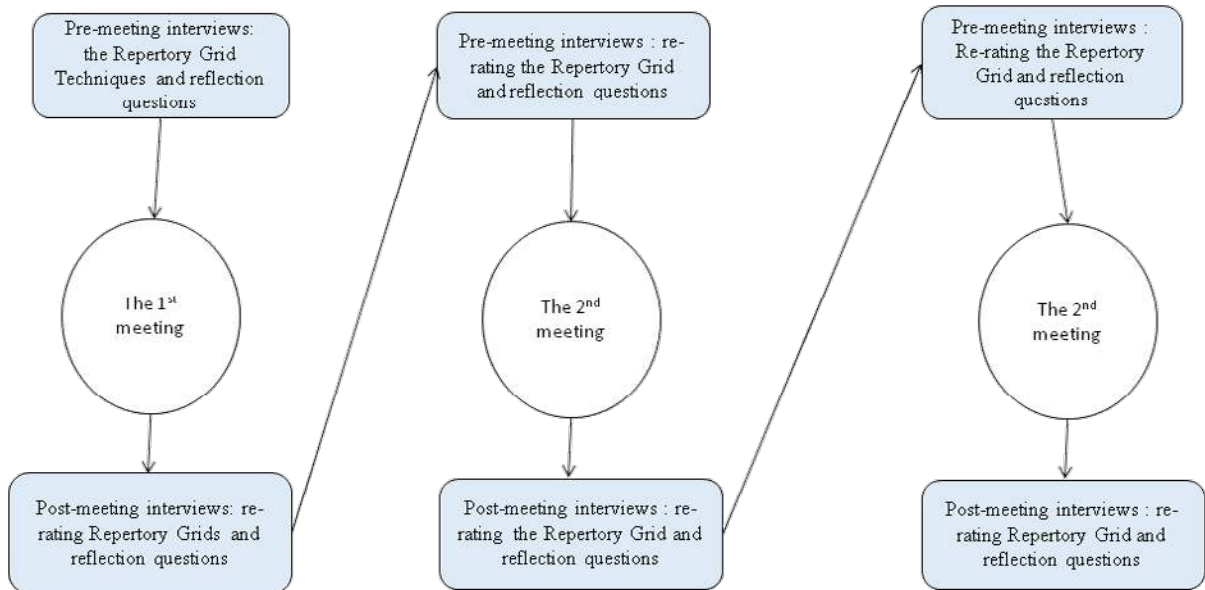


Figure 5a: The repertory grid of A’s perception of exam supervision before the meeting.

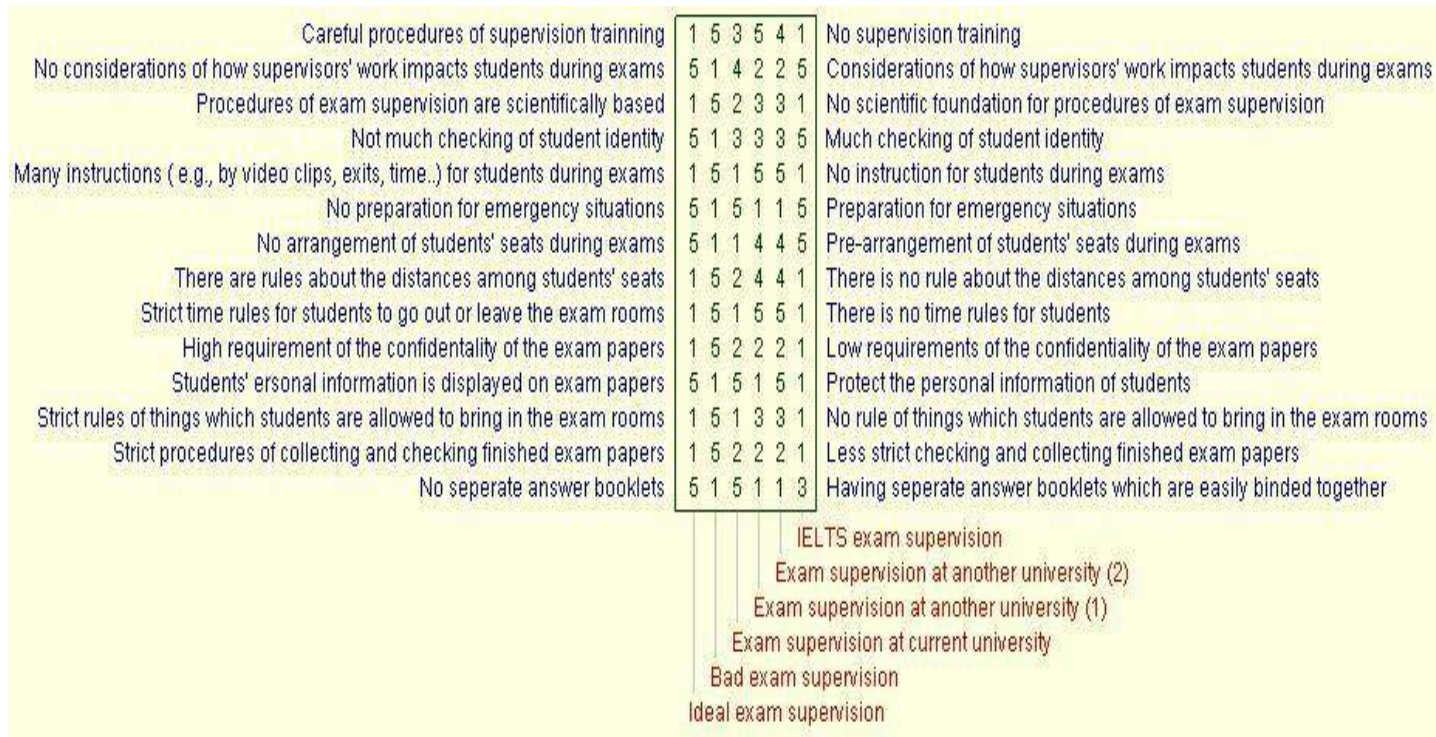


Figure 5b: The principle component analysis of A's repertory grid

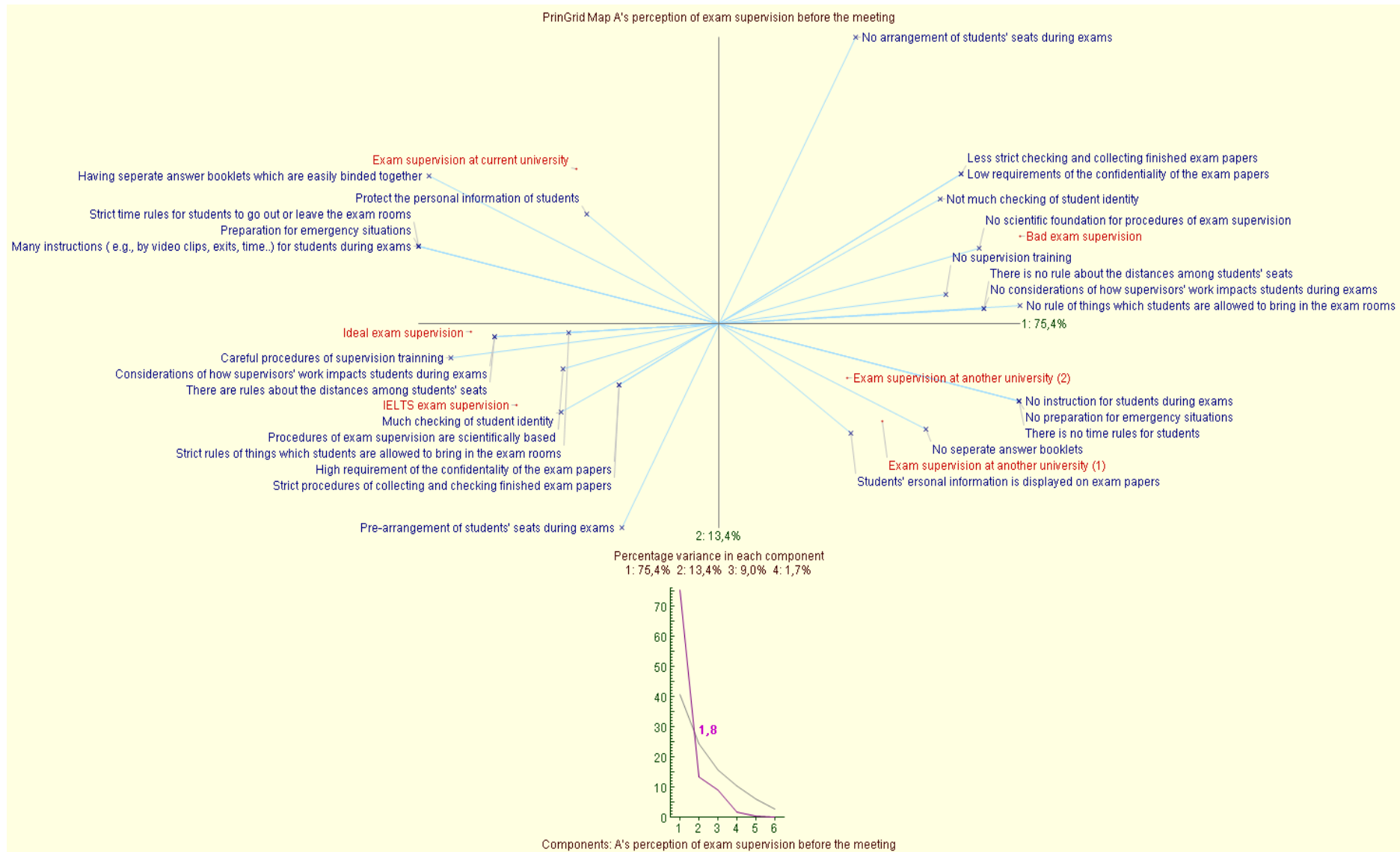


Figure 6a: Compare B's perception of exam supervision before with after the meeting.



Figure 6b: B's perception of exam supervision: the changes of the locations of elements in principle component analysis graph.

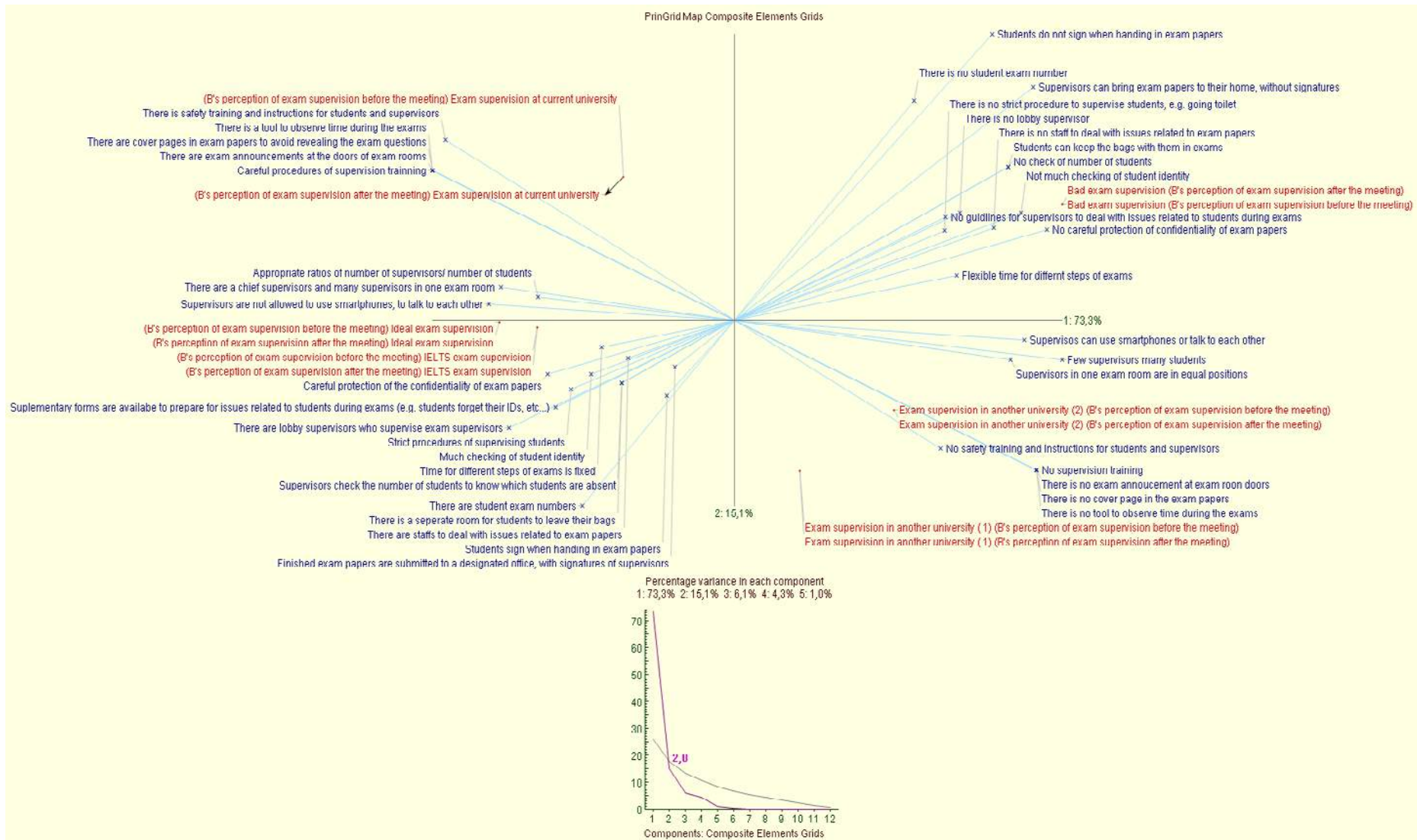


Figure 7a: Compare C's perception of exam supervision before with after the meeting.

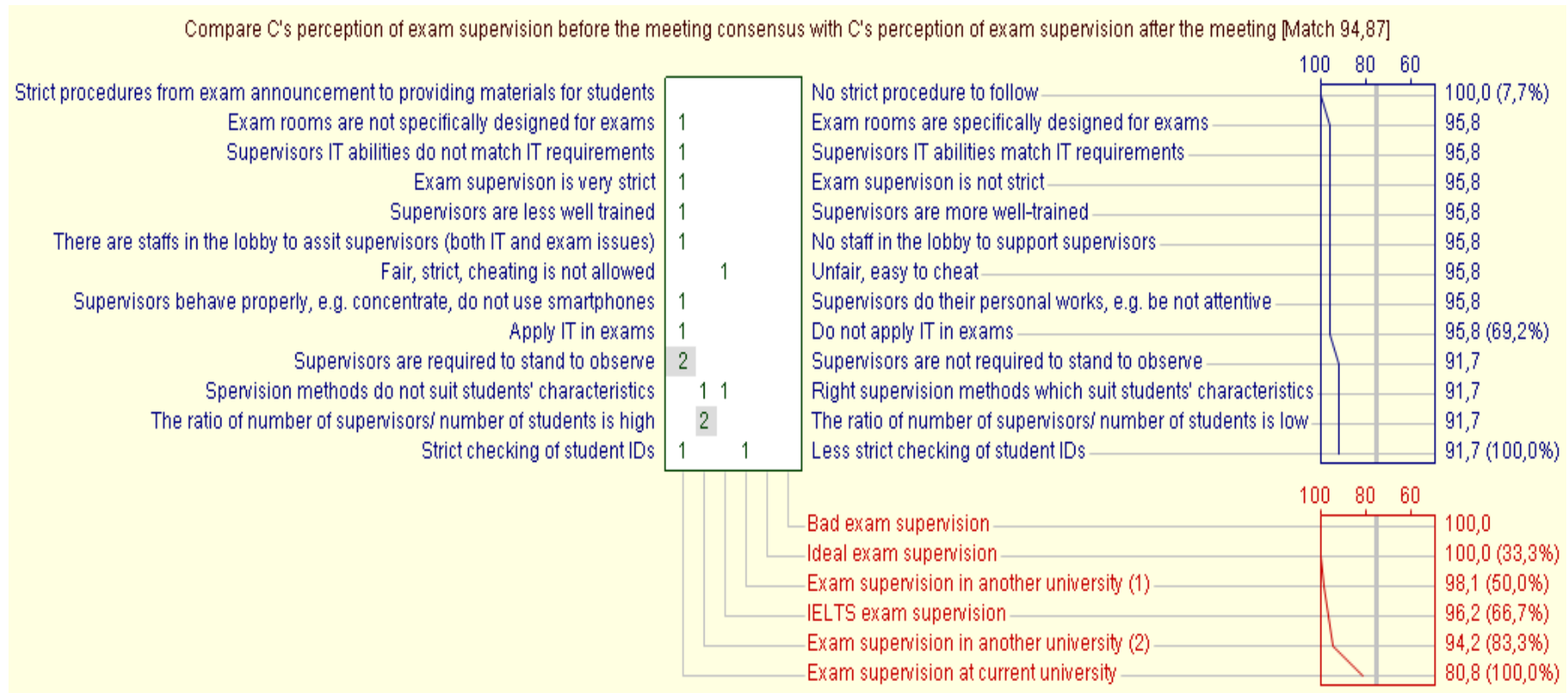
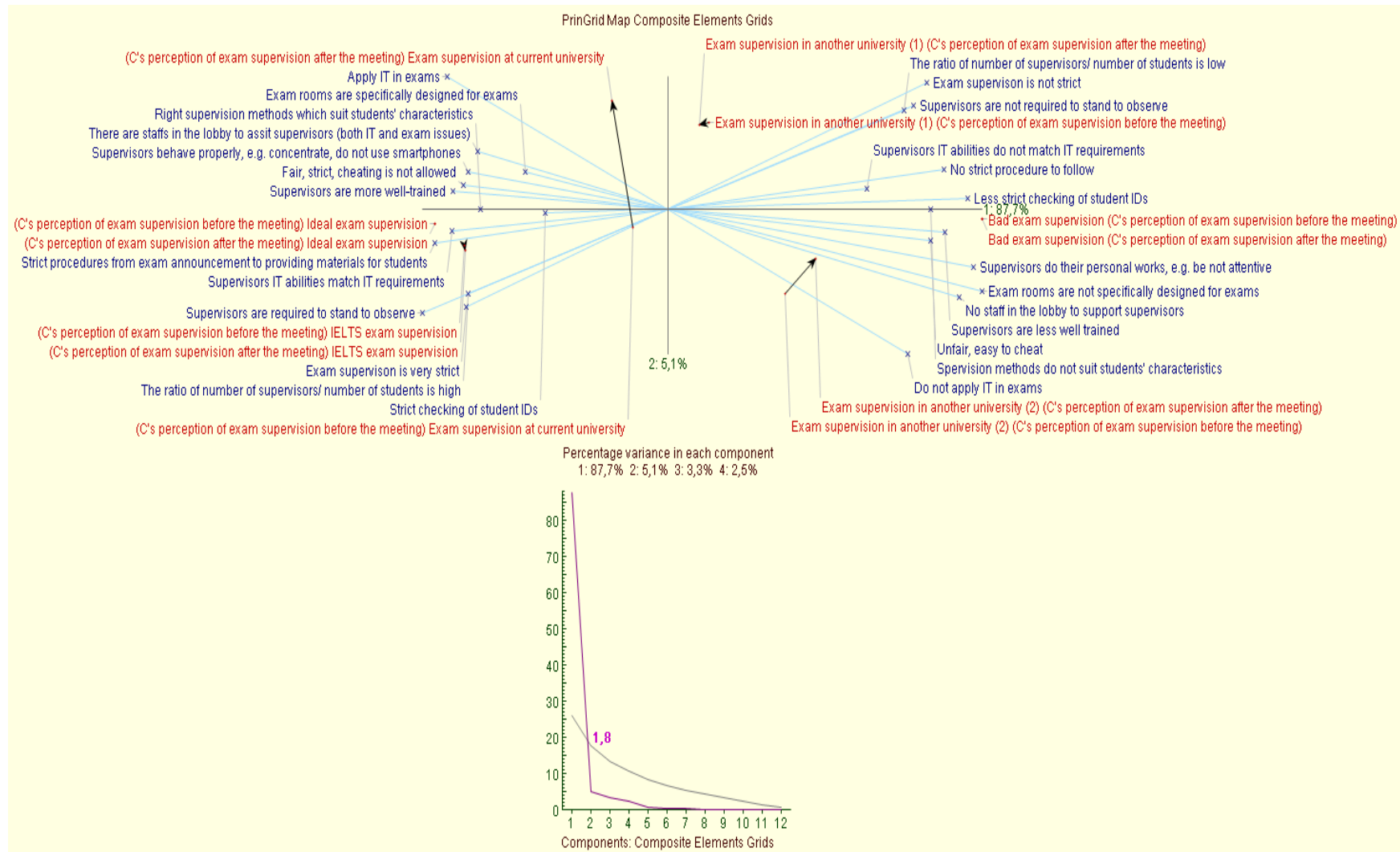


Figure 7b: C’s perception of exam supervision: the changes of the locations of elements in principle component analysis graph



APPENDIX 2: TABLES

Table 1: Summary of data collection in the pilot study

University Exam Redesign Project		
↓		
Sub-project: Exam Supervision Improvement Project		
↓		
Interviewing the three stakeholders of the project before the session	Exam supervision review session	Interviewing the three stakeholders of the project after the session
Stakeholder 1: The project leader	Project members review exam supervision in the university	Stakeholder 1: The project leader
Stakeholder 2: Project member 1		Stakeholder 2: Project member 1
Stakeholder 3: Project member 2		Stakeholder 3: Project member 2

Table 2: Two new constructs of B after the meeting

<i>Constructs</i>	<i>Opposite constructs</i>
Supervising late students	No supervision of late students
Supervising students when they go to a restroom	No supervision

Table 3: Three new constructs of C after the meeting

<i>Constructs</i>	<i>Opposite constructs</i>
Appropriate ages of supervisors	Supervisors are too old
Different answer booklets	Only one answer booklet
A lot of safety instructions	Not many safety instructions

14. Sustainability and Social Issues in Management

Refereed Delivered paper

Modern slavery: Exploring exploitations of slaves

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14. Sustainability and Social Issues in Management

Refereed Delivered paper

Modern slavery: Exploring exploitations of slaves**Abstract**

There are more than 30 million people working in the exploitative conditions and categorised as modern slaves (ILO, 2017). In this research, we set out to (re)conceptualise modern slavery by extending its current understanding to relation of exchange, power and meaning. We propose to research the contemporary form of slavery, predominantly defined as a condition of 'attachment' albeit with the threat of violence (Abadeer, 2008; Bales, 2012; ILO, 2017b), as manifestations of exploitations. The paper explores how slavery exists because of the spatial effect of the conditions that arise from the exploitations for extracting value, identifying with power or construction of social identity at work place.

Key words: Modern Slavery, Value appropriation, Power at work, Social identification

Introduction

In this paper, we set out to (re)conceptualise modern slavery by extending its current understanding to relation of exchange, power and meaning. We argue that contemporary forms of slavery, predominantly defined as a condition of 'attachment' albeit exploitation and threat of violence (Abadeer, 2008; Bales, 2012; ILO, 2017b), is a manifestation of exploitations. A significant number of marginalised and vulnerable population groups around the world, and particularly in developing countries, are forced into a form of enslavement (Abadeer, 2008). It is persistent in global economy in the form of bonded labour, forced labour, human trafficking or even as traditional slavery (Quirk, 2006); despite of international treaties, declarations and interventions against such practices. Although modern slavery is represented by extremities, in form of which it is seen in developing countries, the subtleties of the practice may be represented in developed work in form of precarious work. The estimates of total number of slaves in the global workforce range from 21 million (ILO, 2017a) to 45 million people (Kelly, 2016). Some of the well-known cases that have been exposed for conditions of slavery include Indian Brick industry (Bhattacharya, 2010; Breman, Guérin, & Prakash, 2009; Mahapatra, 1991), Uzbek cotton industry (Peyrouse, 2009) and African cocoa industry (BBC, 2010b). In this paper, we set out to (re)conceptualise

modern slavery by extending its current understanding to relation of exchange, power and meaning. We argue that contemporary forms of slavery, predominantly defined as a condition of ‘exercising ownership’ (Abadeer, 2008; Bales, 2012; ILO, 2017b), is a manifestation of exploitations.

The persistent and insidious nature of contemporary forms of slavery is however not a function of historical persistence, but a particular combination of conditions that flow from the conditions of contemporary capitalism and in this paper we show this via a critical analysis of current scholarship concerned with modern slavery . We argue particularly that modern slavery is a function of the spatial distributions and the assertion of particular social identities among subject groups.

This paper proceeds as follows. We begin by how modern slavery is defined, and then develop a theoretical framework to embed it as a relation of economic, political and symbolic exploitations. The paper then accounts for how modern slavery is persisted in wake of conditions that arise from such exploitations. It then continues to define conditions of modern slavery as conditions of these exploitations. The paper concludes with the suggestions to explore conditions of exploitations in terms of exchange, power and meaning in modern slavery to enrich the theoretical understanding, which eventually may lead to practical task of tackling modern slavery.

By yet Other labels – Forms of slavery and the definitions

Modern slavery is a loaded term and takes many forms in terms of how it is understood. The key question is what practices can be considered as modern slavery makes it a complex subjective exercise, open to interpretations (Quirk, 2006). Bales (2012) suggests that the concept of slavery is an ambiguous and its definitions are inconsistent. It is either defined in terms of traditional slavery practices or its variants, which is now illegal in most part of the world; or in terms of the conditions of slaves significantly similar to the traditional slavery that was abolished in 19th century. Abolishment of slavery in nineteenth century (Ray, 1989) rendered plausible the possibility of its disappearance in decades to come and yet it exists in 21st century; although sometimes with alternate labels like bonded labour, low paid wage labour, prostitution, domestic help exploitation etc. (Bales, 2012).

All cultures and historic periods have known slavery, and it has been packaged differently at each time and place. Draper (2009) notes that a dynamic change in packaging of slavery can be seen at different times, for example, when slavery is legally sanctioned, when notions of

discrimination and racialization emerge, when prices of slavery go up or down, or when sanctions are removed. Since 1815, more than 300 international treaties of slavery have been signed (Allain, 2009), however none of the conventions defined slavery in the same way (See *Appendix 1*). A common focus in most of the definitions though is ownership of one person by another, since slavery took that form in 19th century (Bales, Trodd, & Williamson, 2009). In wake of the legal definitions framed at international treaties and conventions and the definitions of that are framed in the minds of people, the key question is how can we arrive at a conceptualisation that encompasses all forms of slavery.

The fascination with nineteenth century forms of slavery has resulted in overshadowing the greater stories of human bondage in contemporary times (Drescher & Engerman, 1998). Slavery has a seamless history. Although, its history is punctuated by events like its legal abolition, the slavery has never ended. While different cultures and eras impose the elements of control and economic exploitation, slavery has constantly evolved into many forms, possibly to be palatable in context of the socio-economic and cultural scenarios. The most common definition of slavery in the existing literature defines it as “the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised” (Mulligan & Bric, 2013). Traditional slavery may be argued to take such form; modern slavery has some characteristics that make it different.

In olden days slave trade was an instrument of achievement of the empire and colony and a legal practice (Mahapatra, 1991); today it is illegal and, for many institutional liberals, realm of small, criminal and liminal business (Crane, 2013; Lindsay, 2010). Although, we do not subscribe to the idea of modern slavery being a predominant feature of just small, criminal or liminal organisations, which is discussed in the following sections; the illegal nature of slavery implies that the ownership is not asserted over the slaves. In traditional slavery ownership, however was a predominant function which is clearly demonstrated by sale and purchase bills of the slaves (Drescher & Engerman, 1998). Another difference between the older and the new forms of slavery is that the length of time that slaves were held for has decreased. Traditional slavery was a lifelong condition (Bhattacharya, 2010), whereas modern slavery is often temporary and may last for a few years or even few months (Fogel, 1994). Bales (2012) lists four more differences between the two. These differences are based on the concept of “**disposable people.**” In this conceptualisation, Bales stresses that modern slaves are cheaper than ever before. He argues that in 19th century, the demand of slaves was reflected in their prices. It is estimated that in 1850’s average price of a field labouring slave

in America was US \$1000 to US \$ 1800, which equals \$20000 to US \$ 40000 today (Bales et al., 2009). However, in some places like Indian sub-continent, slaves can be acquired for as less as US \$ 100 (Mahapatra, 1991) and the average price of a slave around the globe is US \$ 90 (Bales et al., 2009). Although, it is difficult to make comparison of currencies across different times, the difference between the two is dramatic as current prices are a miniscule percentage of the price of traditional slaves. The fall in the prices of modern slaves has radically changed the demand and supply equation. This means that modern slaves are worth a little but have the ability to generate high profits as the fall of price has not affected their ability to work. In this regard, Bales et al. (2009) estimates that profits made from a slave in 19th century averaged around five percent and today profits from slavery can go up to as high as 800 percent. Moreover, the decrease in the price of slaves has not only increased the profitability but has also altered the relationship between the masters and the slaves. Traditional slaves were expensive and therefore were treated as sizable investments and thus protected; modern slaves are cheap and therefore are disposable in accordance to levels of production. Since modern slaves are cheap, masters avoid permanent ownership. Modern slavery, therefore, is for short term (seasonal) as it is not profitable to have slaves when they are not immediately useful. Table below highlights the key differences in modern and traditional slaves – commodities of the past and present. INSERT TABLE 1 HERE

(Re) conceptualising Modern Slavery – Exploitations in Modern Slavery

We claim that modern slavery is not revealed in these different packaging or explanations of slavery but the key to conceptualise it is explore exploitations of slaves. The slaves may be born into slavery or tricked into it and the contextual factors of why they end up into slavery may be political, cultural, racial, economic or a combination of these; but conditions like constraints on the degree of autonomy, being economically exploited and coercively controlled are common in enslaved. However, exploitation in slave industry, where slaves are subjected to extreme forms of exploitations (Breman et al., 2009), needs to be analysed through economic, political and cultural relations. To be able to address it, the first question to be answered is what is exploitation or what do we make of it?

For many, exploitation is a core concept of conventional economics, where resources of a firm are exploited so as to realize a profit. In this framing a firm would likely balance exploration with exploitation so as to maintain a steady flow of profits. But there is, of course, a second reading of exploitation from the critical and particularly the Marxian literature, characterised its ability to critique capitalist structures (Balibar, 1997) and fraught

with exchange relations (Resnick & Wolff, 2003b; Roemer, 1985). Exploitation is also characterised by the inequality of control and power (Knights, 1990) and is incorporated in the debates about justice, inequality and discrimination (Bufacchi, 2012). All the explanations of exploitation make it a complex concept; and therefore the problematic of exploitation/s cannot be simply located in economic relations. Neither can it be located as a power relation or a symbolic relation; in isolation. In the following section we discuss various perspectives of exploitation to have a holistic understanding of the dynamics between the exploited and the exploiter in slave industries.

Exploitation and value – The exchange relation of exploitation

In the Marxist tradition, the concept of exploitation is defined in terms of the theory of surplus value, which primarily depends on the labour theory of value: “the theory that the value of any commodity is proportional to the amount of ‘socially necessary’ labour embodied in it” (Reeve, 1987, p. 31). Thus value of commodity, according to this notion, is determined by the amount of the labour that is needed to produce it. The labour needed to produce a commodity is referred to as ‘abstract labour’ and the **value** is not just determined by the amount of labour embodied in making that particular product but by that labour which is embodied in all the productive activity that allows it to be produced. It includes all the energies and capacities used by the workers to produce the labouring power, unlike capitalist understanding of value where it is sold as temporal packets by the labourers to capitalists (Cohen, 1979). Brewer (1987, p. 7) argues that Marx roughly estimates this as “the amount of labour required to produce the commodities which are necessary to meet the needs of a labourer and his family.” These needs were not understood just in terms of bare subsistence but included a moral and historical element depending on the standard of life at that time.

The labour that sufficed to meet these needs was termed as socially necessary labour and therefore the value of a commodity was the amount of socially necessary labour required to produce it and therefore embodied in it. Labour over this value is termed as surplus labour and the value it added is termed as the surplus value. Exploitation, in terms of labour theory of value is defined in terms of the ratio of surplus to necessary labour.

$$\textit{The rate of exploitation} = \textit{Surplus Value} / \textit{Socially Necessary Labour}$$

This implies that the greater the amount of the time the labourer work for the capitalist, greater is the exploitation.

While value appropriation may provide an analytical framework for understanding exploitation as an economic function, it doesn't address the power and symbolic dimensions of exploitation. It is true that unequal exchange is often, if not always, exploitative but can exploitation cease to exist if there is equal exchange? We will come to that debate in the following section while discussing exploitation from power and symbolic perspectives.

From a Marxist point of view, the exploitation is an inherent part of capitalistic dynamics (Therborn, 1997). Reeve (1987) argues that cost of maintaining the workers and their family will always be lower than the value that workers produce in a working day and therefore even if labour power is purchased at its value, *surplus value* will be added. This suggests that exploitation in capitalism, which requires positive rate of surplus value for creation of profit, is based on its basic operating principle and not on any violation of the laws of competitive capitalism (King, 1982). However, for pioneers of classic economics, like Adam Smith, who also refers to *value of the labour* as the '**real value**' of a commodity (Meek, 1977, p. 77), surplus extraction by the capitalists is necessary. According to Smith (1976) quoted in (Meek, 1977, p. 66), the deduction of profit from the value, that labourers add, by the capitalist is important because without this appropriation they may not have a reason to employ the labour force. This indicates that continued employment depends on the appropriation of the surplus value. If we base our argument on the assumption that according to Smith wages of labour would exceed the subsistence needs (Hunt, 1977), conflict between the employers (capitalists) and the wage earners would be resolved and degree of exploitation (as an exchange relation) will be much lower, if not non-existent.

Economic explanations of slavery, both from Marxist tradition and neo-classical perspective, investigate the capitalist development in the developing countries, where modern slavery is prevalent, to argue that the development of capitalist mode of production follows a process of liberation – freedom from the land and from the employer (Carver, 1987; Cunliffe, 1987; Steiner, 1987). The labourers are free to sell their labour power as commodity. This political transformation is generally accompanied with the creation of working class and pressures for better working conditions and better wages (Steiner, 1987). However, the enslaved people do not have the privilege to sell their labour as a commodity. They are economically exploited by the owners of means of production and held by coercive pressures. Bales and Robbins (2001, p. 30) argue that labour of the slaves, as it is used in the developing world, stops the political transformation that generally includes the “proletarianization of workforce” and re-

imposes authority over the workforce. It serves as a force that keeps working class from awakening.

In terms of Marglin (1974), who critiques Adam Smith's capitalist structures for advocating technological superiority, exploited labour in the slave industry may be attributed the same feature as is attributed to technology in class struggle. The exploited labour in the slave industry is used by the owner of means of production to cheapen the wage labour, or may be, as a substitute for it. Patterson (1982) explains that capital shifts the balance of power by restricting the movement of exploited labourers in slave industry, in a situation where political consciousness begins to develop. This may include enslaving workers as is the case in forced labour or turning free labourers into slaves by bonding them with debt. In this scenario, the labour power of the exploited workers becomes the property of the owners of the means of production (capitalist). It becomes a commodity completely controlled by the capitalist. It may be noted that advocates of Marxist tradition argue that labour of all wage workers is controlled or appropriated by the capital, to which we concede, but the inability to commodify the labour of the enslaved at their will makes the exploitation extreme in case of modern slavery. Pertinently advocates of capitalism argue that the capitalist developments should enable labour to enter or exit the labour market at any time (Friedman, 2009); but the enslaved labourers cannot, as they cannot sell their labour power or commodify it, either for a fixed or temporary duration or indefinitely (Brass, 1999). This economic examination may help to inform certain aspects of slavery as a social relationship, but taking economic paradigm case for exploitation as a whole risks mistaking what is peculiar to a specific case for the characteristics of the overall phenomenon of modern slavery (Goodin, 1987). The condition of attachment of modern slaves can be embedded in the relation of power or meaning (culture, beliefs etc.) instead of being located in exchange relations. In the next section we explore the exploitations of slaves in terms of power and symbolic relations.

Exploitation and the idioms of Power

Before setting out to explore exploitations of power in modern slavery, it is to be acknowledged that there are competing definitions of power in organisational theory and management literature (Rowlinson, 1997). Lukes (1974) as cited in Ball (1976, p. 274) says power is an “essentially contested concept and inextricably value dependent”; which, according to Rowlinson (1997, p. 102), means that both the definition of the power or any of its given uses are ineradicably tied to a set of value assumptions that predetermine range of its applications. Knights and Willmott (1999, p. 30) argue that power is the “means through

which ruling class, political or managerial group controls the subordinate strata of the society or organisation.” This implies that power is conceived as a persuasive social phenomenon and its consequences are experienced at all levels of social organisations and particularly at the level of hierarchy.

Some other perspectives of power do not simply see it as exhaustively negative or coercive but as a productive and positive relation (C. Kelly, 2007; Rose, 2011). Power, for them, is not conceived as an entity *A* having power over entity *B* but as a relation where both *A* and *B* are each enabled or constrained to achieve organisational objectives. Willmott (1998) argues that if power is understood in this way, it is seen to constitute subjects both in the ruling or/and the subordinate class. There is no presumption or suggestion that people necessarily succumb or subjugate themselves to the forms of power (Foucault, 1980). In contrast, the sub-ordinate class may exhibit their power in form of resistance. While, we acknowledge this poststructuralist framing of power, this paper builds on Marglin (1974) and (Marginson, 1993) who emphasise on the coercive nature of the power, so much so that the terms power and control are used interchangeably. Adapting to this framing of power is primarily based on our ontological commitment that exploitation of modern slaves in terms of coercion and control is a significant aspect of (re)conceptualising modern slavery. As has been discussed earlier workers in slave industry (e.g. brick kilns of India) are subjected to extreme exploitations in terms of power and control. Also, force and Coercion is a dominant feature of current definitions and conceptualisations of modern slavery (See Table 1).

Bell and Bell (1975) argue that force or coercion is always identified as a rather messy, if not downrightly rejected affair, however, necessary. Fincham (1992, p. 180) has distilled force and control in power relations in two main perspectives: “processual and institutional.” The former locates power relations in the achievement of intended strategies or goals of an individual or organisation and the latter sees it as a relation embedded in the constraints imposed on the organisation. The problem though is that there has always been a way to conceal it to make it palatable for the people who exercise power. Patterson (1982) notes that throughout human history there are two extremes of colloquial handling of the coercive aspects of power. One is the tendency to acknowledge the force openly (processual perspective) and then to humanise it by use of various social strategies like fictive kinship, client ship or exchange of gifts. Another is the method of veiling, where coercion is thoroughly denied or completely hidden (institutional perspective). For example in

capitalism, as Knights and Willmott (1989) notes, coercion is presented as a direct opposite of what it is, and interpreted as a kind of freedom.

Patterson (1982) terms these concealments of power as “personalistic and materialistic” idioms. In personalistic form, the power is direct – or nearly so. Individuals are directly dependant on others. This translates into highly unequal distribution of power; however, the coercive aspect is visible and not completely concealed. Here kinship or fictive kinship plays a crucial role for dispensing the coercive aspect of power. In materialistic form, as can be seen in modern capitalism, “relations of dependence are disguised under the shape of social relations between products of labour” Marx & Engels 1963). The power relation therefore is no longer viewed in terms of power of a person over another but as the power of a person over commodity. While, it may be argued that such power relations are inherent to capitalist dynamics (Resnick & Wolff, 2003b), the lack of free will in wake of the acquired debt coupled with symbolic factors like religion, culture or kinship makes the exploitations in slave industry all more worse – extreme. The next section will discuss the exploitation in terms of meaning – a symbolic expression of exploitation in slave industry.

Exploitation – A symbolic expression

The scholarly discourse around exploitation is overwhelmingly focused on the economic (unequal exchange) (Carver, 1987; King, 1982; Resnick & Wolff, 2003a) and the power (coercion and control) (Ball, 1976; Bell & Bell, 1975; Grimes, 1978) motives of exploitation. The emphasis falls either on ‘production and consumption’ of commodities carrying **value** or the **force and control** used. This, we argue, limits the understanding of exploitation and therefore modern slavery as it neither informs about exploitations as a relation of values, religion, or culture etc. – **exploitation as a relation of meaning**. Bufacchi (2012), however, argues that these non-economic conceptualisations of exploitation are not for monetary reasons but for the reasons of identifying with power.

Alvesson and Willmott (2002, p. 619) emphasise the need to give a due regard to how “meaning, culture and ideology” are articulated by and embedded in structural designs of control. Ouchi (1979), three decades ago, observed the dominance of bureaucratic control in the discourse of organisational identity and control, and highlighted the need to include symbolism and culture. Since then, the interest in culture and symbolism has increased considerably (Alvesson, 2000; Morgan, Frost, & Pondy, 1983; Pondy, 1983). However, Alvesson and Willmott (2002) argue that in spite of the growing literature, Ouchi’s

observations remain salient because the need to interpret values and symbolism as “means of legitimating social control” remains. This implies that symbolic and cultural expression; like community values, beliefs or kinships, is a determinant that operationalises force and control and, therefore, important to conceptualise modern slavery (also see: Ouchi, 1980).

The point here is that exploitation in modern slavery is consummated through, to put it terms of Alvesson and Willmott (2002, p. 620), “self-positioning of employees within managerially inspired discourses of work and organisation with which they may become more or less identified and committed”. In other words, how people experience or create meaning of situation, people or objects is crucial for making sense of exploitations, and thus slavery. Deetz (1997, p. 87) argues that management often manages the “insides” - aspirations, hopes and fears – of the workers. For example, a commonly used term for the supervisors or the recruitment agents in the brick kilns of India, which incidentally houses the highest number of modern slaves according to ILO and Anti-slavery International (BBC, 2014; ILO, 2017a; A. Kelly, 2016), is ‘*Sardar*.’ It translates to ‘leader’ in English language. We interpret it as symbolic effort to secure organisational control through the use of cultural norms – in this case the seductive meaning associated with *Sardar*. On the similar lines, Knights and Willmott (1987) argue that “*valued identities*,” like the one build around the commonly used terms like ‘team leader’ in contemporary organisations, are associated with the discourse used to appeal positive cultural affinity for establishing control. The purpose here is to draw attention to symbolic aspects as dimension to explore exploitations in modern slavery.

Symbolic expressions of exploitation in slavery, as Bufacchi (2012, p. 11) puts it, may not be explicit; but entwined in the master-slave relation. Values (community values, kinship ties or religious beliefs), are instrumental in construction of the “social identification” of people (Ashforth & Mael, 1989) and therefore salient to establish, or at least to unpack, the symbolic relation of exploitations in modern slavery. Here, we draw on social identification theory proposed by Tajfel (1974). The theory posits that people tend classify themselves and others in categories based on cultural affinity, organisational membership, religious affiliation or gender and this primarily serves two functions. First, it orders and segments the social environment and therefore provides a systematic means to an individual to define others (Ashforth & Mael, 1989). In other words, a person is informed about assigning prototypical characteristics of the categories to which people belong. Second, it enables individuals to locate themselves in the social environment. It helps them to create self-identity encompassing idiosyncratic characteristics.

While this theoretical framework has found its way in management literature to foster motivation, increase productivity and inform policymaking (Hogg & Terry, 2000; Mehra, Kilduff, & Brass, 1998) in organisations, we see social identification in organisation as symbolic means to identify with power and therefore a symbolic relation of exploitation, particularly in context of modern slavery. For example, identities build around religious teachings or divine texts historically has been used to establish control and power structure. Morrison (1980, p. 17) notes that “biblical defence of slavery is the concept of divine decree, that is, through the curse of Cain God had decreed slavery it had actually come into existence.” Correspondingly, caste system informed by Hindu religious text has resulted in unique identity formation where people anticipate and concur to the their efforts being poorly rewarded (Hoff & Pandey, 2004), and consequently enable the conditions for exploitation, thus modern slavery, to foster. The use of symbolic relations (collective identity formation) as means to exploit, both in terms of power and exchange, has also been as identified and highlighted in case of migrant workers in the popular as well as scholarly literature (Berger, 1975; MacKenzie & Forde, 2009; Tupou, 2017; Wainwright, 2015). The argument here is not about the supply aspect of migration that enables modern slavery as argued by Crane (2013), but the identities that are formed within immigrant groups and help exploiters to sustain slavery and the exploited to endure it. In other words, symbolic relations form the collection consciousness that enable the conditions of slavery.

Conclusion and future research agenda

Modern slavery is a real world problem where millions of people are subjected to extreme exploitations. However, in spite of its persistence in the world and the growing attention it has received, conceptualisation of modern slavery is predominantly based on the conditions of attachment – a feature of traditional slavery, and not on the exploitations of the slaves. We redress this disregard by proposing a framework that conceptualises modern slavery as a relation of exploitations in terms of exchange, power and meaning. The focus on economic, political and cultural relations explores the conditions that assist modern slavery to prevail.

One of the implications of this paper is that economic analysis of exploitation in modern slavery is not absolute and that power relations and cultural factors play a crucial role for exploitations to exist and to sustain. From a conceptual perspective, labour theory of value may inform about the appropriation of surplus value and thus provide an analytic economic account of exploitation in modern slavery (Reeve, 1987); use of power to coerce and control

elucidates the enforcement of exploitation (Marginson, 1993; Marglin, 1974) and social identification explains its acceptance.

The paper provides fertile grounds for the future research. For example a model of exploitations can be developed to redefine modern slavery. Clearly more research is needed to refine the understanding of the specificities of exploitations of exchange, power and meaning in modern slavery, but we cautiously and optimistically submit that our enhanced understanding of these relations in modern slavery may have broader implications for capitalist organisations.

Finally, the paper also raises the call for empirical research to explore the conditions of exploitations in the slave industry (e.g. Brick Kilns of India) and theorise the economic, political and symbolic relations in the modern slavery.

Appendices

Appendix 1

Slavery Treaties or Conventions	Definition of Slavery
Slavery Convention 1889	Slavery defined as “the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised” (Mulligan & Bric, 2013)
Slavery Convention 1926	<i>Forced labour included in the definition of slavery:</i> States should “prevent compulsory or forced labour from developing into conditions analogous to slavery.” (Bales, 2012)
Universal declaration against slavery (1948)	<i>Conditions of servitude added:</i> “No one shall be held in slavery; slavery and the slave-trade in all their forms shall be prohibited” Universal Slavery declaration 1948 (BBC, 2010a)
Slavery Convention 1956	<i>Debt bondage, serfdom and exploitation of labour of young people added:</i> (a) “Debt bondage, that is to say, the status or condition arising from a pledge by a debtor of his personal services or of those of a person under his control as security for a debt, if the value of those services as reasonably assessed is not applied towards the liquidation of the debt or the length and nature of those services are not respectively limited and defined” (b) “Serfdom, that is to say, the condition or status of a tenant who is by law, custom or agreement bound to live and labour on

	<p>land belonging to another person and to render some determinate service to such other person, whether for reward or not, and is not free to change his status”</p> <p>(c) “Any institution or practice whereby a young person under the age of 18 years is delivered by either or both of his natural parents or by his guardian to another person, whether for reward or not, with a view to the exploitation of the child or young person or of his labour” UNHR (ILO, 1956)</p>
<p>International Covenant of Economic and Social Rights 1976</p>	<p><i>Freedom of choice of work and safe and healthy work conditions included:</i></p> <p>“The States Parties to the present Covenant recognize the right to work, which includes the right of everyone to the opportunity to gain his living by work which he freely chooses or accepts, and will take appropriate steps to safeguard this right.” (UNHR resolution 1976)</p>
<p>Rome International Court, Final Act. 1998</p>	<p><i>Slavery Redefined:</i></p> <p>“Enslavement” means the exercise of any or all of the powers attaching to the right of ownership over a person and includes the exercise of such power in the course of trafficking in persons, in particular women and children” (ICRC, 1998)</p>

Table 1

Traditional slavery	Modern Slavery
Slavery not globalised	Slavery globalised
Asserted legal ownership	Avoided legal ownership
Long term relationship	Seasonal relationship
High slave prices	Low slave prices
Low return on slavery (low profits)	Very high returns
Shortage of slaves	Abundance of potential slaves
Slaves high investment entities, thus maintained	Disposable Slaves

(Bales et al., 2009)

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14. Sustainability and Social Issues in Management

Refereed Delivered paper

Modern slavery: Exploring exploitations of slaves

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Modern slavery: Exploring exploitations of slaves**Abstract**

There are more than 30 million people working in the exploitative conditions and categorised as modern slaves (ILO, 2017). In this research, we set out to (re)conceptualise modern slavery by extending its current understanding to relation of exchange, power and meaning. We propose to research the contemporary form of slavery, predominantly defined as a condition of ‘attachment’ albeit with the threat of violence (Abadeer, 2008; Bales, 2012; ILO, 2017b), as manifestations of exploitations. The paper explores how slavery exists because of the spatial effect of the conditions that arise from the exploitations for extracting value, identifying with power or construction of social identity at work place.

Key words: Modern Slavery, Value appropriation, Power at work, Social identification

Introduction

In this paper, we set out to (re)conceptualise modern slavery by extending its current understanding to relation of exchange, power and meaning. We argue that contemporary forms of slavery, predominantly defined as a condition of ‘attachment’ albeit exploitation and threat of violence (Abadeer, 2008; Bales, 2012; ILO, 2017b), is a manifestation of exploitations. A significant number of marginalised and vulnerable population groups around the world, and particularly in developing countries, are forced into a form of enslavement (Abadeer, 2008). It is persistent in global economy in the form of bonded labour, forced labour, human trafficking or even as traditional slavery (Quirk, 2006); despite of international treaties, declarations and interventions against such practices. Although modern slavery is represented by extremities, in form of which it is seen in developing countries, the subtleties of the practice may be represented in developed work in form of precarious work. The estimates of total number of slaves in the global workforce range from 21 million (ILO, 2017a) to 45 million people (Kelly, 2016). Some of the well-known cases that have been exposed for conditions of slavery include Indian Brick industry (Bhattacharya, 2010; Breman, Guérin, & Prakash, 2009; Mahapatra, 1991), Uzbek cotton industry (Peyrouse, 2009) and African cocoa industry (BBC, 2010b). In this paper, we set out to (re)conceptualise

modern slavery by extending its current understanding to relation of exchange, power and meaning. We argue that contemporary forms of slavery, predominantly defined as a condition of ‘exercising ownership’ (Abadeer, 2008; Bales, 2012; ILO, 2017b), is a manifestation of exploitations.

The persistent and insidious nature of contemporary forms of slavery is however not a function of historical persistence, but a particular combination of conditions that flow from the conditions of contemporary capitalism and in this paper we show this via a critical analysis of current scholarship concerned with modern slavery . We argue particularly that modern slavery is a function of the spatial distributions and the assertion of particular social identities among subject groups.

This paper proceeds as follows. We begin by how modern slavery is defined, and then develop a theoretical framework to embed it as a relation of economic, political and symbolic exploitations. The paper then accounts for how modern slavery is persisted in wake of conditions that arise from such exploitations. It then continues to define conditions of modern slavery as conditions of these exploitations. The paper concludes with the suggestions to explore conditions of exploitations in terms of exchange, power and meaning in modern slavery to enrich the theoretical understanding, which eventually may lead to practical task of tackling modern slavery.

By yet Other labels – Forms of slavery and the definitions

Modern slavery is a loaded term and takes many forms in terms of how it is understood. The key question is what practices can be considered as modern slavery makes it a complex subjective exercise, open to interpretations (Quirk, 2006). Bales (2012) suggests that the concept of slavery is an ambiguous and its definitions are inconsistent. It is either defined in terms of traditional slavery practices or its variants, which is now illegal in most part of the world; or in terms of the conditions of slaves significantly similar to the traditional slavery that was abolished in 19th century. Abolishment of slavery in nineteenth century (Ray, 1989) rendered plausible the possibility of its disappearance in decades to come and yet it exists in 21st century; although sometimes with alternate labels like bonded labour, low paid wage labour, prostitution, domestic help exploitation etc. (Bales, 2012).

All cultures and historic periods have known slavery, and it has been packaged differently at each time and place. Draper (2009) notes that a dynamic change in packaging of slavery can be seen at different times, for example, when slavery is legally sanctioned, when notions of

discrimination and racialization emerge, when prices of slavery go up or down, or when sanctions are removed. Since 1815, more than 300 international treaties of slavery have been signed (Allain, 2009), however none of the conventions defined slavery in the same way (See *Appendix 1*). A common focus in most of the definitions though is ownership of one person by another, since slavery took that form in 19th century (Bales, Trodd, & Williamson, 2009). In wake of the legal definitions framed at international treaties and conventions and the definitions of that are framed in the minds of people, the key question is how can we arrive at a conceptualisation that encompasses all forms of slavery.

The fascination with nineteenth century forms of slavery has resulted in overshadowing the greater stories of human bondage in contemporary times (Drescher & Engerman, 1998). Slavery has a seamless history. Although, its history is punctuated by events like its legal abolition, the slavery has never ended. While different cultures and eras impose the elements of control and economic exploitation, slavery has constantly evolved into many forms, possibly to be palatable in context of the socio-economic and cultural scenarios. The most common definition of slavery in the existing literature defines it as “the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised” (Mulligan & Bric, 2013). Traditional slavery may be argued to take such form; modern slavery has some characteristics that make it different.

In olden days slave trade was an instrument of achievement of the empire and colony and a legal practice (Mahapatra, 1991); today it is illegal and, for many institutional liberals, realm of small, criminal and liminal business (Crane, 2013; Lindsay, 2010). Although, we do not subscribe to the idea of modern slavery being a predominant feature of just small, criminal or liminal organisations, which is discussed in the following sections; the illegal nature of slavery implies that the ownership is not asserted over the slaves. In traditional slavery ownership, however was a predominant function which is clearly demonstrated by sale and purchase bills of the slaves (Drescher & Engerman, 1998). Another difference between the older and the new forms of slavery is that the length of time that slaves were held for has decreased. Traditional slavery was a lifelong condition (Bhattacharya, 2010), whereas modern slavery is often temporary and may last for a few years or even few months (Fogel, 1994). Bales (2012) lists four more differences between the two. These differences are based on the concept of “**disposable people.**” In this conceptualisation, Bales stresses that modern slaves are cheaper than ever before. He argues that in 19th century, the demand of slaves was reflected in their prices. It is estimated that in 1850’s average price of a field labouring slave

in America was US \$1000 to US \$ 1800, which equals \$20000 to US \$ 40000 today (Bales et al., 2009). However, in some places like Indian sub-continent, slaves can be acquired for as less as US \$ 100 (Mahapatra, 1991) and the average price of a slave around the globe is US \$ 90 (Bales et al., 2009). Although, it is difficult to make comparison of currencies across different times, the difference between the two is dramatic as current prices are a miniscule percentage of the price of traditional slaves. The fall in the prices of modern slaves has radically changed the demand and supply equation. This means that modern slaves are worth a little but have the ability to generate high profits as the fall of price has not affected their ability to work. In this regard, Bales et al. (2009) estimates that profits made from a slave in 19th century averaged around five percent and today profits from slavery can go up to as high as 800 percent. Moreover, the decrease in the price of slaves has not only increased the profitability but has also altered the relationship between the masters and the slaves. Traditional slaves were expensive and therefore were treated as sizable investments and thus protected; modern slaves are cheap and therefore are disposable in accordance to levels of production. Since modern slaves are cheap, masters avoid permanent ownership. Modern slavery, therefore, is for short term (seasonal) as it is not profitable to have slaves when they are not immediately useful. Table below highlights the key differences in modern and traditional slaves – commodities of the past and present. INSERT TABLE 1 HERE

(Re) conceptualising Modern Slavery – Exploitations in Modern Slavery

We claim that modern slavery is not revealed in these different packaging or explanations of slavery but the key to conceptualise it is explore exploitations of slaves. The slaves may be born into slavery or tricked into it and the contextual factors of why they end up into slavery may be political, cultural, racial, economic or a combination of these; but conditions like constraints on the degree of autonomy, being economically exploited and coercively controlled are common in enslaved. However, exploitation in slave industry, where slaves are subjected to extreme forms of exploitations (Breman et al., 2009), needs to be analysed through economic, political and cultural relations. To be able to address it, the first question to be answered is what is exploitation or what do we make of it?

For many, exploitation is a core concept of conventional economics, where resources of a firm are exploited so as to realize a profit. In this framing a firm would likely balance exploration with exploitation so as to maintain a steady flow of profits. But there is, of course, a second reading of exploitation from the critical and particularly the Marxian literature, characterised its ability to critique capitalist structures (Balibar, 1997) and fraught

with exchange relations (Resnick & Wolff, 2003b; Roemer, 1985). Exploitation is also characterised by the inequality of control and power (Knights, 1990) and is incorporated in the debates about justice, inequality and discrimination (Bufacchi, 2012). All the explanations of exploitation make it a complex concept; and therefore the problematic of exploitation/s cannot be simply located in economic relations. Neither can it be located as a power relation or a symbolic relation; in isolation. In the following section we discuss various perspectives of exploitation to have a holistic understanding of the dynamics between the exploited and the exploiter in slave industries.

Exploitation and value – The exchange relation of exploitation

In the Marxist tradition, the concept of exploitation is defined in terms of the theory of surplus value, which primarily depends on the labour theory of value: “the theory that the value of any commodity is proportional to the amount of ‘socially necessary’ labour embodied in it” (Reeve, 1987, p. 31). Thus value of commodity, according to this notion, is determined by the amount of the labour that is needed to produce it. The labour needed to produce a commodity is referred to as ‘abstract labour’ and the **value** is not just determined by the amount of labour embodied in making that particular product but by that labour which is embodied in all the productive activity that allows it to be produced. It includes all the energies and capacities used by the workers to produce the labouring power, unlike capitalist understanding of value where it is sold as temporal packets by the labourers to capitalists (Cohen, 1979). Brewer (1987, p. 7) argues that Marx roughly estimates this as “the amount of labour required to produce the commodities which are necessary to meet the needs of a labourer and his family.” These needs were not understood just in terms of bare subsistence but included a moral and historical element depending on the standard of life at that time.

The labour that sufficed to meet these needs was termed as socially necessary labour and therefore the value of a commodity was the amount of socially necessary labour required to produce it and therefore embodied in it. Labour over this value is termed as surplus labour and the value it added is termed as the surplus value. Exploitation, in terms of labour theory of value is defined in terms of the ratio of surplus to necessary labour.

$$\textit{The rate of exploitation} = \textit{Surplus Value} / \textit{Socially Necessary Labour}$$

This implies that the greater the amount of the time the labourer work for the capitalist, greater is the exploitation.

While value appropriation may provide an analytical framework for understanding exploitation as an economic function, it doesn't address the power and symbolic dimensions of exploitation. It is true that unequal exchange is often, if not always, exploitative but can exploitation cease to exist if there is equal exchange? We will come to that debate in the following section while discussing exploitation from power and symbolic perspectives.

From a Marxist point of view, the exploitation is an inherent part of capitalistic dynamics (Therborn, 1997). Reeve (1987) argues that cost of maintaining the workers and their family will always be lower than the value that workers produce in a working day and therefore even if labour power is purchased at its value, *surplus value* will be added. This suggests that exploitation in capitalism, which requires positive rate of surplus value for creation of profit, is based on its basic operating principle and not on any violation of the laws of competitive capitalism (King, 1982). However, for pioneers of classic economics, like Adam Smith, who also refers to *value of the labour* as the '**real value**' of a commodity (Meek, 1977, p. 77), surplus extraction by the capitalists is necessary. According to Smith (1976) quoted in (Meek, 1977, p. 66), the deduction of profit from the value, that labourers add, by the capitalist is important because without this appropriation they may not have a reason to employ the labour force. This indicates that continued employment depends on the appropriation of the surplus value. If we base our argument on the assumption that according to Smith wages of labour would exceed the subsistence needs (Hunt, 1977), conflict between the employers (capitalists) and the wage earners would be resolved and degree of exploitation (as an exchange relation) will be much lower, if not non-existent.

Economic explanations of slavery, both from Marxist tradition and neo-classical perspective, investigate the capitalist development in the developing countries, where modern slavery is prevalent, to argue that the development of capitalist mode of production follows a process of liberation – freedom from the land and from the employer (Carver, 1987; Cunliffe, 1987; Steiner, 1987). The labourers are free to sell their labour power as commodity. This political transformation is generally accompanied with the creation of working class and pressures for better working conditions and better wages (Steiner, 1987). However, the enslaved people do not have the privilege to sell their labour as a commodity. They are economically exploited by the owners of means of production and held by coercive pressures. Bales and Robbins (2001, p. 30) argue that labour of the slaves, as it is used in the developing world, stops the political transformation that generally includes the “proletarianization of workforce” and re-

imposes authority over the workforce. It serves as a force that keeps working class from awakening.

In terms of Marglin (1974), who critiques Adam Smith's capitalist structures for advocating technological superiority, exploited labour in the slave industry may be attributed the same feature as is attributed to technology in class struggle. The exploited labour in the slave industry is used by the owner of means of production to cheapen the wage labour, or may be, as a substitute for it. Patterson (1982) explains that capital shifts the balance of power by restricting the movement of exploited labourers in slave industry, in a situation where political consciousness begins to develop. This may include enslaving workers as is the case in forced labour or turning free labourers into slaves by bonding them with debt. In this scenario, the labour power of the exploited workers becomes the property of the owners of the means of production (capitalist). It becomes a commodity completely controlled by the capitalist. It may be noted that advocates of Marxist tradition argue that labour of all wage workers is controlled or appropriated by the capital, to which we concede, but the inability to commodify the labour of the enslaved at their will makes the exploitation extreme in case of modern slavery. Pertinently advocates of capitalism argue that the capitalist developments should enable labour to enter or exit the labour market at any time (Friedman, 2009); but the enslaved labourers cannot, as they cannot sell their labour power or commodify it, either for a fixed or temporary duration or indefinitely (Brass, 1999). This economic examination may help to inform certain aspects of slavery as a social relationship, but taking economic paradigm case for exploitation as a whole risks mistaking what is peculiar to a specific case for the characteristics of the overall phenomenon of modern slavery (Goodin, 1987). The condition of attachment of modern slaves can be embedded in the relation of power or meaning (culture, beliefs etc.) instead of being located in exchange relations. In the next section we explore the exploitations of slaves in terms of power and symbolic relations.

Exploitation and the idioms of Power

Before setting out to explore exploitations of power in modern slavery, it is to be acknowledged that there are competing definitions of power in organisational theory and management literature (Rowlinson, 1997). Lukes (1974) as cited in Ball (1976, p. 274) says power is an “essentially contested concept and inextricably value dependent”; which, according to Rowlinson (1997, p. 102), means that both the definition of the power or any of its given uses are ineradicably tied to a set of value assumptions that predetermine range of its applications. Knights and Willmott (1999, p. 30) argue that power is the “means through

which ruling class, political or managerial group controls the subordinate strata of the society or organisation.” This implies that power is conceived as a persuasive social phenomenon and its consequences are experienced at all levels of social organisations and particularly at the level of hierarchy.

Some other perspectives of power do not simply see it as exhaustively negative or coercive but as a productive and positive relation (C. Kelly, 2007; Rose, 2011). Power, for them, is not conceived as an entity *A* having power over entity *B* but as a relation where both *A* and *B* are each enabled or constrained to achieve organisational objectives. Willmott (1998) argues that if power is understood in this way, it is seen to constitute subjects both in the ruling or/and the subordinate class. There is no presumption or suggestion that people necessarily succumb or subjugate themselves to the forms of power (Foucault, 1980). In contrast, the sub-ordinate class may exhibit their power in form of resistance. While, we acknowledge this poststructuralist framing of power, this paper builds on Marglin (1974) and (Marginson, 1993) who emphasise on the coercive nature of the power, so much so that the terms power and control are used interchangeably. Adapting to this framing of power is primarily based on our ontological commitment that exploitation of modern slaves in terms of coercion and control is a significant aspect of (re)conceptualising modern slavery. As has been discussed earlier workers in slave industry (e.g. brick kilns of India) are subjected to extreme exploitations in terms of power and control. Also, force and Coercion is a dominant feature of current definitions and conceptualisations of modern slavery (See Table 1).

Bell and Bell (1975) argue that force or coercion is always identified as a rather messy, if not downright rejected affair, however, necessary. Fincham (1992, p. 180) has distilled force and control in power relations in two main perspectives: “processual and institutional.” The former locates power relations in the achievement of intended strategies or goals of an individual or organisation and the latter sees it as a relation embedded in the constraints imposed on the organisation. The problem though is that there has always been a way to conceal it to make it palatable for the people who exercise power. Patterson (1982) notes that throughout human history there are two extremes of colloquial handling of the coercive aspects of power. One is the tendency to acknowledge the force openly (processual perspective) and then to humanise it by use of various social strategies like fictive kinship, client ship or exchange of gifts. Another is the method of veiling, where coercion is thoroughly denied or completely hidden (institutional perspective). For example in

capitalism, as Knights and Willmott (1989) notes, coercion is presented as a direct opposite of what it is, and interpreted as a kind of freedom.

Patterson (1982) terms these concealments of power as “personalistic and materialistic” idioms. In personalistic form, the power is direct – or nearly so. Individuals are directly dependant on others. This translates into highly unequal distribution of power; however, the coercive aspect is visible and not completely concealed. Here kinship or fictive kinship plays a crucial role for dispensing the coercive aspect of power. In materialistic form, as can be seen in modern capitalism, “relations of dependence are disguised under the shape of social relations between products of labour” Marx & Engels 1963). The power relation therefore is no longer viewed in terms of power of a person over another but as the power of a person over commodity. While, it may be argued that such power relations are inherent to capitalist dynamics (Resnick & Wolff, 2003b), the lack of free will in wake of the acquired debt coupled with symbolic factors like religion, culture or kinship makes the exploitations in slave industry all more worse – extreme. The next section will discuss the exploitation in terms of meaning – a symbolic expression of exploitation in slave industry.

Exploitation – A symbolic expression

The scholarly discourse around exploitation is overwhelmingly focused on the economic (unequal exchange) (Carver, 1987; King, 1982; Resnick & Wolff, 2003a) and the power (coercion and control) (Ball, 1976; Bell & Bell, 1975; Grimes, 1978) motives of exploitation. The emphasis falls either on ‘production and consumption’ of commodities carrying **value** or the **force and control** used. This, we argue, limits the understanding of exploitation and therefore modern slavery as it neither informs about exploitations as a relation of values, religion, or culture etc. – **exploitation as a relation of meaning**. Bufacchi (2012), however, argues that these non-economic conceptualisations of exploitation are not for monetary reasons but for the reasons of identifying with power.

Alvesson and Willmott (2002, p. 619) emphasise the need to give a due regard to how “meaning, culture and ideology” are articulated by and embedded in structural designs of control. Ouchi (1979), three decades ago, observed the dominance of bureaucratic control in the discourse of organisational identity and control, and highlighted the need to include symbolism and culture. Since then, the interest in culture and symbolism has increased considerably (Alvesson, 2000; Morgan, Frost, & Pondy, 1983; Pondy, 1983). However, Alvesson and Willmott (2002) argue that in spite of the growing literature, Ouchi’s

observations remain salient because the need to interpret values and symbolism as “means of legitimating social control” remains. This implies that symbolic and cultural expression; like community values, beliefs or kinships, is a determinant that operationalises force and control and, therefore, important to conceptualise modern slavery (also see: Ouchi, 1980).

The point here is that exploitation in modern slavery is consummated through, to put it terms of Alvesson and Willmott (2002, p. 620), “self-positioning of employees within managerially inspired discourses of work and organisation with which they may become more or less identified and committed”. In other words, how people experience or create meaning of situation, people or objects is crucial for making sense of exploitations, and thus slavery. Deetz (1997, p. 87) argues that management often manages the “insides” - aspirations, hopes and fears – of the workers. For example, a commonly used term for the supervisors or the recruitment agents in the brick kilns of India, which incidentally houses the highest number of modern slaves according to ILO and Anti-slavery International (BBC, 2014; ILO, 2017a; A. Kelly, 2016), is ‘*Sardar*.’ It translates to ‘leader’ in English language. We interpret it as symbolic effort to secure organisational control through the use of cultural norms – in this case the seductive meaning associated with *Sardar*. On the similar lines, Knights and Willmott (1987) argue that “*valued identities*,” like the one build around the commonly used terms like ‘team leader’ in contemporary organisations, are associated with the discourse used to appeal positive cultural affinity for establishing control. The purpose here is to draw attention to symbolic aspects as dimension to explore exploitations in modern slavery.

Symbolic expressions of exploitation in slavery, as Bufacchi (2012, p. 11) puts it, may not be explicit; but entwined in the master-slave relation. Values (community values, kinship ties or religious beliefs), are instrumental in construction of the “social identification” of people (Ashforth & Mael, 1989) and therefore salient to establish, or at least to unpack, the symbolic relation of exploitations in modern slavery. Here, we draw on social identification theory proposed by Tajfel (1974). The theory posits that people tend classify themselves and others in categories based on cultural affinity, organisational membership, religious affiliation or gender and this primarily serves two functions. First, it orders and segments the social environment and therefore provides a systematic means to an individual to define others (Ashforth & Mael, 1989). In other words, a person is informed about assigning prototypical characteristics of the categories to which people belong. Second, it enables individuals to locate themselves in the social environment. It helps them to create self-identity encompassing idiosyncratic characteristics.

While this theoretical framework has found its way in management literature to foster motivation, increase productivity and inform policymaking (Hogg & Terry, 2000; Mehra, Kilduff, & Brass, 1998) in organisations, we see social identification in organisation as symbolic means to identify with power and therefore a symbolic relation of exploitation, particularly in context of modern slavery. For example, identities build around religious teachings or divine texts historically has been used to establish control and power structure. Morrison (1980, p. 17) notes that “biblical defence of slavery is the concept of divine decree, that is, through the curse of Cain God had decreed slavery it had actually come into existence.” Correspondingly, caste system informed by Hindu religious text has resulted in unique identity formation where people anticipate and concur to the their efforts being poorly rewarded (Hoff & Pandey, 2004), and consequently enable the conditions for exploitation, thus modern slavery, to foster. The use of symbolic relations (collective identity formation) as means to exploit, both in terms of power and exchange, has also been as identified and highlighted in case of migrant workers in the popular as well as scholarly literature (Berger, 1975; MacKenzie & Forde, 2009; Tupou, 2017; Wainwright, 2015). The argument here is not about the supply aspect of migration that enables modern slavery as argued by Crane (2013), but the identities that are formed within immigrant groups and help exploiters to sustain slavery and the exploited to endure it. In other words, symbolic relations form the collection consciousness that enable the conditions of slavery.

Conclusion and future research agenda

Modern slavery is a real world problem where millions of people are subjected to extreme exploitations. However, in spite of its persistence in the world and the growing attention it has received, conceptualisation of modern slavery is predominantly based on the conditions of attachment – a feature of traditional slavery, and not on the exploitations of the slaves. We redress this disregard by proposing a framework that conceptualises modern slavery as a relation of exploitations in terms of exchange, power and meaning. The focus on economic, political and cultural relations explores the conditions that assist modern slavery to prevail.

One of the implications of this paper is that economic analysis of exploitation in modern slavery is not absolute and that power relations and cultural factors play a crucial role for exploitations to exist and to sustain. From a conceptual perspective, labour theory of value may inform about the appropriation of surplus value and thus provide an analytic economic account of exploitation in modern slavery (Reeve, 1987); use of power to coerce and control

elucidates the enforcement of exploitation (Marginson, 1993; Marglin, 1974) and social identification explains its acceptance.

The paper provides fertile grounds for the future research. For example a model of exploitations can be developed to redefine modern slavery. Clearly more research is needed to refine the understanding of the specificities of exploitations of exchange, power and meaning in modern slavery, but we cautiously and optimistically submit that our enhanced understanding of these relations in modern slavery may have broader implications for capitalist organisations.

Finally, the paper also raises the call for empirical research to explore the conditions of exploitations in the slave industry (e.g. Brick Kilns of India) and theorise the economic, political and symbolic relations in the modern slavery.

Appendices

Appendix 1

Slavery Treaties or Conventions	Definition of Slavery
Slavery Convention 1889	Slavery defined as “the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised” (Mulligan & Bric, 2013)
Slavery Convention 1926	<i>Forced labour included in the definition of slavery:</i> States should “prevent compulsory or forced labour from developing into conditions analogous to slavery.” (Bales, 2012)
Universal declaration against slavery (1948)	<i>Conditions of servitude added:</i> “No one shall be held in slavery; slavery and the slave-trade in all their forms shall be prohibited” Universal Slavery declaration 1948 (BBC, 2010a)
Slavery Convention 1956	<i>Debt bondage, serfdom and exploitation of labour of young people added:</i> (a) “Debt bondage, that is to say, the status or condition arising from a pledge by a debtor of his personal services or of those of a person under his control as security for a debt, if the value of those services as reasonably assessed is not applied towards the liquidation of the debt or the length and nature of those services are not respectively limited and defined” (b) “Serfdom, that is to say, the condition or status of a tenant who is by law, custom or agreement bound to live and labour on

	<p>land belonging to another person and to render some determinate service to such other person, whether for reward or not, and is not free to change his status”</p> <p>(c) “Any institution or practice whereby a young person under the age of 18 years is delivered by either or both of his natural parents or by his guardian to another person, whether for reward or not, with a view to the exploitation of the child or young person or of his labour” UNHR (ILO, 1956)</p>
<p>International Covenant of Economic and Social Rights 1976</p>	<p><i>Freedom of choice of work and safe and healthy work conditions included:</i></p> <p>“The States Parties to the present Covenant recognize the right to work, which includes the right of everyone to the opportunity to gain his living by work which he freely chooses or accepts, and will take appropriate steps to safeguard this right.” (UNHR resolution 1976)</p>
<p>Rome International Court, Final Act. 1998</p>	<p><i>Slavery Redefined:</i></p> <p>“Enslavement” means the exercise of any or all of the powers attaching to the right of ownership over a person and includes the exercise of such power in the course of trafficking in persons, in particular women and children” (ICRC, 1998)</p>

Table 1

Traditional slavery	Modern Slavery
Slavery not globalised	Slavery globalised
Asserted legal ownership	Avoided legal ownership
Long term relationship	Seasonal relationship
High slave prices	Low slave prices
Low return on slavery (low profits)	Very high returns
Shortage of slaves	Abundance of potential slaves
Slaves high investment entities, thus maintained	Disposable Slaves

(Bales et al., 2009)

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13. Strategic Management

Tracing the value circuit in a fluid economic context: a consumer unmet-needs approach

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Tracing the value circuit in a contemporary economic context: a consumer unmet-needs approach

ABSTRACT

Although the contemporary economic context is increasingly competitive, changing, and uncertain, strategy, operations, and marketing literatures retain classical firm-centric assumptions that firms create value, and that they do this by adding together valuable firm-specific resources. This article suggests that such assumptions inhibit firm agility, are an impediment to alignment of intra-firm phases of activities, and do not explain performance heterogeneity in perfect markets. A new firm-consumer-centric model of value transfer and transformation is offered that relies on the counter-intuitive assumption that firms do not create value, and therefore that performance heterogeneity is explained by management behavior in targeting satisfaction of consumer unmet needs, and not by firm-specific resources and capabilities.

Keywords: Strategic Management; Resource-based View; Dynamic Capability; Perfect competition

In seeking to explain performance heterogeneity among firms, strategic management literature continues to ask the fundamental question, “What is the inherent source of enterprise-generated future cash flows?” (Teece, 2014: 329). Some authors have focused on positioning of homogeneous firms in product markets (industries) that permit sustained anti-competitive conduct due, for example, to barriers to entry and market concentration (Porter, 2001), while others have focused on imperfect factor markets in which heterogeneous firm-specific factors can be sustained. Such firm-specific factors included valuable and scarce resources (Wernerfelt, 1984), (Barney, 1991), and capabilities (Nelson and Winter, 1982), (Teece and Pisano, 1994), which, when markets were established, could be associated with particular products and thence with particular uses. At the same time, operations literature has focused on operational efficiency and alignment with strategic objectives, (Skinner, 1969), (Boyer and McDermott, 1999), (Slack and Lewis, 2011).

However, four problems arise in theories founded on the supply-side notion that firms create value by adding value inherent in firm-specific resources. First, performance heterogeneity cannot be sustained when both product and factor markets are under continuing pressure of competition; second, Dynamic Capabilities, as currently formulated, rely on firm-specific advantages even though it is not possible to predict whether firm-specific advantages are in fact advantageous in a changing and uncertain context; third, intra-firm activities, such as Dynamic Capabilities, are not easily identified or

measured (Breznik and Hisrich, 2014); and finally, there are difficulties in achieving alignment (Coltman et al., 2015) between phases of activities that cannot be individually monitored. Consequently, precise ex-ante guidelines to managers for how to enhance agility and alignment between intra-firm phases of activities in a contemporary economic context are seldom provided.

On the demand side, marketing and entrepreneurship literature, such as Vargo and Lusch (2004) and Rietveld (2018), and some strategy literature, such as Peteraf and Barney (2003) and Priem (2007), take a more consumer-centric perspective. In this approach, the value of resources is measured in terms of value of consumer utility (Menger, 1871), or value in use, operationalised as consumer willingness to pay for particular resources or products. However, these literatures often retain the supply-side assumption that value is developed in firms, either through value addition or creation. Arguably, an exception is suggested by Grönroos (2017: 130) for whom *potential* use value is developed through "...compiling resources and developing processes ...". In consequence, consumer-oriented perspectives have introduced theory for determining resource value in terms of consumer utility value. Such theoretical arguments run the risk of confusing the extrinsic value of means with the intrinsic value of ends (Lamprecht, 1920), an example of which is equating competitive advantage with superior performance, that has been criticized by Powell (2001). Equating ends with means is problematic for a number of reasons. First, although the existence of ends may prove the existence of *a* means for their achievement, it does not prove the existence of a *particular* means, because each 'end' could be arrived at through a number of alternative means. Second, it is not meaningful to measure outcomes, or ends, in the same units as means. For example, it is meaningless to equate units of a feeling of warmth to a cold person with units of means, such as electrical resistance (measured in ohms), that could be used to effect that feeling. And third, if the position is held that value is intrinsic in means at a moment in time before ends are achieved, equating means value and ends value gives zero means-value at the moment before, but a different value after, ends are achieved.

The purpose of this article is to explain sustained performance heterogeneity in a contemporary context that is increasingly competitive, changing, and uncertain, in a way that resolves theoretical problems relating equating means and ends value, and offers suggestions for improving

agility and alignment. This article concludes that firms sustain heterogeneous performance in perfect markets not through firm-specific advantages, but through the behaviour of entrepreneurs and managers in targeting particular unmet needs and transforming these to potential means for their satisfaction. In so concluding, strategy and operations theory are harmonised with entrepreneurship and marketing theory in a firm-consumer value circuit. Such a circuit is founded in the following major premise: the source of economic value rests entirely in satisfaction of unmet needs, and not in resources. In adopting this new major premise, this article extends Pisano (2016: 22) to reframe the strategic problem facing firms from a firm-centric question of how firms create “... new capabilities required to serve a new market”, to a firm-consumer-centric question of how firms and consumers seek mutual survival in a contemporary economic context characterized by competition, uncertainty, change, and by innovation. Innovation, resulting from technology push (Di Stefano et al., 2012), provides choice that increases consumer influence over the transfer of potential means, which in turn increases the pressure on firms to innovate. Such increasing influence allows consumers, equifinally (Bertalanffy von, 1950), to achieve an objective of satisfying unmet needs from a range of heterogeneous means for their satisfaction, which calls into question the association between value in satisfying unmet needs and particular products or resources.

In this new frame, a theoretical model is developed at three levels. First, at the level of the economic system it is assumed that entities of firms as well as consumers each have an invariant goal of survival, for the achievement of which they compete for value in the form of satisfaction of consumer unmet needs that are limited at each moment in time. Second, at the level of the entity, a theoretical model of economic activity is offered in which value is transferred and transformed between firm and consumer, rather than being exchanged and added. Here, one-directional transfer is preferred to exchange because a reverse transfer is not necessary for satisfaction of unmet needs. And finally, at the level of empirical observation of economic activity, this approach offers proxies for the measurement of value and for entity survival.

REVIEW OF THE LITERATURE

Received assumptions that underpin strategic management explanations for sustained

performance heterogeneity have their tradition in classical economics. In a classical economic context, in which market demand was relatively established and consumer choices few, resources could be reliably associated with products and thence with satisfaction of particular needs. Because of the static association between scarce resources and seemingly endless needs, giants of classical scholarship, Nicholas Barbon, Adam Smith, and Thomas Malthus could advise firms and indeed empires that the path to wealth began with control of scarce and valuable land and labour resources; the more-obvious lever for firm performance was resources, while consumer unmet needs, being static, went unnoticed. The magnitude of resource value was determined by ‘value in exchange’ and, noting the diamond and water paradox of value described by Adam Smith (1776), also depended, if somewhat untidily, on their ‘value in use’. Armed with an estimate of prospective revenues and costs that pertained in established markets, and with the underlying assumption that firm revenues and costs were related to controlled scarce and valuable resources, firms set to the task of adding value to valuable land through valuable labour.

The assumption that value is inherent in resources in the sense that they retain value even while not in use is evident in Barbon (1690: 9): “The chief End or Business of Trade, is to make a profitable Bargain ... [where the] ... Stock and Wares of all Trade are the Animals, Vegetables, and Minerals of the whole Universe, whatsoever the Land or Sea produceth.” This assumption has remained consistent through to the present time. As examples, Ricardo (1817: 7) saw the principal problem of political economy as the allotment of all that is derived from the surface of the earth to wages, profit, and rent. Such assumptions also underpin modern literature: according to Priem (2007: 232), “the consumer perspective cannot replace the existing production-oriented approaches [that follow Ricardo]”. And these assumptions subsist in operations strategy literature: Slack and Lewis (2011: XIX) note that “... firms have found that it is the way they manage their operations, and their resources in general, which sets them apart from, and above, their competitors.”

In a quest to understand “...the inherent source of enterprise-generated future cash flows...” (Tece, 2014: 329), a series of three prominent firm-level approaches have retained a priori assumptions in which firms compete for scarce resources. The resource-based view (RBV) (Ricardo, 1817), (Lippman and Rumelt, 1982), (Wernerfelt, 1984), (Barney, 1991), (Barney and Hesterly,

2008); capabilities (Schumpeter, 1934), (Penrose, 1959), (Richardson, 1972), (Nelson and Winter, 1982), (Teece and Pisano, 1994), (Breznik and Hisrich, 2014), (Eggers and Kaplan, 2013); and consumer-benefit experienced (Menger, 1871), (Vargo and Lusch, 2004), (Priem, 2007), expressly identify value and rarity of firm-specific advantages as necessary conditions for competitive advantage. This series of three approaches is presented using Bain's (1968) structure-conduct-performance (SCP) framework shown in Figure 1. Importantly, all three approaches retained the sequence wherein formulation of strategy took place subsequently to consideration of the firm's inventory of skills and resources (Skinner, 1969), or subsequently to consideration of firm strengths and weaknesses (Andrews, 1971), or subsequently to consideration of firm (organization) capabilities (Dess, 1987). In this sequence, a firm's value lies in its controlled resources and in its capabilities for adding value to create valuable products, and strategy managers then exploit the firm's value in its industry context by identifying consumers with whom to share the firm's products. Such a sequence restricts strategy managers to explore opportunities that can be exploited by a firm's existing capabilities.

Insert **Figure 1:** 'Composite theoretical framework for three extant approaches' about here

Operations strategy literature (Skinner, 1969), (Boyer and McDermott, 1999), (Slack and Lewis, 2011) has retained a priori assumptions of inter-firm competition to control scarce resources, in common with the RBV, capabilities, and consumer-benefit experienced literatures. Such advantages have been deemed to rest in a firm's collection of valuable and rare resources, termed capabilities, where resources include strategic and operational processes as well as labour and materials. For example, Hayes and Pisano (1996) noted the incidence of successful firms that focused on building internal capabilities. In this view, firms deploy capabilities to add value to valuable resources to create valuable products, often called value propositions. Many extant theories then measure the (assumed to be intrinsic) value of products through consumer interpretation. As an example, Peteraf and Barney (2003: 314) defined economic value created by a firm as "... the difference between the perceived benefits gained by the purchasers of the good and the economic cost to the enterprise."

However, the view that resources have intrinsic value harbours a number of theoretical and practical problems. Theoretical problems include the circularity of the argument relating resource value to competitive advantage. This has been addressed by a number of authors, for example Powell (2001: 885) who argued that “...competitive advantages, especially resource-based advantages, do not exist as sensible entities ...”; Lockett and Thompson (2001: 741), who observed that “empirical research using the RBV needs to be able to specify the relationship between outcomes and resources in a nontautological fashion, a task that is not always straightforward ...”, and also by Zahra et al. (2006), Lockett et al. (2009), and Arend and Bromiley (2009). Two further theoretical problems are: the adoption of consumer interpretation for determining product value that is purported to exist before such interpretation; and measurement of resource value in an unrelated scale of utility value Viner (1978). As an example of unrelated scales of value are length and time: it is not useful to measure length in the unrelated scale of time. An example of this measurement-scale problem is found in the Austrian school approach (Menger, 1871) for measuring the value of goods, which are the means to effect utility, in terms of the value of marginal utility.

Practical problems that relate to the assumption of inherent value of resources are failure to explain: a) how a firm can adjust its resources and products to markets that are not already established, such as a firm startup to satisfy a new opportunity, or a firm in a market that has changed, if their value is measured by improvements in firm efficiency and effectiveness in established markets (Williamson, 1981), (Barney, 1991), (Peteraf and Barney, 2003: 309). In other words, a manager is advised to select resources that have value in the sense that they will make valuable products. This is a circular argument that makes it impossible to predict, before actual sales, which resources will turn out to be valuable. It is for this reason that Karl Marx pointed out the firm must know which products are valuable before it can determine which resources are valuable (Dassler, 2016: 252); b) how to identify dynamic capabilities if these are a mere label (Breznik and Hisrich, 2014: 380) for whatever it was that must have caused, when viewed in retrospect, changes in firm performance in dynamic contexts; c) and how, if by definition a resource is not rare if “...possessed by large numbers of competing or potentially competing firms ...” (Barney, 1991: 106), rarity can be a necessary condition for sustained performance heterogeneity among commodity firms. This difficulty also

applies to dynamic capabilities, as currently formulated, in cases where a dynamic capability changes an ordinary capability from one un-rare state to another.

The overriding difficulty with extant explanations for sustained performance heterogeneity is that they rely on firm-specific competitive advantages, which contravenes the condition of perfect competition that there be “...free competition... [for] factors of production” (Cassel, 1932: 119). A solution to this difficulty was offered by Amit and Schoemaker (1993: 44) who emphasized a behavioral view that sustained heterogeneity was influenced by “decisions by ... managers facing high uncertainty ...” on how to “...target, develop and deploy firm-specific *Strategic Assets*.” However, this behavioural view did not replace the resource-based view that valuable firm-specific resources and capabilities were necessary to sustain performance heterogeneity.

THREE LEVELS OF A CONSUMER UNMET-NEEDS APPROACH

In this article, the strategic problem facing firms is reframed from a firm-centric question of how to identify and select core capabilities, in which intrinsic value is assumed to rest, to a firm-consumer circuit question of how to transfer and transform value. In this new frame, this article offers three levels consistent with Van de Ven (2007: 113) as “... levels of abstraction, ranging from broad and general to narrow and specific”, shown in Figure 2 below:

Insert **Figure 2:** ‘Three levels of economic activity in a firm-consumer value circuit’ about here

Level 1 - A priori assumptions for economic context

At the first level, two classes of independent entities, firms and consumers, that are free to associate, compete for limited value in an economic system. The assumption is made that the role of the firm is to contribute to the economic system, as part of which survival of any particular individual firm is not necessary, and it is the role of the economic system to support consumer survival through satisfaction of unmet needs. Value is therefore seen as value in satisfying unmet needs, where needs are assumed to exist independently of both the means to satisfy them, and of conscious awareness. This definition contrasts with ‘value in exchange’ of a particular product because satisfaction of unmet needs exists whether or not an exchange is made; and it contrasts with ‘value in use’ of a particular product because a particular need may be satisfied by any of a number of means. Further,

the question, ‘what is the value in use of a particular product?’ is firm-centric and product-centric, and is the reverse of the unmet-need-centric question, ‘what product could be used to satisfy a particular unmet need?’ Independence of conscious awareness is important because consumers satisfy combinations of needs at numerous biological levels of organisation with every action they take, making awareness difficult to achieve. Further, ‘needs’ are not the same as ‘wants’ because needs can be transformed from a state of being unmet to a state of being met, whereas wants are always in a state of being unsatisfied. In relation to entrepreneurship, this article distinguishes between needs and opportunities because needs can be seen as having ontological reality independently of observation, because a consumer may be unaware of needs (Maslow, 1970), while entrepreneurial opportunities to satisfy unmet needs depend for their existence on the mind of the entrepreneur (Ramoglou and Tsang, 2016), (Alvarez and Barney, 2017).

Level 2 - Model of economic activity

At the second level, economic activity is modeled as circuits of firms and consumers that transfer and transform value to enhance mutual survival. Each entity conflicts or cooperates with others of its own type, and must pair with an entity of the other type for the duration of value transfer. Further to Surana et al. (2005), who posited that supply chains were complex adaptive systems, this article suggests firms and consumers can be described as systems that are: open because they sense their external environment; complex when the number of variables is large; adaptive because they change in response to external opportunities and threats; and organized because rules, which may be simple (Eisenhardt and Sull, 2001), cause emergence (Heylighen, 1991) of organized complexity (Weaver, 1948). Therefore, firms and consumers are seen as autopoietic (Heylighen and Joslyn, 2001) complex adaptive systems, driven by an invariant goal of survival, which drives the flow of value around the firm-consumer circuit.

If value is intrinsic in the satisfaction of unmet needs, which is external to firms, rather than in firm-specific resources, firms transform such value from unmet need to potential means for its satisfaction. During its transformation, the magnitude of value remains the same in the ideal case in which there are no losses. This notion of value transformation at constant magnitude supplants the

notion of value addition held in extant approaches. Four major firm phases of transformation are envisaged: 1. Set strategic objectives; 2. Design capability; 3. Build capability; 4. Use capability. Intra-firm alignment can be measured as the effectiveness with which each phase meets its target for product quality, volume, price, cost, and risk.

Insert **Figure 3:** ‘Unmet-needs oriented approach’ about here

An extension is made to the Helfat et al. (2007: 1) definition of capability which was “... the ability to perform a particular task or activity”. In this article, a capability is *a means to achieve particular ends*, such as strategic objectives; a capability has dimensions of capacity and ability to achieve its ends, but lacks the trigger and authority to activate itself. Therefore, extending (Penrose, 1959), capabilities can be thought of as more than merely collections of resources, because capabilities are designed to achieve objectives whereas resources are ingredients of capabilities. Nevertheless, because capabilities and resources are means, not ends, in this definition they do not have intrinsic value. Consistent with Teece (2016), and adopting the notions of ends and means, a dynamic capability is defined as a means to achieve the particular end of changing a different capability to achieve a new end.

In terms of activities depicted in Figure 2, a firm has the capability to transfer potential value from consumer to firm, and to transform potential to usable value. The firm’s capability includes influenced resources, and its capability boundary limit will therefore usually be greater than the limit of the firm, where the firm limit includes merely controlled resources and activities. This is important because, in the approach suggested in this article, the firm offers the whole value of the unmet needs to be satisfied, not merely the amount of value that extant theories assume is added by the final firm in the supply chain.

An important distinction between the proposed consumer unmet-needs-oriented conceptual approach and extant approaches lies in the sequence of strategy formulation and capability design. As shown in the Structure-Conduct-Performance format in Figure 3, strategic objectives are both the end stage of business strategy and the starting stage for capability design by operations. The question arises, what ordering principle (Cross, 1982) should determine this sequence? Turning to living

systems for inspiration, process steps follow a sequence that increases order Skene (2017: 119). Such a sequence has been exemplified in non-living systems by Johnson (1974) in a fast bin-packing algorithm in which bins are filled by a list of numbers sequenced in reducing size, largest number first. In this sequence, larger numbers suffer greater constraint because they have fewer choices of location as the bins are filled. From this example we draw an ordering principle that constructive sequences begin with the most-constrained step and proceed with steps that are increasingly flexible.

Level 3 - Empirical observation

This article suggests that, even under pressure of competition in both product and factor markets, performance heterogeneity among firms in an economic system can be explained by heterogeneity in opportunities targeted by managers to satisfy unmet needs, and such heterogeneity can be sustained if unmet needs continue to be uncertain and changing. For an individual firm, such performance can be disaggregated into performance in satisfying unmet needs, and performance in perpetuating its own survival.

a) A suggested proxy measure for satisfying unmet needs is firm revenue, independent of firm costs. Revenue is related to price paid in for-profit firms, and to donations and grants in nonprofits. However, revenue is not a perfect measure because it is affected by external factors such as distribution of wealth. In for-profit firms, revenue is affected by the amount of money a consumer controls at the time of value transfer, and in nonprofits, by the differing amounts of donations and grants available to differing categories of people. Nevertheless, revenue is proportional to satisfaction of unmet needs.

b) The ability of a firm to sustain its performance in satisfying unmet needs, i.e. firm survival, could be measured by surplus. However, margin, which is surplus normalized by costs, is preferred to surplus because margin is an efficiency measure, does not suffer effects of changes in value of money over time, and also enables comparison between firms of differing levels of revenue. Consumer survival could be measured in the same way, where consumer incomes are analogous to firm revenues. A firm's contribution to the economic system could then be measured, using a flow analogy, as surplus x margin.

c) A firm can be considered aligned to the extent that sales volume, price, and cost of transferred products, which can be thought of as consumer-controlled potential means for satisfying unmet needs, match the firm's targets for output, risk, and cost, which can be thought of as firm-controlled unmet needs. In terms of the constructs in Figure 2, alignment is indicated by a small difference between 'controlled potential means' and 'controlled unmet needs'.

d) A firm can be considered agile to the extent that alignment is achieved in a changing and uncertain context.

e) A feature of competitiveness of an economic system is the number of offered potential means per unmet need.

CONCLUSION AND IMPLICATIONS

Extant strategic management approaches have focused on firm-specific advantages such as resources and capabilities as the source of value and therefore as an explanation for sustained heterogeneous performance. However, firm-specific advantages rely on imperfect factor markets and therefore do not explain such performance in a perfectly competitive context. The notion of resources having value, in the sense that they retained value even while not in use, arose in a pre-industrial context where markets for resources were relatively established, and the variety of product types for satisfying unmet needs was limited. In that more-stable context firms could pragmatically associate control of particular resources with revenues. However, the contemporary context is dominated by competition, change, uncertainty, and increased variety of solutions available to consumers to satisfy their unmet needs. In such a context, an association between particular resources and revenues is fractured. Further, from a logical standpoint, value of firm-specific advantages was deduced using the circular argument that such advantages were valuable if they led to valuable outcomes. In those approaches, firms were conceptualized as creating value by adding value inherent in resources, but the notion of adding value is problematic because it is not arithmetically possible to determine value added by each phase of firm activities if value, measured as revenue, is only known for the whole firm. This causes difficulties for monitoring intra-firm alignment of phases.

A new unmet-needs oriented approach offers a set of a priori assumptions for, and a theoretical model of, economic behaviour intended to enable firms, as entities in the economic system, to satisfy changing unmet needs. In this new approach, sustained firm competitive performance in respect of *revenue* is heterogeneous to the extent that managers target the control of unmet needs that continue to be heterogeneous in a volatile context, and performance in respect of *margin* depends on the cost of transforming unmet needs to potential means for meeting them. An important feature of this approach is an ordering principle for capability design, the responsibility for which is assigned to operations. This new approach has a number of implications. First, agility: because value in satisfying consumer unmet needs is independent of means for their satisfaction, strategic management thinking processes are free to explore ends independently of means. Thus, ambidextrously (Raisch et al., 2009), because operations are no longer constrained to make the best use of existing capabilities, they are free to design, build, and use means to exploit such ends. Here, capability design and build are analogous to dynamic capability. Second, because the approach sees capability design as part of a linear sequence of activities for transforming value, in which the magnitude of value ideally remains the same, and because the design can be assessed against strategic objectives, a theoretical basis is established for measuring the performance of dynamic capability activities. Third, the approach enables a firm to monitor alignment of each intra-firm phase with strategic objectives, thereby helping to resolve tension between the exploratory nature of strategy formulated in an external context of uncertainty, and the exploitive nature of operations activities carried out in a context within the firm that is less uncertain. In this sense, alignment between phases can be seen as the extent to which each phase is effective in achieving its objectives. And finally, the role of the economy is to support survival of consumers through satisfying unmet needs, and therefore the implication arises that managers should maximize a firm's contribution to the economic system. This implication contrasts with the notion that managers should maximize firm value through profits, and with stakeholder theory (Jensen, 2001).

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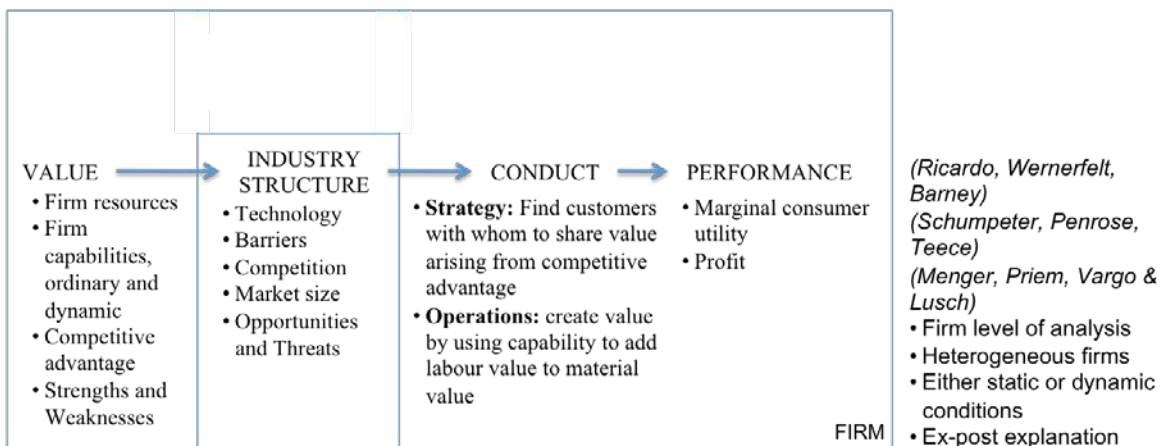


Figure 1: Composite theoretical framework for three extant approaches

Level 1 - A priori assumptions:

Closed complex (economic) system, within which firms compete with firms and consumers with consumers to achieve an invariant goal of survival by controlling and satisfying unmet needs, and in which unmet needs are limited at any moment in time but not over time. Needs exist independently of observation.

Level 2 - Model of economic activity:

Electric-circuit analogy of inter-entity transfer and intra-entity transform of needs from state of being unmet to met. Firms compete to transfer unmet needs and transform to potential means, while consumers compete to transfer potential means to transform unmet to met needs

Level - 3 Proxy measures of activity:

Revenues and Costs

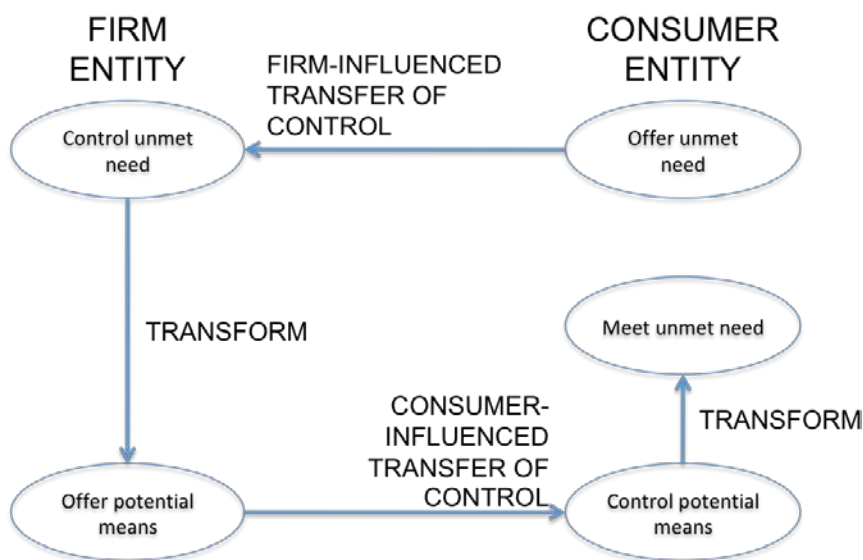


Figure 2: Three levels of economic activity in a firm-consumer value circuit

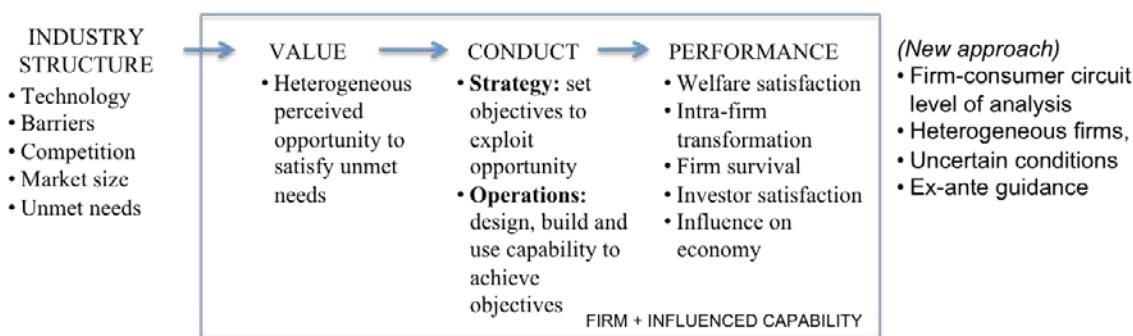


Figure 3: Unmet-needs oriented approach

**THE RELATIONSHIP BETWEEN SOCIAL CAPITAL, KNOWLEDGE ACQUISITION,
PRODUCT INNOVATION, AND FIRM PERFORMANCE IN MALAYSIAN
MANUFACTURING FIRMS**

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ABSTRACT

Centered on social capital theory, we develop and test a model on product innovation involving customers. The goal of our study is to examine how social capital impacts knowledge acquired from customers and whether or not the acquired knowledge affects product innovation of manufacturing firms in an emerging market. We employ a sample of 393 manufacturing firms in Malaysia. Our results demonstrate that all social capital dimensions are positively associated with product innovation. Product innovation is, in turn, positively associated with the firm's market performance. However, the partial mediation of knowledge acquisition signals other factors impacting social capital and product innovation of firms, respectively. Implication for practice signals a need for firms to also include other sources of knowledge.

Key words: Social capital, Knowledge acquisition, Product Innovation, Firm performance, Strategy, Competitive advantage, Malaysia

The extensive research on product innovation indicates the requirement of knowledge from diverse actors. Firms have reported extensive value from outside knowledge which compels them to create multifarious interactions and collaborations with external parties (Chesbrough, 2003). Specifically, favorable knowledge exchanges with external parties like customers is well documented in literature. Firms gain from acquiring knowledge from customers (Noordhoff, Kyriakopoulos, Moorman, Pauwels, & Dellaert, 2011; Truong, Simmons, & Palmer, 2012), with reports of explicit increases in product innovation (Coviello & Joseph, 2012; Scaringella, Miles, & Truong, 2017).

Thus interactions and relationships with customers are valuable especially in acquiring knowledge, as it provide firms the potential to profit from it (Atluri, Dietz, & Henke, 2017; Cockayne, 2016; Ebers & Maurer, 2014; Noorderhaven, & Harzing, 2009). In other words, social interaction, relationship building and network ties which form the social capital construct (Yli-Renko, Autio, & Sapienza, 2001) help facilitate knowledge acquisition. Considering the impact of social capital, researches began to establish its significance in facilitating innovation (Chen, Chang, & Hung, 2008; Gu, Wang, & Wang, 2013; Landry, Amara, & Lamari, 2002; Wu, Chang, & Chen, 2008; Yli-Renko et al., 2001). This is attributable to the belief that innovation is not a discrete event but a result of the interactions and exchanges of knowledge involving customers (Landry et al., 2002). Following this call, the design of this study integrates four research streams – social capital, knowledge acquisition, product innovation, and firm performance – which tackles the main research question: What impact does social capital have on acquiring knowledge from customers and product innovation of firms?

Among others, the acquisition of knowledge by firms depends on the social capital accumulated through networks of interaction and learning. Firms have capabilities for creating and sharing knowledge that improve their technical and economic innovation process (Dingler & Enkel, 2016) thus supporting social capital theory.

Our contribution to the innovation literature is in three ways. (a) Social capital is a broadly defined construct and measuring it is a challenge (Lins, Servaes, & Tamayo, 2017). However, following the study by Yli-Renko et al. (2001), we used three dimensions to measure social capital – the level of social interaction, the quality of the relationship in terms of goodwill trust and reciprocity, and the level of network ties created through the relationship. (b) Integrating four important constructs – social capital, knowledge acquisition, product innovation and market innovation within a single study that examined manufacturing firms in Malaysia is unique and hugely contributes to literature within an emerging market setting. (c) By examining knowledge acquisition from customers, this study validates the profound impact of social capital in garnering valuable input from customers. This in turn has great influence on the firm’s product innovation and market performance, respectively.

The structure of this paper is such that the next section covers theoretical background, which explains all constructs of this study and its respective hypotheses. This is followed with methodology and then the results are presented. The final section is discussion that includes implication to theory and practice, limitation and future research direction.

THEORETICAL BACKGROUND

Social Capital

Social capital consists of obligations and expectations, which are dependent on the trustworthiness of the social environment, and the information flow capabilities of the social structure (Coleman, 1998). Anderson, Dodd, and Jack (2010, p. 122) defined social capital as a “networking platform of relationships where individuals are able to capture resources which are generated by others or social units, so they can improve entrepreneurial effectiveness”. In several intra and inter organizational studies social capital is regarded as social relations that create goodwill to facilitate the accomplishment of resources, influence and defined goals (Adler & Kwon, 2002; Porter & Woo, 2015; Stam, Arzlanian, & Elfring, 2014).

Although social capital can be non-beneficial (Besser & Miller, 2013) that can even lead to the transmission of bad business advice between network members (Fisher, 2013), several studies empirically justified how social capital facilitates resource exchange, develops area contexts, and increases possibilities for strategic development within the organization (Eklinder-Frick, Eriksson, & Hallén, 2011; Fafchamps, 2006; Houghton, Smith, & Hood, 2009; Nahapiet & Ghoshal, 1998; Porter & Woo, 2015; Tasselli, Kilduff, & Menges, 2015; van Rijn, Bulte, & Adekunle, 2012). Moreover, social capital that encompasses the relationship between organizations and external parties facilitates innovation (Bagley & Hillyard, 2014; Eklinder-Frick et al., 2011). In fact, social capital highly contributes to product innovation by reducing transaction costs between firms and other actors. Specifically, costs concerning searching information, bargaining, decision-making, policing, and enforcement are markedly reduced (Eklinder-Frick et al., 2011; Lowitt, Hickey, Ganpat, & Phillip, 2014). Edelman, Bresnen, Newell, Scarbrough and Swan (2004) found that social capital helps value creation in firms because it aids in acquiring knowledge that is not easily accessible. Moreover, some organizations foster social interactions and relations with knowledge providers inside and outside the firm (Ebers & Maurer, 2014), as social integration mechanisms do impact an organization's capability to transfer knowledge (Jansen, Van Den Bosch & Volberda, 2005).

In support of the this, the study by Yli-Renko et al. (2001) revealed, in addition to social capital, knowledge acquisition had a significant and important factor for new product development. Thus externally oriented firms that leverage and share outside knowledge had a positive impact on its innovation capability hence positively affecting market performance (Grawe, Chen, & Daugherty, 2009). Although these contributions are very valuable, few model the mechanisms of social capital on firm level outcomes, such as innovation and its contribution to market performance. Consistent with a relational view of competitive advantage (Dyer & Singh, 1998; Hitt, Dacin, Levitas, Arregle, & Borza, 2000), we help fill this gap in the literature by introducing, within an emerging market setting, how dimensions of social capital in a manufacturing firm's relationship with its key customers affects the firm's ability to acquire new knowledge and exploit it for product innovation and its impact on market performance. We contend that the amount of external knowledge a manufacturing firm will obtain from key customers depends on three aspects of social capital in the relationship: the level of social

interaction, the quality of the relationship in terms of goodwill trust and reciprocity, and the level of network ties created through the relationship.

Social interaction refers to the extent of social relationships between the focal firm and the customer (Nahapiet & Ghoshal, 1998; Larson, 1992; Ring & Van de Ven, 1994), while relationship quality is the extent that this interaction develops goodwill trust and expectations of reciprocity (Dyer & Singh, 1998; Larson, 1992; Ring & Van de Ven, 1994). Customer network ties denote the extent to which the key customer provides the focal firm access or introductions to a broader set of customers (McEvily, & Zaheer, 1999; Uzzi, 1997). We also expect that knowledge acquisition will enhance knowledge exploitation processes, by speeding up product innovation and its effect on firm's market performance (Chesbrough, 2003). Besides, several literatures suggest that present firms heavily depend on knowledge sharing with external parties, such as customers (Borgatti & Halgin, 2011; Landry et al., 2002; Scaringella et al., 2017).

Our empirical investigation within the Malaysian manufacturing firms examines the effects of social capital, and knowledge acquisition, on innovation and market performance. Thus, the proposed theoretical model of this study is shown in Figure 1.

Social Interaction, Product Innovation, and Knowledge Acquisition

Social interaction is a structural dimension of social capital and channels information and resource flows (Tsai & Ghoshal, 1998; Chen et al., 2008). By using social interactions one firm may get access to use other firms' resources and able to find the resource they need for their innovation process (Coleman, 1988; Tsai & Ghoshal, 1998). Likewise, several past studies highlighted the significance of social interaction with external firms or users as the main drivers of the firm's higher innovation performance (Landry et al., 2002; Alguezaui, & Filieri, 2010; Laursen, Masciarelli, & Prencipe, 2012).

Greater levels of social interaction between a firm and its key customer increase the knowledge the firm acquires through that relationship by intensifying role interactions, and enhancing the firm's ability to recognize and evaluate pertinent knowledge (Chohen & Levinthal, 1990; Lane & Lubatkin, 1998; Gluckler, 2013; Ring & Van de Ven, 1994), and by thence increasing its incentive to exchange and process knowledge which affect new product development (Dyer & Singh, 1998; Larson, 1992; Zahra,

Ireland, & Hitt, 2000; Yli-Renko et al., 2001) and better product development (Cousins, Handfield, Lawson, & Petersen, 2006; Lawson, Petersen, Cousins, & Handfield, 2009).

Nahapiet and Ghoshal (1998) and Ring and Van de Ven (1994) noted that social interactions develop over time tend to exchange resources, which according to Yli-Renko et al. (2001), improves firm's capability to recognize and evaluate the external resource and knowledge of the key customer in the new product development process. The interaction also help firms access and understand the customer's operations and effective means of communication. Thus, based on the above discussion we hypothesize that:

H1. Social Interaction is significantly and positively related to product innovation.

H4. Social Interaction is significantly and positively related to knowledge acquisition.

Relationship Quality, Product Innovation, and Knowledge Acquisition

Relationship quality is the cognitive dimension of social capital which reflects common values, a shared vision, which also encourages the development of trusting relationships (Tsai & Ghoshal, 1998). A relational dimension, trust is established based on two party's common goals, beliefs, norms, good intentions, competence, openness and reliability of other actors through a track record of interactions (Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998).

Past studies emphasized that increases in quality of relationship with community members contribute more than any other explanatory variable to increase the likelihood of firms' innovation (Landry et al., 2002; Yli-Renko et al., 2001). Chiu, Hsu, and Wang (2006) stated that a trusted relationship leads to sharing and exchanging good quality knowledge for new development of the product. In sum, the quality of the relationship between a firm and its key customers should be positively associated with product innovation because it provides control, increases mutual understanding, quickens exchange processes, and encourages freedom in exchange. Therefore, we hypothesize that:

H2. Relationship Quality is significantly and positively related to product innovation.

H5. Relationship Quality is significantly and positively related to knowledge acquisition.

Customer Network Ties, Product Innovation, and Knowledge Acquisition

The positive impact of interfirm networks on innovation has been traced back to the potential of interorganizational collaboration to facilitate knowledge sharing and interactive learning processes

among participating firms (Inkpen & Tsang, 2005). The key customer may act as a link to a broad marketplace, connecting the firm with other customers. Such ties are important for the transmission of novel information for new product development (Scaringella et al., 2017). This potential in turn, is claimed to be strongly dependent on the overall network structure (Zaheer & Bell, 2005).

McEvily and Zaheer (1999) argue that network ties aid in the development of competitive capabilities by broadening and deepening market knowledge. They also pointed out that a greater number of such links means exposure to a broad set of opportunities for further learning. Besides enhancing technological learning (Zahra et al., 2000), developing a broad set of customer network ties should also enhance the firm's ability to manage its external relations. Hitt et al., (2000) argue that such a skill will be an important strategic tool for partner selection of an entrepreneurial firm. Hence based on the preceding literature, we propose that customer network ties positively affect product innovation. Thus, we hypothesize that:

H3. Customer Network Ties is significantly and positively related to product innovation.

H6. Customer Network Ties is significantly and positively related to knowledge acquisition.

Knowledge Acquisition and Product Innovation

Yli-Renko et al. (2001) stated that knowledge acquisition positively effects new product development, technological distinctiveness, and sales cost efficiency. Knowledge acquisition play a significant role for new technology ventures (Scaringella et al., 2017; Yu, Chen, Nguyen, & Zhang, 2014). Agarwal, Echambadi, Franco, and Sarkar (2004), in their empirical investigation suggest that knowledge acquisition has critical implications for achieving both favourable performance and innovation performance. According to Marvel and Lumpkin (2007), knowledge acquisition enhances the breadth and depth of valuable information and thus increases the potential for acquiring innovative processes or products to serve the market.

Knowledge acquisition via relationships contributes to product innovation development in manufacturing sectors, because product innovation requires the integration and combination of specialized knowledge inputs from many different areas of technology (Cohen & Levinthal, 1990; Eisenhardt & Brown, 1998; Zahra et al., 2000). Scaringella et al. (2017) found that customers are a valuable source of information for new product development. A key customer can provide user know-

how regarding product improvement possibilities, new functional requirements, the value of prototypes, and the like. As Zahra et al. (2000) argue, knowledge diversity increases the depth, breadth, and speed of learning, leading to a greater number of product introductions. Therefore, based on above literature, in this study we propose that knowledge acquisition has a mediating effect on the relationship between social capital and product innovation. Thus, we hypothesize that:

H7. Knowledge Acquisition is significantly and positively related to product innovation.

H7a. Knowledge Acquisition has a mediating effect in the relationship between social interaction and product innovation.

H7b. Knowledge Acquisition has a mediating effect in the relationship between relationship quality and product innovation.

H7c. Knowledge Acquisition has a mediating effect in the relationship between customer network ties and product innovation.

Product Innovation and Market Performance

Although product innovation and firm success links have been well researched, this relationship is equally vital today hence it still garners current research attention (Fu, Mohnen, & Zanello, 2018; Story, Bosco & Cadogan, 2015). These and other previous studies have shown that product innovation has a significant and positive impact on firm’s productivity and market performance (Griffin & Page, 1996; Montoya-Weiss & Calantone, 1994; Singh, Jayasingam, & Klobas, 2016). For a short time, firms may become monopolies and earn high profits by product innovations as they face very little direct competitors (Lieberman & Montgomery, 1988). However, over time competition will increase and firms’ profits will reduce gradually, but they will be able to earn monopoly profits if the firm is able to produce new and innovative products continuously. Similarly, studies of U.S, Greece and Australian manufacturing firms found that product innovation is an important determinant of firms’ growth and profitability (Salavou, 2002; Prajogo, 2006), and higher market performance (Geroski, Machin, & Van Reenan, 1993; Li & Atuahene-Gima, 2001). Accordingly, it is hypothesized that:

H8. Product innovation is significantly and positively related to market performance.

Insert Figure 1 about here

METHODOLOGY

Data and Sample

We conducted a survey on 393 manufacturing firms located in Klang Valley, Malaysia. We focused on manufacturing firms, a significant economic contributor in Malaysia, because they are affected by key external relationships (Eisenhardt & Schoonhoven, 1996; Singh et al., 2016). The population of this study comprised of employees (at least assistant managers, management team and/or owners) who are directly involved in the product operations and product development processes. The high-technology industry is chosen because it is knowledge-driven; it affects innovative performance; and knowledge acquisition is salient in this industry characterised with rapid technological changes. To confirm that the sample firms are involved in technology creation, we checked their business profile from the 2015 Federation of Malaysian Manufactures (FMM) directory. The manufacturing firms short-listed, through convenience, were contacted by telephone and after an initial inquiry, appointments were made for questionnaire distribution; and explanation was provided wherever needed. Each respondent represented one manufacturing firm. Therefore, we managed to get high response rate.

A pilot study has been conducted on 20 firms. The pilot data were entered into SPSS® v. 22 and analysed for reliability of measurements. The result of Cronbach's alpha for all the variables is above the .70 threshold, thus confirming reliability of the measurements used in this study. In total, 450 manufacturing firms were selected for the personal and email distribution of the questionnaires. A total of 393 usable responses, from 393 firms, were considered "clean" and used for data analysis. The response rate is 87.33%.

Measurement of Variables

A 5-point Likert scale (1 = strongly disagree; 5 = strongly agree, where a rating of 3 = neutral) was used for all the constructs. The construction of the measures is explained in the following sub-sections.

Dependent variables

Product Innovation

In this study, we used four items to measure the level of product innovation that was adapted from Grawe et al. (2009) and Yli-Renko et al., (2001), which is the integration of customer ideas into the product innovation process. We asked our respondents to indicate their agreement with statements regarding the innovation process in their firm, which depicts the process of improving current products

or developing new products. The measure for product innovation in the follow-up survey significantly correlated with our original measure ($r = 0.28, p < .0001$), suggesting construct validity.

Market Performance

Market performance was measured by using items adapted from Claycomb et al., (1999) and Jaworski and Kohli (1993). Respondents were asked to indicate the performance of their firms in the past year compared to the performance of their major competitors based on the following: sales volume; profit margin; market share; and overall competitive position. The measure for firm performance in the follow-up survey significantly correlated with our original measure ($r = 0.74, p < .0001$), suggesting construct validity.

Independent variables

Social Interaction

We measured social interaction with four statements reflecting the extent to which the relationship is characterized by personal, social ties between the firm and the customer, time a firm spend to interact with key customer, and the level of communication with customer for searching information, resources, and new contacts. The measurement of social interaction was adapted from Claycomb et al., (1999) and Jaworski and Kohli (1993). The measure for social interaction in the follow-up survey significantly correlated with our original measure ($r = 0.35, p < .0001$), suggesting construct validity.

Relationship Quality

We measured relationship quality with five statements reflecting the extent to which the firm perceives trust between itself and the key customer, adopted from Yli-Renko et al. (2001) and Chiu et al. (2006). The measure for social interaction in the follow-up survey significantly correlated with our original measure ($r = 0.65, p < .0001$), suggesting construct validity.

Customer network ties

Customer network ties was measured by using 2-item statements reflecting the degree to which the key customer relationship provides the firm with a network of customer contacts, adapted from Yli-Renko et al. (2001). The measure for customer network ties in the follow-up survey correlated significantly with our original measure ($r = 0.37, p < .0001$), suggesting construct validity.

Mediating variables

Knowledge Acquisition

Knowledge acquisition was measured with 4-items reflecting the technological and market knowledge that a firm may acquire from the key customer, adapted from Yli-Renko et al. (2001). Respondents were asked to indicate their agreement with statements regarding knowledge a firm received from their customer related to market knowledge, valuable information, and technical knowledge about product. The measure for customer network ties in the follow-up survey correlated significantly with our original measure ($r = 0.38, p < .0001$), suggesting construct validity.

Data Analysis Techniques

The data collected for his study were analysed quantitatively. IBM SPSS® Statistics v.22 and Analysis of Moment Structures (AMOS) v.21 were used to run the relevant statistical tests. The next section provides a brief over-view of the main data analysis techniques used in this study.

RESULTS

Demographic Profile of respondents

Table 1 shows the demographic profile of the respondents. Out of 393 respondents majority of the respondents were male (225 or 57.3%), female (168 or 42.7%), in the group of 41-50 years old (229 or 58.3%), holding a Bachelor degree (268 or 68.20%), were Managers (182 or 46.30%), and (171 or 43.5%) were working in the same organizations between 1 to 3 years.

Insert Table 1 about here

The tests for normality, multicollinearity, non-response bias, exploratory factor analysis (EFA), reliability and validity are depicted in Tables 2, 3, 4, 5, 6 and 7, respectively.

Insert Tables 2, 3, 4, 5, 6, 7 and 8
about here

Reliability

Item-total-correlation for all the items are greater than 0.5 while Cronbach’s Alphas for all the scales are well above the threshold of 0.7, indicating reliability (Nunnally, & Berstein, 1994; Hair, Black, Babin, & Anderson, 2010).

Common Method Bias

Based on Harman’s single factor test, the result of EFA indicated only 30.57% variance explaining a single factor. Therefore, we can confirm that the data is free from common method bias.

Hypotheses testing

The research model in Figure 3 below is a composite model that was developed based on the hypotheses of this study. The result of the model fit summary in Figure 3 shows the significant value of CMIN/DF (RATIO) is 2.191 ($p = .000 < 0.05$), while the remaining values supported a model that fitted well (CFI = .917; GFI = .900; RMSEA = .055). Hence, we can conclude that the model fits. Furthermore, Table 9 below shows the SEM results with the Standardised β and p values. The results show that all eight hypotheses (H1-H8) are supported.

Insert Figure 3 about here

Insert Table 9 about here

Mediating effect

Table 10, below shows that all three social capital constructs are significantly related to knowledge acquisition. Table 10 also shows that knowledge acquisition has a partial mediating effect on each relationship of the social capital constructs and product innovation, respectively. Therefore, we can summarize that all three hypotheses (H6a-H6c) are partially supported.

Insert Table 10 about here

DISCUSSION

The main objective of this study is to analyse the effect of social capital on product innovation and its impact on market performance. The significant positive relationship of social interaction, relationship quality, and customer network ties to product innovation and knowledge acquisition, respectively is supported by previous researches (Lane & Lubatkin, 1998; Tsai & Ghoshal, 1998). This study’s results mirror a more recent research that indicate social activities like interactions and building ties are as important as outside knowledge (Dingler & Enkel, 2016). Thus our results indicate that social interaction, relationship quality, and customer ties are important platforms where firms’ key customers can share their knowledge and ideas for product innovation. Our findings also suggest that knowledge

acquisition is important for product innovation and enhances the competitive advantage, consistent with previous studies.

In our study we hypothesized that knowledge acquisition is positively related with product innovation. This result was also supported by previous and recent researches that highlighted the importance of acquiring external knowledge for product development, particularly from key customers (Scaringella et al. 2017; Yli-Renko, et al., 2001). Our findings that suggest partial mediating effect of knowledge acquisition on the social capital constructs and product innovation relationship are not fully in line with past researches (Zahra et al., 2000; Yli-Renko, et al., 2001). The reason for this could be that there are other factors like capturing knowledge from research institutions, and other firms can have a bigger impact on product innovation. Finally, the results supported the importance of product innovation on market performance. In sum, our study suggests that by leveraging social capital, manufacturing firms may acquire external knowledge for product innovation and increase market performance thus accomplishing the firm's strategic goals.

Implication for theory and practice

Overall findings of the research contribute in three ways. First, we used three dimensions of social capital, and all dimensions have significant effects on product innovation as well as knowledge acquisition. Second, the partial mediating effect of knowledge acquisition suggests that solely depending on customer knowledge can be detrimental to firms, as indicated by a recent study Scaringella et al. (2017). They found that firms that leverage both customer and research institutions were in a better position to acquire valuable knowledge for radical innovation than firms that only relied on customers.

Third, this study highlights how a manufacturing firm within an emerging market can achieve appropriate value from their key customers and show the way for competitive advantage. Moreover, this study also creates awareness among management teams about the importance of actively managing their social capital to stimulate knowledge and build competitive advantage. These findings assist operation managers by giving knowledge about their product innovation, firm's growth and the potential in external knowledge.

LIMITATIONS AND FUTURE STUDY

Although the statistical results provide solid support for the hypothesised relationship, several limitations need to be addressed for future research. First, whether our findings could be generalized to all types of industries is unclear. The manufacturing sector of high technology industries might be different from other low-technology manufacturing industries or service industries. Therefore, further study is necessary to verify and generalize our findings. Second, the data was collected from the firms only located in the Klang Valley area. Therefore, future studies could be conducted in other industries and other area settings.

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TABLES AND FIGURES

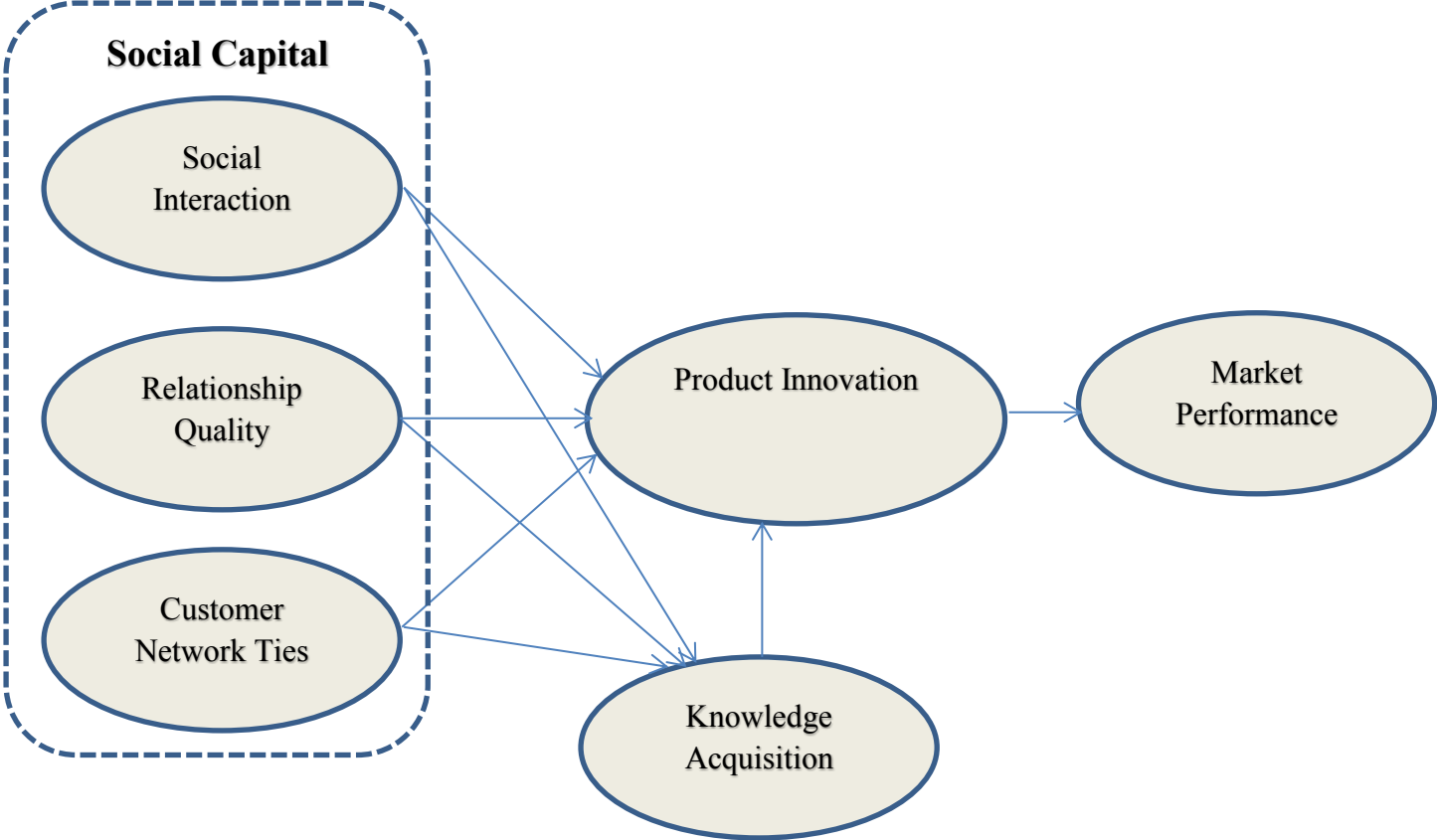


Figure 1. Research framework

Table 1

Respondents' Profile

Variables	Frequency	Percentage (%)	Cumulative
Gender			
Male	225	57.3%	57.3
Female	168	42.7%	100
Ethnicity			
Malay	147	37.4	37.4
Chinese	128	32.6	70.0
Indian	100	25.4	95.4
Others	18	4.6	100
Age			
Under 30 Years	1	.3%	.3
31 – 40 Years	116	29.5%	29.5
41 – 50 Years	229	58.3%	88.0
Above 50 Years	47	12.0%	100
Education			
Secondary School	4	1.0%	1.0
Diploma	67	17.0%	18.1
Bachelor's Degree	268	68.2%	86.3
Postgraduate Degree	45	11.5%	97.7
Others	9	2.3%	100
Position			
Senior Executive	5	1.3%	1.3
Manager	182	46.3%	47.6
Senior Manager	152	38.7%	86.3
Director / Owner	54	13.7%	100
Working in Same Firm			
Less than 1 Year	41	10.4%	10.4
1-3 Years	171	43.5%	53.9%
3-6 Years	145	36.9%	90.8%
More than 6 Years	36	9.2%	100

Table 2

Assessment of normality

Variable	min	max	skew	c.r.	kurtosis	c.r.
Social Interaction	3.00	5.00	-.355	-2.87	-.64	-2.58
Relationship Quality	3.00	5.00	-.161	-1.30	-.25	-1.01
Customer Network ties	3.00	5.00	-.341	-2.76	-.50	-2.03
Knowledge Acquisition	3.00	5.00	-.591	-4.78	-.09	-.39
Product Innovation	3.00	5.00	-.661	-5.35	.02	.09
Firm Performance	3.00	5.00	-.490	-3.96	-.191	-.77
Multivariate					3.05	3.09

Exploratory factor analysis (EFA)

Table 3

Tolerance and VIF values for predictor and mediating variables

Construct	Dependent Variable	Collinearity Statistics	
		Tolerance	VIF
Social Interaction		.64	1.57
Relationship Quality	Product Innovation	.62	1.62
Customer Network Ties		.92	1.09
Knowledge Acquisition	Innovation	1	1
Production Innovation	Market Performance	1	1

Table 4

T-test results for differences between first and last 40 respondents

Variables	Firs respondents (N = 40)	Last respondents (N = 40)	T-Statistic	Significance
Social Interaction	4.61	4.51	1.22	.229
Relationship Quality	4.59	4.57	.350	.728
Customer Network Ties	4.49	4.52	.427	.153
Knowledge Acquisition	4.52	4.46	.684	.498
Product Innovation	4.45	4.34	1.53	.134
Market Performance	4.41	4.31	1.05	.300

Table 5

Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.900
Approx. Chi-Square	4327.39
Bartlett's Test of Sphericity	df 406
	Sig. 0.00

Table 6

Exploratory Factor Analysis. Rotated Component Matrix

	Factor					
	1	2	3	4	5	6
SocialInter1		.589				
SocialInter2		.543				
SocialInter3		.735				
SocialInter4		.753				
RelationshipQ1					.714	
RelationshipQ2					.583	
RelationshipQ3					.675	
RelationshipQ4					.552	
RelationshipQ5					.619	
CustomerTies1						.709
CustomerTies2						.823
KnowledgeA1				.589		
KnowledgeA2				.803		
KnowledgeA3				.559		
KnowledgeA4				.810		
Innovation1	.515					
Innovation2	.728					
Innovation3	.833					
Innovation4	.667					
Performance1			.758			
Performance2			.767			
Performance3			.673			
Performance4			.563			
Eigenvalue	8.24	2.41	2.03	1.67	1.28	1.18
Variance Explained	28.40	8.32	7.00	5.75	4.39	4.06

Extraction Method: Principal Component Analysis.

Table 7

Composite Validity

	CR	AVE	MSV	MaxR(H)	1	2	3	4	5	6
(1) Product Innovation	0.792	0.590	0.276	0.801	0.750					
(2) Relationship Quality	0.791	0.612	0.381	0.866	0.513	0.759				
(3) Customer Network ties	0.769	0.629	0.266	0.919	0.479	0.382	0.793			
(4) Knowledge Acquisition	0.756	0.546	0.341	0.939	0.497	0.584	0.480	0.668		
(5) Social Interaction	0.753	0.638	0.281	0.950	0.475	0.884	0.265	0.452	0.762	
(6) Market Performance	0.782	0.579	0.276	0.959	0.936	0.478	0.516	0.471	0.471	0.792

Table 8

Correlations

			Estimate	P value
Relationship Quality	<-->	Customer Network Ties	.382	.001
Relationship Quality	<-->	Knowledge Acquisition	.584	.001
Relationship Quality	<-->	Social Interaction	.884	.001
Relationship Quality	<-->	Product Innovation	.513	.001
Relationship Quality	<-->	Market Performance	.478	.001
Customer Network Ties	<-->	Knowledge Acquisition	.480	.001
Customer Network Ties	<-->	Social Interaction	.265	.001
Customer Network Ties	<-->	Product Innovation	.479	.001
Customer Network Ties	<-->	Market Performance	.516	.001
Knowledge Acquisition	<-->	Social Interaction	.452	.001
Knowledge Acquisition	<-->	Product Innovation	.497	.001
Knowledge Acquisition	<-->	Market Performance	.471	.001
Social Interaction	<-->	Product Innovation	.475	.001
Social Interaction	<-->	Market Performance	.471	.001
Product Innovation	<-->	Market Performance	.936	.001

Figure 2.

Confirmatory Factor Analysis (CFA)

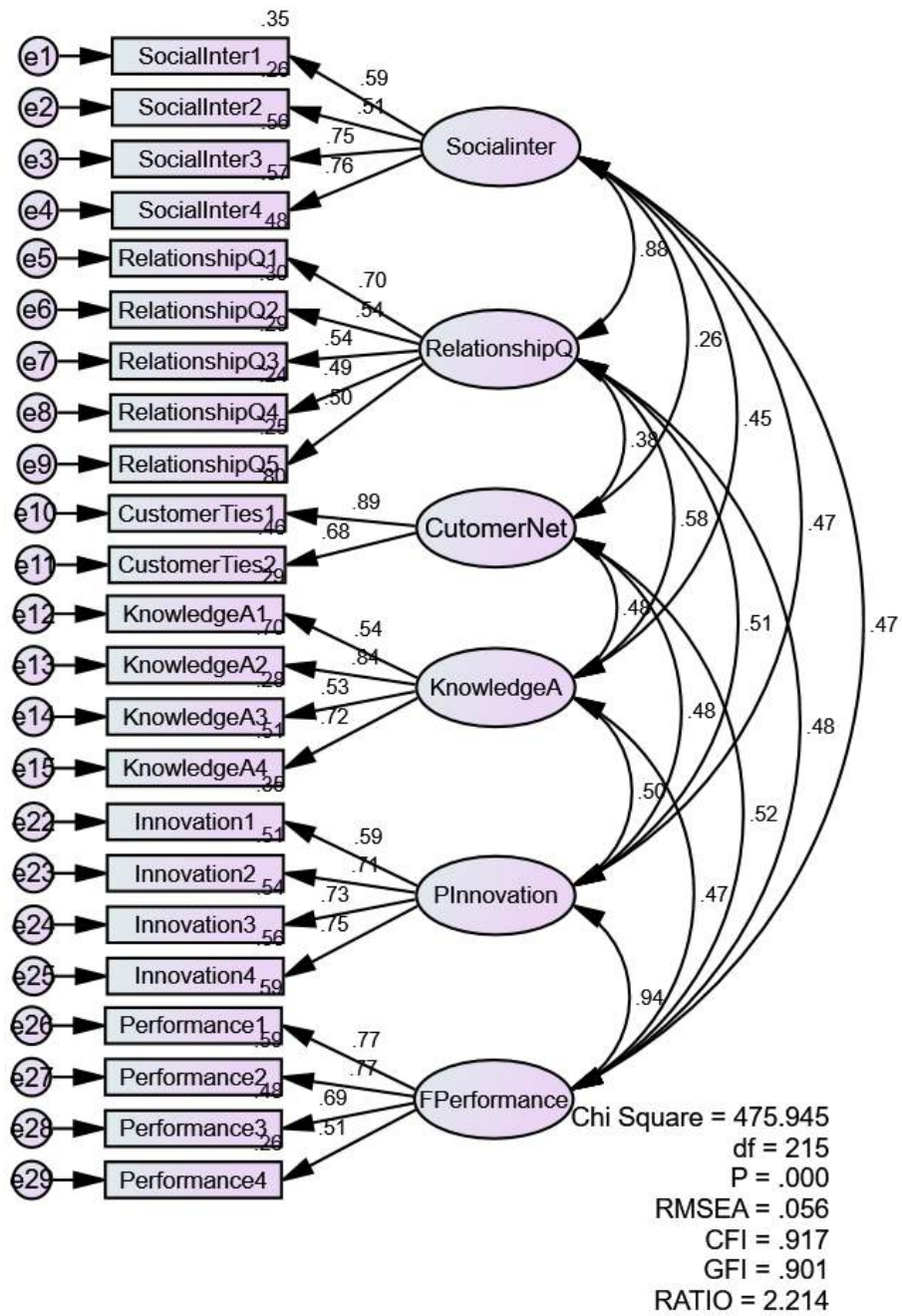


Figure 3.

Structural Equation Modelling (SEM)

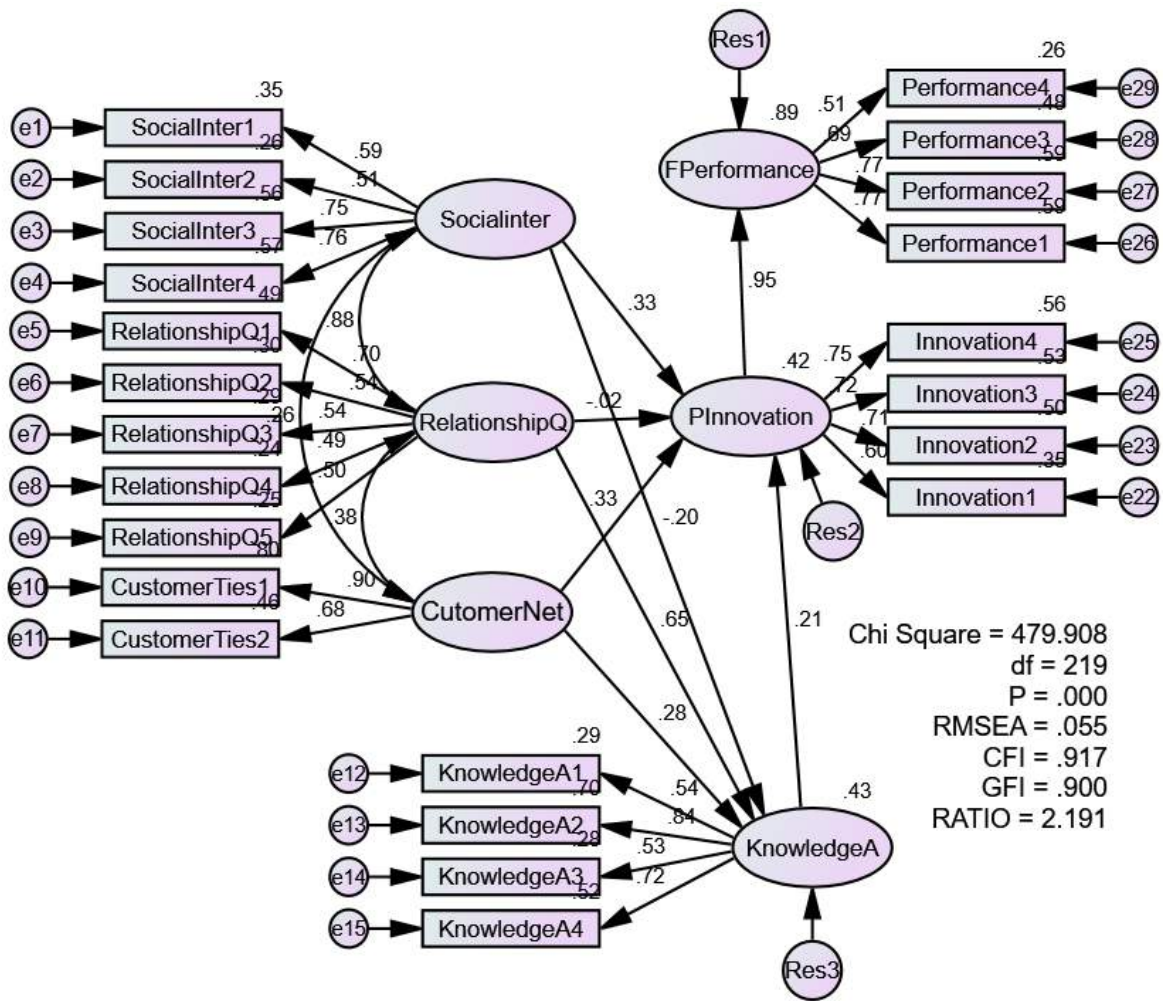


Table 9
Structural equation modelling results: Standardized Regression Weights

Hypotheses	Description of Path	Hypothesized Direction	Standardized β	P value
H1	Social Interaction ----→ Product Innovation	+	.219	.000
H2	Relationship Quality ----→ Product Innovation	+	.138	.020
H3	Customer Network Ties ----→ Product Innovation	+	.202	.000
H4	Social Interaction ----→ Knowledge Acquisition	+	.133	.012
H5	Relationship Quality ----→ Knowledge Acquisition	+	.305	.000
H6	Customer Network Ties --→ Knowledge Acquisition	+	.187	.000
H7	Knowledge Acquisition ----→ Product Innovation	+	.208	.000
H8	Product Innovation ----→ Market Performance	+	.713	.000

Table 10
Structural equation modelling results: Mediating Effect

	Paths	Direct without Mediator (P)	Direct with Mediator (P)	Indirect (BC) (P)	Findings
Innovation	← Social Interaction	.232(.000)	.206(.000)	.015	Partially Mediating
Innovation	← Relationship Quality	.178(.020)	.122(.028)	.002	Partially Mediating
Innovation	← Customer Network Ties	.284(.000)	.238(.000)	.002	Partially Mediating

4. Health Management and Organisation
Refereed Delivered

**How emotion promotes multidisciplinary healthcare: An examination of
palliative care**

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4. Health Management and Organisation Refereed Delivered

How emotion promotes multidisciplinary healthcare: An examination of palliative care

ABSTRACT: *Evidence suggests healthcare requires multidisciplinary practices. Yet multidisciplinary practices are often hampered by disciplinary divisions. This is particularly in palliative care, where curing is often juxtaposed against caring. Although research verifies the role of emotion in health(care), this largely considers the emotional sequelae experienced by clinicians, patients, and carers. There is limited recognition of the role of emotion in multidisciplinary practices. This article presents findings from an eight-month ethnography within a community health centre that offered palliative care to patients at home. Findings suggest that emotion can promote multidisciplinary palliative care by: justifying practices; storying and collectivising experiences; and shaping professional identities. These findings have important implications for researchers and clinicians, all of which are discussed.*

Keywords: Community healthcare; healthcare professions; knowledge translation; managing integrated health services; practice, climate, culture, environment; professional identities

Multidisciplinary practice represents a cornerstone of modern healthcare. It might be understood as a group of health professionals from different disciplines who share responsibility for collaborative decision-making and the outcomes of patient-focused care (Liedtka, Whitten, & Sorrells-Jones, 1998). Although sometimes confused with more advanced forms of teamwork, like inter- and transdisciplinary healthcare, multidisciplinary healthcare is that in which clinicians with different knowledge collaborate, rather than combine or converge (Gatchel, McGeary, McGeary, Lippe, & Anderson, 2014). As such, it is likely to typify the types of healthcare found in many Western nations, like Australia and New Zealand.

Multidisciplinary practice has become a prominent feature in many health systems (Lown & Manning, 2010). This follows a more thorough understanding of complex health issues and multimorbidities, and an increasing recognition that addressing these requires complementary skills, knowledge, and perspectives (McCallin & Bamford, 2007). This is supported by evidence suggesting that integrated healthcare is associated with: improved patient wellbeing, reduced hospitalisation, decreased mortality rates, better staff morale, as well as reduced staff burnout and attrition (Safran, Miller, & Beckman, 2006).

Although relevant to all domains of healthcare, multidisciplinary practice is particularly germane to palliative care (Hill, 1998). This is largely because this speciality reflects a biopsychosocial model of care, recognising a dynamic interaction between that which is physiological, psychological,

social, and spiritual (Ansari & Rassouli, 2018). Furthermore, end-of-life care can be emotionally-charged, particularly when cultural taboos hinder what patients and carers can discuss, when and how they can discuss it, and with who.

Despite the benefits associated with multidisciplinary palliative care (Forrest & Barclay, 2007; Jongen et al., 2011), it is difficult to enact and demonstrate. It can be hindered by: insufficient resources, including time, workforce capacity, and funds; poor administrative processes; as well as ineffective interdisciplinary communication, particularly when there is friction between and among disciplines within a team (Ratcheva, 2009). Friction can be demonstrated by: limited recognition of the different roles and areas of expertise of each discipline; hierarchies that serve to maintain power imbalances; and disparate discourses that stymie communication (Walsh et al., 2010). Furthermore, friction can be inflamed by emotionally-charged contexts, like palliative care.

Emotion is inherently interwoven into clinical care, notably community-based palliative care. In addition to the patients and carers who receive palliative and bereavement care, clinicians can also experience varied emotional states (Weissman, 2009). However, the role of emotion in multidisciplinary healthcare has received limited scholarly attention. For instance, following an ethnography, McCallin and Bamford (2007) found team members required emotional intelligence to work effectively with colleagues, patients, and families to integrate disparate views. Similarly, in their study of relationship-centred theory and its relationship with clinician interactions, Safran and colleagues (2006) noted the importance of emotional intelligence in multidisciplinary practice as enacted by mindfulness – that is, organisational and employee awareness of self and others. And during weekly interdisciplinary conferences in a palliative outpatient ward, which followed clinical supervision, Nordentoft (2008) described how emotion work involved care for both patients and fellow clinicians.

Here, emotions are understood as embedded in social and cultural contexts, mediated by language, bodily performance, politics and culture. This recognises the socially-embedded nature of feeling and experience; it also acknowledges that these ‘sensate, corporeal’ (Burkitt, 1997, p. 43) and experiences are localised in the body and relationships between bodies (Pile, 2010). Research on palliative care clinicians’ emotions is primarily concerned with: negotiating social interaction; giving voice to dying patients (Li & Arber, 2006); and the emotional strain associated with moral distress

(Brazil, Kassalainen, Ploeg, & Marshall, 2010; Weissman, 2009), particularly when treatment ceases (Harrington & Smith, 2008). Liaising with a referring physician and conferring with a consulting physician can be ‘an emotional mine-field’ (Weissman, 2009, p. 865) – this is largely due to conflict about: the withdrawal of potentially life-prolonging treatment; as well as symptom management and pain control. Yet the tension between palliative care and other specialities that aim to cure, is poorly understood (Hillman & Chen, 2009). This article therefore examines the relationship between emotion and multidisciplinary palliative care. More specifically, it considers how emotions serve to align professions with other professions to produce collectives.

METHOD

Following the approval of the relevant Human Research Ethics Committees, an eight-month ethnography was conducted within a community health centre that offered palliative care to patients at home. Twelve community health nurses participated on a rotating basis, with different nurses shadowed at different times (Czarniawska, 2014; Gill, Barbour, & Marleah, 2014). They were shadowed while delivering palliative care to patients and carers, and attending to related duties, such as: documenting clinical notes; organising equipment; liaising with general practitioners and carers; and conferring with fellow community health nurses, formally and informally. Participants included: specialist palliative care nurses and generalist community health nurses who delivered palliative care. Although these clinicians were the group that was shadowed, other clinicians were observed incidentally, while they interacted with core participants. Given the community-based context of this study, where palliative care was delivered in patient homes, patients and carers were also observed, incidentally. In addition to patient homes, clinicians were shadowed while: on commute to and from home visits; at the centre at which they worked; and within the affiliated local hospital, which they frequented irregularly, for meetings or to collect or return equipment. A thematic model of narrative analysis was used to interpret the qualitative data that was constructed with the participants (Riessman, 2005). These data included: a ‘thick’ journal and ‘thin’ memos of observations and experiences, maintained by the lead author, while on and offsite (David & Baron, 2010; Geertz, 1973; Sergi & Hallin, 2011); as well as transcripts of interviews with the shadowed participants. These were used to construct prototypical or normative

stories around central conceptual groupings related to emotion and multidisciplinary practice, which were revisited and revised as analysis progressed.

RESULTS

The community-based palliative care model within the local health district involved a team of specialist nurses who served as a consultant to generalist community health nurses who coordinated patient care. In addition to palliative care, the community health nurses: delivered wound care; administered intravenous antibiotics; and drained bodily fluids, among other tasks. Palliative care was therefore one component of their generalist role. The specialist palliative care nurses were also supported by specialist palliative care medics based at the local hospital, who attended the regular case reviews at the centre as well as home visits, when required.

Justifying Practices

Although not necessarily a novel finding, the palliative care nurses and medics regularly affirmed the multidisciplinary nature of palliative care, suggesting it was a necessary and vital part of community-based care. This was reflected in how care was enacted, with the generalist and specialist nurses consulting each other, general practitioners, hospital-based medics, social workers, and clinicians at aged care facilities, among other services:

Palliative care... is... not just the nurse, the patient; it's the patients in the centre and we're around them... In that circle, you've got the nurse, you've got the doctor, the OTs [occupational therapists], the physios [physiotherapists]; everyone is involved in palliative care.

However, the emotional and relational nature of this collaboration was an important part of teamwork. Positively-valenced experiences promoted collaboration, negatively-valenced experiences divided those professions that did, and did not appear to embody the different facets of palliative care.

The palliative care specialist medics had one of the closest external relationships with specialist and generalist nurses. They consistently and regularly worked with the palliative care specialist nurses, both within and beyond the centre. This consistency and regularity strengthened the camaraderie and affection, explicated by the way the medics were described:

I think they're a different breed of doctors that... go into palliative care.

I think they have a lot of compassion and I think that's also what palliative care is all about... compassionate care... I think they do a lot more holistic care.

The palliative care specialist medics differed from other 'breed[s]' of doctors. According to those who were shadowed, the medics were more likely to understand the needs of patient and carers, and provide compassionate care, accordingly. The participants revered medics, largely because of the compassion they witnessed and experienced:

[The registrar] just gets to the real nut of it... She's a good interviewer... She just takes it slowly and gets everything she need[s] to, out of them... Doesn't jump around; sticks to the point.

This collective appreciation for the medics helped the generalist nurses recognise their value as a point of contact and a trusted source of information and support. These emotional attachments suggested a safe culture of approachability and collaboration among the medics and all nurses, justifying practices like planned joint visits and unplanned telephone calls.

Storying and Collectivising Experiences

Clinicians portrayed their collaboration with diverse professionals via emotion-laden stories, using these to shape, understand, and reaffirm the varying nature of the disciplines they worked with. In healthcare, the role of talk in identity-construction has been examined in doctor-patient consultations, where patient accounts contained emotive and vivid descriptions of their experiences (Webb & Stimson, 1976). In this construction of identity through emotion-talk, elements of drama constitute what Webb and Stimson called atrocity stories. Emotion-laden stories can serve two purposes. First, they can help to make sense of past events. Second, they can redress the doctor-patient power imbalance by construing patients as rational and sensible beings, and chastising a doctor's actions as inappropriate, irresponsible, or insensitive. Atrocity stories were shared in the context of multidisciplinary practice. For instance, senior nurses within the centre sometimes recounted an anecdote that helped their junior counterparts to understand what it can be like to work with speech pathologists, oncologists, haematologists, and an array of other '-ologists'. These were supplemented with vivid emotional performances and imagery to

portray the merits and misadventures of multidisciplinary palliative care. These instances served to implicitly establish the values of palliative care and collectively align team members with and against different professions. These shared anecdotes and collectivised experiences became central to the multidisciplinary relationships. A discipline's 'capacity for compassion' and its alignment with palliative care – as understood by the participants – were defining features of each profession. Several exemplars serve to highlight and explicate these findings.

Participants alluded to discord between palliative care and the disciplines of cardiology and nephrology. This manifested as outbursts of anger from palliative care nurses and medics towards cardiologists and nephrologists – these occurred in collective settings, like the case reviews, and during private discussions about patient care. These intense, emotional performances served multiple purposes. They were cathartic for the aggrieved clinician; they showed others the aggrieved clinician's patient-centric approach and their empathy for the patient and carer; they reinforced the meaning of palliative care, as understood by the participants; they helped to delineate palliative care from other specialities; they helped palliative care nurses and medics to bond; and they enabled generalist nurses to recognise these points of difference and define palliative care:

I think [palliative care] is the only stream that does [continuity-of-care]... well; whereas other teams will focus on cardiac or orthopaedics and that's their only focus.

Shaping Professional Identities

Participants' stories and emotional performances shaped professional identities, as understood by the collective. Instances of poor referral processes consolidated and reified the foreign '-ologist' as unempathetic of patients, carers, and the palliative care specialists. In these identity-shaping stories, the foreign '-ologist' would refer patients with limited detail on patient history and patient preferences. This made it difficult for the participants to initiate contact with a patient and continue their care:

They're only interested in looking after their specific thing. They don't look at the whole patient. As soon as they can't treat them anymore, they just dump them off.

Rather than delegitimise other professions, participants' frustration and anger about what they failed to do bonded the specialist and generalist nurses. This helped to implicitly reaffirm the embodied empathic nature of palliative care towards the patient and carer journeys. This echoes Ahmed's (2004) findings on the cultural politics of emotion, suggesting emotions 'do things' (p. 26) – they work to align individuals with collectives through the intensity of their attachments.

Emotion also shaped the multidisciplinary relationship between palliative care specialists (both medics and nurses) and general practitioners. The general practitioners had a relatively more complex working relationship with the specialist and generalist nurses. Their role in patient care often fluctuated, depending on their presence and relationship with the patient (and carer). Nevertheless, they were viewed as an important link in palliative care, often represented by a participant's frustration when a general practitioner was uncontactable or seemed indifferent:

It's very frustrating going out to a patient and they want to die at home for example and you can't get a local doctor to certify, or you can't get a local doctor to write up medication or whatever.

Working with a general practitioner who was present in the life of a patient and carer, and who genuinely consulted with palliative care specialists – both medics and nurses – was important for effective multidisciplinary palliative care. A recurring story was of a general practitioner who contacted the appropriate interstate government body to place a large order for a schedule 8 (or S8) drug to manage a patient's pain. Rather than unhelpfully provide a repeat prescription for a small quantity of the drug, which was likely to be insufficient, the general practitioner negotiated bureaucracy for the benefit of the patient and their carer. Although this might seem like a trivial act, it meant so much to the patient and carer who appreciated the general practitioner's thoughtfulness. This story, which was recounted at different times with different people, shaped how the nurses perceived general practitioners. They considered how others matched with this touchstone, their capacity for compassion, and the ways they embodied the different facets of palliative care. This in turn nurtured, or hindered a relationship between the nurses and general practitioners.

Although alliances among different clinical disciplines were apparent during fieldwork, so too were alliances that divided the clinical realm from the non-clinical realm. Consider for instance, the

ways in which some participants defamed or vouched for ‘management’, ‘the government’, bureaucrats, administrators, patients, and carers. Sometimes they questioned the accountability mechanisms espoused by the officials ‘up the hill’, and the grievances aired by some carers. These utterances enhanced or flavoured a collective, clinical identity as the participants’ defended their clinical counterparts and aligned with the frailties and capacity for error:

When they were complaining about mistakes that had been made by the pharmacist, they had given the wrong medication and I found that hard to answer because, all of us, we’ve all made some sort of drug error or some sort of mistake or human error.

This interview excerpt followed a home visit with a generalist nurse where the patient had expressed anger at a pharmacist who had made a prescription error. Here the clinician considered her past mistakes and concerns regarding drug prescription and how this could have easily been her own mistake. In this instance the participant was a relatively junior generalist nurse and, as outlined, generalist nurses have a purview beyond merely palliative care, and so their alignment with other, generalist, medical professions were more likely.

DISCUSSION

As the shift towards patient-centric care and a recognition of complex health issues and multimorbidities continue, multidisciplinary practice will remain an important focus for research and practice within many Western health systems. This is certainly so in community-based palliative care in Australia, where there is an increasing demand for teamwork that seeks to ‘[not only] control pain and physical symptoms of the patient, but also to provide a set of mental, spiritual, social and family healthcare’ (Ansari & Rassouli, 2018, p. 46). Emotions and the related relational components of multidisciplinary practice are complex. Furthermore, poor interprofessional relationships can thwart teamwork and compromise patient care (Ansari & Rassouli, 2018; Hill, 1998; Mahmood-Yousuf, Munday, King, & Dale, 2008; Sargeant, Loney, & Murphy, 2008). Empirical research on the emotional attachments associated with multidisciplinary healthcare can inform and promote effective collaboration in this context.

This article contributes to this aim by detailing the findings of an eight-month ethnography within a community health centre that offered palliative care to patients at home. Findings suggest that emotion can promote or hinder multidisciplinary palliative care by: justifying practices; enabling clinicians to story and collectivise experiences; and shaping professional identities. This study suggests a need to foster of cross-disciplinary empathy, to enable clinicians to understand and be moved by the experiences of diverse disciplines. This reflects the literature on effective elements of multidisciplinary practice. This extends to the study of intercultural communication focused on building the capacity for empathy' (Delia, 1987; Williams, 1983). Clinicians can function as cultural groups, and as such, interprofessional communication is effectively intercultural communication (Gauthier, 2013). In a study involving interprofessional primary health clinicians, participants cited that effective collaboration required: an understanding of, and respect for team members' roles; a recognition that teams require work; and communication among other features (Sargeant et al., 2008).

Implications for practice suggest a need for opportunities in community-based palliative care to share perspectives and values across diverse disciplines. This could be achieved through short-term secondments between and among disciplines. Additionally, collaborative reflexive opportunities could promote shared understanding of the diverse roles required in palliative care. Cross-disciplinary video reflexive ethnography has a demonstrated capacity to reveal and shape the visible and invisible ways that clinicians work (Dadich, Collier, Hodgins, & Crawford, 2018; Hor, Iedema, & Manias, 2014; Iedema, Long, Forsyth, & Lee, 2006). Similarly, training that involves different disciplines can help to improve communication and teamwork (Mahmood-Yousuf et al., 2008).

Although this study helped to clarify how emotion promotes multidisciplinary healthcare, a limitation is the absence of other perspectives from non-nurse participants who are (a)typically involved in community-based palliative care. As such, further research would be valuable, particularly that which uses a critical, participatory methodology fostering the necessary inter-relational webs promoting cross disciplinary empathy. This repeats the call for doing visual reflexive ethnography to both describe practices and change them as well, as 'ethnography and intervention are not distinct but interwoven practices' (Mesman, 2007, p. 281).

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Stream 03 Gender, Diversity and Indigeneity

Refereed Interactive Paper

**A GENDER CRITIQUE OF LIBERAL FEMINISM AND ITS IMPACT ON REMEDICAL
TECHNIQUES TO ELIMINATE THE GLASS CEILING EFFECTS**

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Stream 03 Gender, Diversity and Indigeneity**Refereed Interactive Paper****A GENDER CRITIQUE OF LIBERAL FEMINISM AND ITS IMPACT ON REMEDICAL
TECHNIQUES TO ELIMINATE THE GLASS CEILING EFFECTS****ABSTRACT**

This paper reviews the remedies in the previous studies which break or unbreak the glass ceiling effects in the workplace. A feminist critique shows the link between these remedies and liberal feminism, then reveals some factors including the controversial concept of equality, the multiple identities of individuals, the non-merit factors and the significance of unpaid work which might have been neglected. It recommends that a combination of different theoretical lenses should be used to address the glass ceiling phenomenon.

Keywords: gender, glass ceiling, feminism

When Harvard University named Dr. Drew Gilpin Faust as the first women president in its 371-year history in 2007, her appointment was featured on headlines of media reports worldwide. It was heralded as evidence of a crack in the glass ceiling by reporter and scholars; in other words, gender barriers which hinder women's career progress were removed (DeVan, 2008). However, after more than a decade, small improvements have been made in shattering the glass ceiling. Despite constituting half of the labour force globally, women still face many challenges if they wish to reach the top in their profession (Catalyst, 2017). In the business world, only 27.4% of key management personnel positions are held by women; and one-quarter of organizations continue to have no women in those positions (Catalyst, 2016).

This paper will attempt to gain insight into the reasons why some solutions proposed by earlier studies are or are not effective in facilitating women's career advancement by first reviewing the glass ceiling

effects. Then, it attempts to explain the reasons for the helplessness of these solutions through a gender critique of liberal feminism.

THE GLASS CEILING PHENOMENON

Definition

The glass ceiling is “the unseen, yet unreachable barrier that keeps minorities and women from rising to the upper rungs of the corporate ladder, regardless of their qualifications or achievements” (U.S Department of Labor, 1995, p.4). It is not the identical term to gender or racial discrimination, but a specific type of gender/racial inequality (Cotter, Hermsen, Ovadia & Vanneman, 2001). It is categorised as one form of sex discrimination together with overt discrimination and sexual harassment (Bell, McLaughlin & Sequeira, 2002).

The glass ceiling phenomenon has strong correlation with gender. Cotter et al. (2001) found no evidence of glass ceiling effect among African-American men but observed the existence of the glass ceiling among both white and African-American women. Cotter et al. (2001) assert that there are four criteria that should be met to define gender or other inequalities as a glass ceiling effect. They include:

- (1) “A gender or racial difference that is not explained by other job-relevant characteristics of the employee” (p.657).
- (2) “A gender or racial difference that is greater at higher levels of an outcome than at lower levels of an outcome” (p.658).
- (3) “A gender or racial inequality in the chances of advancement into higher levels, not merely the proportions of each gender or race currently at those higher levels” (p.659).
- (4) “A gender or racial inequality that increases over the course of a career” (p.661).

Evidences for the existence of the glass ceiling

The evidences for the existence of the glass ceiling have been found in different sectors and in different national contexts. For example, in the business sector Dimovski, Škerlavaj and Mok Kim Man (2010) found the presence of the glass ceiling that prevents women middle managers in Singaporean and

Malaysian organizations from career advancement due to insufficient organizational support, including networking, mentoring, and family friendly initiatives. Castaño, Martín, Vázquez and Martínez (2010) surveyed 242 female and male senior executives in Spanish companies also reported the evidence of the glass ceiling effects as a result of cultural patterns and institutional barriers. In politics, the results from an empirical study by Folke and Rickne (2016) shows that a glass ceiling exist for female politicians in Sweden, a country with a long history of efforts to improve women's political representation. Falk and Grizard (2005) conducted a research on some American largest communication companies and also identified effects of the glass ceiling on women's career advancement. Positive correlation between the companies' benefits score, maternity score and percentage of women on the boards of directors is reported (Falk & Grizard, 2005). However, few studies fail to find the evidence of the glass ceiling effects. While Bryson (2004) examined the consequences for women in the academic profession of the widespread use of fixed term contracts, he found that men were more likely to benefit from non-competitive selection at entry, hold more secure and less certain forms of fixed term contracts and have more success in promotion though statistical evidence is not strong enough to report sex discrimination. Even when the phenomenon cannot be explained by gender discrimination, men still have an advantage in career progression (Bryson, 2004).

Significance of removing barriers to women's career advancement

Removing barriers to women's career progress will be beneficial to both organizations and women themselves. First, facilitating women's career advancement might enable organizations to grow sustainably. This paper employs the architectural approach to managing knowledge stocks and flows of Morris, Snell & Lepak (2005) which states that employee human capital has two characteristics: value and uniqueness. Organizations depend on different employees (i.e. both male and female) who contributes in different ways based on differences in their knowledge (Grant, 1996 as cited in Morris et al., 2005).

To ensure an organization operates in the most effective and efficient way, it is essential for the leaders and managers to successfully manage its employees' knowledge stocks through their recombination and renewal. Therefore, if an organization fails to acknowledge and make use of their female

employees' knowledge, the knowledge flows within the organization will be slowed down and hence affect its performance.

In the business world, a study conducted by Catalyst (2004) in companies from five different sectors including consumer discretionary, consumer staples, financial, industrial, and information technology or telecommunications services aims to find the link between gender diversity in their top management and their financial performance. The findings showed a link between gender diversity in top management and positive financial performance. Companies with the highest representation of women on their top management teams experienced better financial performance than companies with the lowest representation of women (Catalyst, 2004).

Furthermore, organizations which support people of all backgrounds, gender, sexual orientations and ethnicities and effectively manage the extent and effects of diversity within their ranks are more attractive to potential employees of those organizations (Olsen & Martins, 2016).

As for women themselves, career success is associated with higher level of job satisfaction, which is in turn linked to general life satisfaction (Punnett, Duffy, Fox, Gregory, Lituchy, Miller, Inés Monserrat, Olivas-Luján & Bastos F. Santos, 2007). Women will not miss out on a “gourmet meal” (Jonung & Stahlberg, 2008).

WHAT BREAKS OR UNBREAKS THE GLASS CEILING

Solutions to dismantle glass ceiling

Numerous studies have proposed the measures to tackle the issue of glass ceiling under three levels including societal, internal structural and government barriers. Most researchers' attention is on internal structural level and solutions have ranged from adopting a new form of leading (Court, 2004) to promoting organizational learning (Williams, 2014).

Internal structural level

One solution at internal structural level proposed is to minimise the bias in hiring standard by establishing standards of merits prior to the review of candidates (Uhlmann & Cohen, 2005). Uhlmann

and Cohen's (2005) findings are different from other studies in the hiring standards. While other researchers (Biernat and Kobrynowicz, 1997; Eagly and Karau, 2002) focus on negative viewpoints towards women's skills and abilities during the hiring process, Uhlmann and Cohen (2005) argue that the establishment of standards of merits in the hiring process does not advantage men or women in general. Instead, people redefine merits in a manner congenial to the idiosyncratic credentials of individual applicants from desired groups. As a result, they suggest that the applicants' gender should be revealed only after the standards of merits for the available positions are formed and maintained throughout the hiring process (Uhlmann & Cohen, 2005).

Similar to Uhlmann and Cohen (2005), Marschke, Laursen, Nielsen and Rankin (2007) seek the solution to enhance women's career advancement in modifying the process at the beginning of their career pipeline. They propose to expand the job descriptions and identify and talking to potential candidate personally. Unlike Uhlmann and Cohen (2005), they also recommend that employers should put efforts into retaining female employees by ensuring the work and life balance, providing friendly and supportive working environment, and offering mentoring (Marschke et al., 2007). However, commitment to policies against discrimination is not sufficient. Employers should monitor the effects of the policies and measure the progress from annual data (Marschke et al., 2007).

Morrison and Von Glinow (1990) recommend that senior managers should provide women with opportunities to take challenging assignments because a good executive needs to be able to demonstrate her or his ability to handle job challenge and specifically difficult assignments (McCall, Lombardo & Morrison, 1988). Some examples of difficult assignments are discrete projects and task force jobs, temporary assignments on major problems facing an organization, or line-to-staff switches (managers left line jobs, in which they had been in charge and their results are measurable, for a stint in staff role) (McCall et al., 1988). Another task which requires much efforts and skills to accomplish is when managers have to learn a new technical area such as market research or financial planning (McCall et al., 1988). Nonetheless, these assignments are less available to women than to men; thus, their career progress slows down (Morrison & Von Glinow, 1990).

Another way to deal with barriers to women's career progress is introducing new management option. For example, in the academic sector women co-principalship (Court, 2004) which refers to the practice that one of the two or more principals control the same school is proposed. This innovative way of shared leadership has provided women with some benefits such as removing personal isolation, and lessening stress. However, policy makers should take into account individual differences when making strategies to help women to reach the leadership positions.

The other measure recommended by Williams (2014) is the application of organizational learning as framework to facilitate progress and overcome the glass ceiling effects. It includes single-loop learning (focus on minor fixes and adjustments), double-loop learning (modify organizations' underlying norms, values and belief that guide how institutions behave) and triple-loop learning (occur at three levels, involve tactics thinking and guiding organizational logic and the big picture strategic context of a given institution) (Williams, 2014). If organisations only implement single-loop learning strategies, deeper and more fundamental issues will still be unaddressed. Williams (2014) affirms that institutional transformation only become possible when triple-loop learning strategies are adopted and put into practice.

Government level

Remedies at government level is the ratification of and commitment to international laws and conventions and the legislation of national laws and policies which protect human rights and fight against discrimination of any kinds. For example, the most universal document is the Universal Declaration of Human Rights proclaimed by the United Nations General Assembly in Paris on 10 December 1948. The first article in the Declaration states that "All human beings are born free and equal in dignity and rights" (United Nations, n.d, para.10). Therefore, all the countries which ratify the Declaration must commit to no discrimination of any kind including gender discrimination. The other example is the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), adopted in 1979 by the UN General Assembly. It is dedicated to protecting women's rights (UN Women, n.d.). When government enforce laws and policies to protect women's rights,

organisations are required to obey the law. When gender discrimination is eliminated, glass ceiling phenomenon will be tackled too.

Overall, Powell and Butterfield (2015) after reviewing 20 years of empirical field of study of the glass ceiling phenomenon conclude that “any organizational processes that neutralize or eliminate the effects prejudice and stereotyping on the basis of leader sex will contribute to the shattering of glass ceiling” (p.318). However, the commitment to the above measures and their effectiveness in improving women’s career progress depend on the diversity in management of organisations (Morrison & Von Glinow, 1990). The more diverse an organisation’s board of management is, the more appreciative and committed the senior managers are to the policies and practices responsive to all employees’ needs (Morrison & Von Glinow, 1990).

Solutions which do not break the glass ceiling

However, there are some answers to the issue which have proved to be ineffective. The first one is affirmative action programs (Snyder, 1993) which refers to the action taken by employers to recruit and facilitate the advancement of qualified minorities, women, persons with disabilities, and covered veterans (United States Department of Labor, n.d.). Snyder (1993) asserts that there is no doubt that AA programs have brought benefits to a number of individuals; however, commitment to those programs was made by male decision makers. In addition, managers who support AA programs risk lowered prestige and credibility and thus failed to support them. Furthermore, the beneficiaries of the programs were put under performance pressure and their success are attributed to the programs rather than individual efforts (Snyder, 1993). Sometimes AA programs can do more harm than good to the beneficiaries. Gino (2014) reports that some students are accepted to certain schools thanks to the AA programs, but their abilities fall below the norm. As a result, they are more likely to fail at school and in their careers (Gino, 2014).

Secondly, gender training which is conducted from one to five days and target at men or women or both is not as effective as expected. The short-term duration of training cannot create broad-based effects because the unconscious biases against women have deeply rooted in people’s values and mindsets

(Snyder, 1993). In one study, Alexandra Kalev (of the University of California at Berkeley) and her colleagues examined the efficacy of approaches that organizations commonly use to promote diversity using a data set on workforces of 708 private sector establishment across three decades from 1971. The findings reveal that diversity training was among the least effective methods to reduce biases and increase women representation in the top position (Gino, 2014).

Thirdly, seeding which refers to the action of placing women in staff and lower managerial positions for future promotion does not generate any fruitful results because they do not receive the same developmental opportunities as their male colleagues (Snyder, 1993). For example, female academic staff are believed to be more nurturing to students; thus, they take more teaching responsibilities and they contribute less to research because they have to take time off to have children. They are clogged at certain fields and are more isolated in science, technology, engineering and math fields (Jones, 2014).

The final ineffective solution is flexible working patterns (Woodward, 2007). Some British universities have implemented some policies and programs to introduce flexible working practices and to prevent discrimination. While some argue flexible working arrangement can enable parents to meet both work and domestic commitments so they can focus on achieving career goals, the results of Woodward's study showed that flexitime is more suitable for women at junior level. The managerial role requires incumbents' presence for much of the time. Therefore, flexitime is not the answer to the work-life balance and hence is not useful in helping women to climb the career ladder.

CRITTIQUES TOWARDS THE REMEDICAL TECHNIQUES

From a feminist perspective, most of the remedies appear to be based on liberal feminist ideology whose characteristics can be summarised in six key concepts: freedom, choice, rights, equality, rationality and control (Zalewski, 2000). Similar to other feminist schools of thought, the central issue addressed by liberal feminists is gender issue (Munson & Saulnier, 2014). However, what distinguish liberal feminist theory from others is the claim that women and men have similar capacity to reason (Jaggar, 1983). Reason, which distinguishes us from the other creatures, is defined by liberal feminists as the ability to

comprehend the rational principles of morality (moral aspect) or the ability to calculate the best means to achieve some desired ends (prudential aspect) (Tong, 2013).

Liberal feminists argue that women's subordination results from gender stereotypes (Zalewski, 2000). Jean-Jacques Rousseau, one of the key Enlightenment philosophers described men as "active and strong" and women as "passive and weak". He also claimed that "woman is especially constituted to please man", as a result, she should be "obedient and industrious" and women's education should be relative to that of men in order to "please them, to be useful for them and to make them happy" (Rousseau, 1895). The pleasure giving role of women of Rousseau (1895) has long been rejected by Mary Wollstonecraft (1792). Wollstonecraft (1792) reasoned that men would develop the same characteristics of women if they were in the same "cage" (Tong, 2013). Mill (1869) not only blames women's subordination on faulty education but also adds that the rule of men over women is accepted voluntarily. As women's subordination is considered universal, attacking the universal opinion is difficult (Mill, 1895). O'Brien (1983) shared the same view with Mill and claimed that the sex differences (biological) are gender differences (cultural) and gender is a sex-appropriate socialisation of the individual.

Therefore, liberal feminists advocate for the rights of women to be treated like men and do what men do such as voting and running for office (Zalewski, 2000). Mill (1869) proposed providing women with education as it could help change their self-perception. They would no longer consider attracting, obeying, and loving their 'masters' as the main goals of their life (Bryson, 2016). Other solutions to tackle the problem include accessible and adequate childcare, reproductive rights, job retraining, work places free of sexual harassment and equality in education (McHugh, 2007) as gender oppression is also caused by the lack of or limited access for women to good jobs, gender stereotypes, and legal constraints (Calas & Smircich, 1993). After all, a society can only be "good" or "just" if it embraces individuals' autonomy which can be achieved through a system of individual rights (Calas & Smircich, 1993).

It is apparent that the AA programs, gender training and seeding (Snyder, 1993; Jones, 2014) or the providing of opportunities to take challenging assignments to be qualified for executive roles to women (Morrison & Von Glinow, 1990) corresponds with liberal feminists' values. Undoubtedly, some

solutions have helped to facilitate women in their career path to some extent. However, the aforementioned remedies offered by organisations and governments have ignored some factors that might affect the outcomes.

The controversial concept of equality

The concept of “equal” or “equality” has appeared in legal documents like CEDAW to protect women from discrimination and address the rights of women in different spheres including economics, education or employment. For example, Article 11 of CEDAW discusses women’s rights to free choice of profession and employment, same employment opportunities, and equal remuneration like men (UN Women, n.d.). However, any legal documents which equate “equality” with sameness of opportunities and treatment between men and women might not be useful for promoting gender equality. Chegwe (2014) while examining the impacts of liberal feminism on Nigerian law argues that women are biologically different from men. For example, pregnancy is exclusive to women. The struggle for gender equality in the absence of sex specific legislation to deal with pregnancy and maternity leave will paradoxically strengthen the inequality and make women suffer from work discrimination (Chegwe, 2014). Therefore, “if women are treated as the same as men, the outcome is not necessarily equality” (Nash, 1997, p.16).

Unpaid work

Furthermore, the solutions at government level pay more attention to gender inequality in paid employment but tend to overlook gender inequality in unpaid care work which is considered the missing link in the analysis of gender gaps in labour outcomes (Ferrant, Pesando & Nowacka, 2014). Women generally spend more time on unpaid work than men. Unpaid work include work inside and outside the home. Examples of domestic unpaid work are the care of elderly family members, children and grandchildren while examples of unpaid work outside the home include volunteering to individuals or groups which promote community issues (Kulik & Liberman, 2013). Although unpaid work is important, but it is hard to measure; consequently, it is absent in policy agendas (Ferrant et al., 2014).

The failure to address the inequality in unpaid work between men and women might make gender equality harder to achieve.

Multiple identities of individuals

The negligence of individuals' multiple identities and different forms of power is one of the weaknesses of the liberal feminist approach (Weedon, 2007). One's identity not only originates from gender but from race, culture, nationality and roles (Josselson & Harway, 2012). However, in today's world, the concept of "gender" or "culture" is not "pure" or "distinct" (Iyall Smith, 2009, p.4). Colonisation, globalisation and localisation have created "hybrid identities" which are separated from the previous forms and recombine with new forms (Iyall Smith, 2009, p.3). Therefore, solutions which aim to provide individuals with same opportunities and treatment are more likely to fail. Moreover, career development is one such area in which models developed on White males' career experiences may be inappropriately applied to women or minorities or models developed on women in the Western countries might not be able to be applied to women in Asian nations.

Non-merit factors

A person's success is dependent on not only her or his own merits but also the non-merit factors (McNamee & Miller, 2013). Sometimes the non-merit factors have more effects than the merit factors (McNamee & Miller, 2013). The chief non-merit factor is inheritance which refers to "the effect of where one starts on where one finishes in the race to get ahead" (McNamee & Miller, 2013, p.199). Men and women starts at different points in their career path due to the widespread gender discrimination against women; consequently, when women are given similar treatment and chances, their possibility of reaching the same goal as men is still lower. Hence, meritocracy – "a social system as a whole in which individuals get ahead and earn rewards in direct proportion to their individual efforts and abilities" still stays as a myth instead of reality (McNamee & Miller, 2013, p.7).

CONCLUSION

Unarguably, solutions which are based on a single ideology and one demographic group might not be able to be generalised to other groups. The proposed solutions undoubtedly have contributed to the

crack of the glass ceiling effects, but they have not gone far enough. Most ineffective measures which do not acknowledge the controversy of the concept of equality, the existence of the multiple identities of individuals, the non-merit factors and the significance of unpaid work may offer quick fixes, but organisations' underlying norms, values and beliefs remained unchanged. There is a dearth of studies which offer recommendations involving the examination of the organisations' surrounding environment. Therefore, there is a need to incorporate remedies generating from different theoretical lenses, acknowledge other factors affecting the effectiveness or the ineffectiveness of the solutions and focus more on the triple-loop fixes.

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10 – Organisational Behaviour
Competitive Session

Dissociating Self-perception from Perceptions of Organization: Effects of Post-Merger Conflicts on Employee Identification During Post-Merger Integration Process

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Dissociating Self-perception from Perceptions of Organization: Effects of Post-Merger Conflicts on Employee Identification During Post-Merger Integration Process

ABSTRACT: *In this study we examine how conflicts due to changes affect employees' perceived association between them and their organization during the post-merger integration (PMI) process. Employing organizational identification (OI) and organizational change perspectives, we investigate the moderating effect of post-merger conflicts on employees' identification with their organization. We argue that those employees who face post-merger conflicts will dissociate themselves from their organization, or in other words, have a lower level of identification with their organization such that they perceive their values (involvement (H1), sharing (H2a, H2b), innovation (H3) different from how they see the firm encouraging, enabling, or supporting these values. We present empirical evidence for these hypotheses through a sample of current employees of a merged professional services firm.*

Keywords: Organizational Identification, Organizational Disidentification, Organizational Identity, Post-Merger Integration, Resistance to Change, Conflict

INTRODUCTION

Continued organizational identification (OI) of employees during the post-merger integration (PMI) process is critical for successful merger integration but it is also significantly threatened during merger integration (Ullrich & van Dick, 2007). While merger, as a major organizational change, comes with ambiguities and conflicts, very little scholarly effort has been put into investigating the role of conflicts due to changes during the PMI process (hereafter, *post-merger conflicts*) on employee identification. In this study, we investigate how facing post-merger conflicts affects OI, especially as a potential source of non- and dis-identification of the employees with the merged entity.

Researchers emphasized both what facilitates OI and what OI produces. They have also investigated the role of the context in OI (please see Ashforth, Harrison, & Corley, 2008; He & Brown, 2013; Riketta, 2005 for reviews). Studies also focused on OI in dynamic contexts. van Dick, Ullrich, and Tissington (2006) claim that post-merger identification predicts performance outcomes such as job satisfaction and turnover intention. Regarding antecedents of post-merger OI, studies acknowledged individual, merger-related, and organizational factors that can influence employee's post-merger identification (Clark, Gioia, Ketchen, and Thomas, 2010, Ullrich, Wieseke, and Van Dick, 2005, Giessner, 2011). One conclusion from this literature is that post-merger OI is not guaranteed and depends on what happens during the PMI process, how employees perceive the changes, and how they react to them (Boen, Vanbeselaere, Brebels, Huybens, & Millet, 2007, van

Knippenberg, van Knippenberg, Monden, and de Lima, 2002, Elstak, Bhatt, Van Riel, Pratt, and Berens, 2015). Following existing conceptualization of OI from social identity theory, we ask: *How post-merger conflicts influence employees' perceived value association between themselves and their organization and impact the level of employees' identification with the merged entity?*

Conflicts focused in this study are referred to as post-merger conflicts between the employee and the working environment because of incompatibility, differences, and inconsistency in policies and practices during the PMI process. In particular, we argue that those employees who face post-merger conflicts will dissociate themselves from their organization, i.e. they will have a lower level of identification with their organization. We conduct analyses on a sample of employees of a merging professional services firm in Vietnam. We find that those employees who suffer post-merger conflicts have a different self-perception regarding i) their involvement level with the firm, ii) their sharing level within the firm, and iii) their innovativeness within the firm than how they think the firm i) encourages involvement, ii) enables and supports sharing, and iii) encourages innovation.

This study makes several contributions to the OI literature. Firstly, post-merger conflicts are brought into this literature as an antecedent of OI in a merger context. This antecedent is more situational, dynamic, and interactive than traditional static ones. Secondly, we adopt “value congruence” concept which is established in other literatures (i.e. Hoffman, Bynum, Piccolo, & Sutton, 2011; Ogunfowora, 2014) and bring it into OI literature. Further, instead of measuring employees' OI directly which is common but offers inconsistent results (Riketta, 2005), we measure OI with an indirect approach. Post-merger conflicts are added on and proved to have a negative interaction effect on the association of their two perceptions.

THEORY AND HYPOTHESES

Identity and Identification

Organizational identification (OI) is the self-perception or sense of “belongingness” to or “oneness” with the organization (Ashforth & Mael, 1989). Dutton et al. (1994) suggest that it happens through a *perceptual connection* between *the definition of an organization* and *the definition of one person*, i.e. a perceived value association. In other words, to understand OI, we need to uncover two definitions and the relation between them. The first, *definition of one person*, answers “Who am I?”

(Ashforth et al., 2008). This is a self-concept: identity at the individual level. Individual identity is a set of values, emotions or meanings attached to the individuals through their unique sense of self (Postmes & Jetten, 2006); through their membership of an organization (Tajfel, 1978); or through multiple roles they play within the organization (Stryker & Burke, 2000).

The second, *definition of an organization*, answers “Who are we as an organization?” or “Who do we want to be as an organization?” (Albert & Whetten, 1985), also see Gioia, Patvardhan, Hamilton, and Corley (2013) for a review. This is again self-concept: identity but at the organizational level. Accordingly, organizational identity is a set of distinctive, core, and enduring values or beliefs either established by the top management team (Voss, Cable, & Voss, 2006), or shaped by outsiders or external institutions (Bartels et al., 2007; Fuller et al., 2006), and at the end perceived by one organizational member (Dutton et al., 1994). The last item one needs to uncover about OI is how these two sets of values are related to each other. In other words, the *perceptual connection* between the *definition of an organization* and the *definition of one person* becomes the cognitive connection between two sets of values held by an employee and by her organization. This perceived connection occurs when there exist similarities between values of employees and those of their organizations.

Value congruence is used to measure the overlap of values held by individuals and their team (Jehn, 1994), department (Enz, 1988), and organization (Ostroff et al., 2005). Accordingly, OI occurs when the values an employee holds are similar or congruent with the values she perceives that her organization embraces (George & Chattopadhyay, 2005). Therefore, we argue that the level of OI can be captured by examining the degree of perceived value overlap between an employee and his or her organization. In addition, the perceived overlap of values can range from far apart, to small or large (Boivie, Lange, McDonald, & Westphal, 2011) indicating non-identification (or dis-identification) to a low or high level of employees’ identification with the organization.

In an opposite direction to identification, dis-identification is composed of the feelings of detachment from, dissatisfaction with, and dissimilarity to the organization or other organizational members (Becker & Tausch, 2014). Employees who dis-identify with their organization are likely to psychologically disconnect or disassociate themselves from the organization (Kreiner & Ashforth, 2004) to the extent that employees perceive their values are different or even opposite to their

organization’s values (Bhattacharya & Elsbach, 2002; Elsbach & Bhattacharya, 2001). Non-identification, however, happens when employees do not understand why they would identify with or dis-identify from their organization or if they do not have any interest in either identifying with or dis-identifying from their organization (Lock & Filo, 2012; Lock et al., 2013; Vadera & Pratt, 2013).

Identity Change and Alternatives

Organizational change is challenging: it comes with unknowns and these, in turn, result in uncertainty and ambiguities (Corley & Gioia, 2004). During it, employees try to make sense of what is going on within the organization (Maitlis & Sonenshein, 2010; Weick, Sutcliffe, & Obstfeld, 2005). They may even struggle just to make sense of: “Who are we becoming as an organization?” (Tienari & Vaara, 2016). Therefore, change at the organizational level ends up with change in organizational values. Those organizations where employees continue to hold congruent values to the changes are more likely to manage the change process successfully (Amis, Slack, & Hinings, 2002).

Employees who perceive change in organizational values cannot immediately cognitively and emotionally connect with the organization because this cognitive connection requires a similarity of values between employees and their organization. Their current values may become unrelated to or disassociated with new organizational values. In other words, during the early phases of change, employees may perceive that their values are partially or completely incongruent with organization’s new values. In sum, organizational change poses a threat to the existing level of OI because it makes the perceived value overlap between the two become smaller (Ullrich & van Dick, 2007).

Employees who are confronted with reduction in the perceived overlap between self-identity and new organizational values would engage in one of the two paths to reduce uncertainty and enhance their self-esteem (van Vuuren, 2012). Figure 1 shows two alternative routes for this dynamic shift in value congruence and overlap during pre-, during, and PMI process contexts.

[Insert Figure 1 about here]

Route #1: Changing Sense of Self to the New Situation

Employees may find that the best way to reduce the uncertainty and resolve ambiguities during early phases of organizational change is to change their sense of self to adjust to the new situation (van Vuuren, 2012). Generating a similarity between their self and the organization through

anchoring their own values to the new organizational values would help them feel less uncertain and achieve self-enhancement (Vadera & Pratt, 2013). To change their sense of self to the new situation, first they need to go through de-identification. They de-identify themselves with the “old” organization by loosening individual ties to those old values (Fiol, 2002). Only then can they engage in re-identification process, which will require a re-establishment of the *perceptual connection* between their own values and the new organizational values. They re-identify themselves with the organization by constructing individual ties to the new organizational values (Fiol, 2002). In sum, those employees who see benefits from the change process would discard their own values and adopt the new organizational values as their new values, such that their new own values and the new organizational values are congruent and overlapping again.

Route #2: Making Sense of the New Situation so Original Organizational Identity Stays Intact

Individuals rely on a sense of self consistency - the maintenance of some continuity during change (Chreim, 2002). When they are forced to change their perception, they select to change their perception of others (e.g. organization) rather than of themselves. Therefore, another option to reduce uncertainty and enhance self-esteem is to keep their sense of self intact and remain attached to the old organizational values. Especially those employees who suffer PMI conflicts would follow this option.

In an organizational change context, conflicts between the employee and the organization can be due to discrepancy or inconsistency in ideas, feelings, and behaviors of employees. Employees may receive contradictory information and be exposed to conflicting policies and processes. Thomas (1992) concludes such employees would try to resolve the conflicts by withdrawing the relationships which generate the conflicts or by gaining additional inducements to compensate for the conflicts. In sum, conflicts would put these employees in an emotional discomfort and make them selectively ignore the good side and notice only the bad side of change in the organization and possibly in the new values of the organization (Gardner, Pickett, & Brewer, 2000). Furthermore, this emotional discomfort and the conflicts they face would make them feel that the older days were better and help them further attach to the old organizational values. Note that they are already identified with the old values, otherwise they would have most likely quit (Dukerick et al., 1998; Kreiner & Ashforth, 2004). Therefore, they are much more likely to perceive those old values to overlap with their own values.

Since they, for some specific reasons, cannot physically escape from the organization at least immediately, creating a psychological distance between them and the organization can be an optimal choice (Becker & Tausch, 2014). When the values and characteristics of an employee are incongruent with those of the new organization, being disassociated with the organization is a way through which she protects self-image and enhances self-esteem (Lock et al., 2013; Reid & Hogg, 2005). As a result, they perceive that their values are different from their organization's values or believe that their organization's values are opposite to their values (Bhattacharya & Elsbach, 2002; Elsbach & Bhattacharya, 2001; Kreiner & Ashforth, 2004). Thus, they will become dis-identified or non-identified with the organization by separating their values from the new organizational values or ignoring the new organizational values. Therefore, we propose:

Proposition: *Those employees who suffer conflicts due to organizational changes will disassociate themselves from the firm and have lower value overlap.*

One significant change process that affects employees' identification is when two firms merge to become a new one. In such settings, additional conflicts, pressure, and power fights among employees are distinctive and anticipated (Corley & Gioia, 2004). A merger would also result in more intensive conflicts that employees have to confront during PMI (Weber, Rachman-Moore, & Tarba, 2012). These, in turn lead to change in their perceptual connection between themselves and the newly merged firm. When conflicts are related to the organization's actions during the PMI process, they would pose strong threats to the employees' OI such that these conflicts would result in a looser and weaker perceptual connection between employees and the organization.

Conflicts during PMI can be due to policy differences between the two original firms or from the inconsistencies in established practices of the new firm. Members who perceive such differences and inconsistencies would feel anxious and be confused about which policies they should follow. Therefore, they would find it harder to identify with the merged firm. They would selectively ignore the good and notice only the bad things undertaken through change process (Gardner et al., 2000).

For example, involvement, sharing, and innovation are important values for both individuals and the organization (Kabanoff et al., 1995), especially when the organization undergoes significant change such as restructuring, transformation, and merger. Especially in the merger context, to

understand and deal with the new work groups, cultures, and business processes, employees need to be involved in the integration process. They participate in the integration process by sharing or being shared necessary information and resources. And they need to support others and also are supported by others in addition to coming up with new and innovative solutions to problems they face. Because they suffer post-merger conflicts, they would perceive only the “negative side” of the new organization in such a way that they will think the new merged firm does not encourage involvement, innovativeness, and sharing behaviors of organizational members at all and that an involvement, innovation, and sharing culture does not exist during the PMI process. Therefore, we hypothesize that *those employees who suffer post-merger conflicts will have different self-perceptions regarding their:*

Hypothesis 1. involvement level compared to how they think the firm encourages involvement.

Hypothesis 2a. sharing level compared to how they think the firm enables sharing.

Hypothesis 2b. sharing level compared to how they think the firm supports sharing.

Hypothesis 3: innovation level compared to how they think the firm encourages innovation.

METHOD

Sample and Procedures

An international professional services firm in Vietnam (GRACO) specializing on audit, tax and advisory services served as the research site. This firm merged with another domestic professional services firm (NEXCO) in July 2014 while keeping practicing under the ‘old’ name – GRACO. These kinds of firms typically rely on individuals’ values (Morris & Empson, 1998), therefore individuals’ connections with the organization becomes crucial during the integration process of the two firms, thus motivating the organizational identification (OI). We collected data using an online survey of all GRACO employees in September 2016 enabling us to capture the ‘good’ time of PMI. We also used two sets of HR archives (in one and two years after the merger) provided by Division of People and Culture. The initial sample consisted of 140 employees of the merged firm – ‘new’ GRACO (a response rate of approximately 65%). After incomplete responses were excluded, the final sample included 106 employees. They were mostly female (71 %), in audit services division (39%), university graduate (94%), and located in Hanoi office (61%). 45% of the sample were newcomers (whose organizational tenure was less than 2 years) and the remaining employees were originally

from NEXCO (35 %) or ‘old’ GRACO (20 %). The sample spanned all six job levels: 4% partners and directors, 15% senior managers and managers, 24% senior associates, and 57% associates.

Dependent variables

In this study, we conceptualize and measure the perceived value overlap in an indirect manner. This overlap is indirect (Ostroff et al., 2005) because employees are asked about their defining values and organization’s defining values separately preparing for a comparison rather than being asked directly of an overlap. Four dependent variables measured employees’ perceptions of their organization during PMI corresponding to the three self-perceived values about involvement, sharing, and innovation. These were asked on a 7-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (7). *Organization Encouraging Involvement* is whether the organization encourages involvement. In order to identify this, employees were asked whether “their organization get members involved in decision making during the past 12 months”. This item was developed by (Jons, Froese, & Pak, 2007). *Organization Enabling Sharing* refers to if the organization enables knowledge sharing. Adapted from Feller, Finnegan, Fitzgerald, and Hayes (2008), participants were asked if their organization enables employees “to share work contacts”, “to access others’ expertise”, “to access others’ knowledge”. This variable was average of these three items and the Cronbach’s α for this scale was 0.94. *Organization Supporting Sharing* is if the organization supports knowledge sharing. Participants were asked if their organization supports transferring “marketing and customer knowledge”, “R&D and operation knowledge”, “managerial knowledge” across departments. This variable was average of these three, which were adapted from Tanriverdi (2005). The Cronbach’s α was 0.96. *Organization Facilitating Innovation* is whether the organization creates favorable conditions for innovative activities. Using Gold, Malhotra, and Segars (2001), respondents were asked whether “their organization facilitates the creation of new knowledge”.

Independent variables

Four independent variables were used to measure employees’ perception of self during the PMI process. A 7-point Likert scale ranging from 1 as Strongly Disagree to 7 as Strongly Agree was used for all these variables. *Employee Involvement* refers to the extent that employees can directly or indirectly participate in the decision-making process (Mitchell, 1973). Participants were asked

“whether they feel more involved in decision making over the last 12 months compared to one year ago”. This item was modified and adapted from Locke and Schweiger (1979). *Employee Sharing* indicates whether employees are willing to share their knowledge with others. Respondents were questioned “whether they are not willing to share their knowledge during the last 12 months because they are afraid that others will take advantage of their knowledge”. This item was drawn from Junni (2011). This item was measured in a reverse way to capture employees’ willingness to share.

Employee Innovation represents employees’ ability to innovate in their fields. Adapted from Ko (2005), employees were asked about their ability to develop new ideas in their area of expertise.

Conflict Exposure refers to the extent that employees suffered conflicts within the organization and among their relationships due to organizational change. Respondents were asked whether “they have experienced conflicts due to the change”. This item was adapted from (Buono & Bowditch, 2003).

Control variables

It is possible that whether employees’ gender, which original firm they used to work for or whether they are hired after the start of the PMI process, and which job level they have obtained may influence their perception of self and their perception of the organization during the PMI process. Therefore, in the empirical analyses, we controlled for *Employee Gender*, *Job Level*, and *Original Firm*. We also have controlled for the quality of supervisor – employee relationship (*Leader-member Exchange (LMX) Quality* variable); whether employee and supervisor are in social advice- seeking and giving relationship (*Employee – Supervisor Relationship* variable); and the characteristics of employees’ ego advice- seeking and giving network (*Employee Advice Network Centrality* variable).

Empirical Estimation Methodology

We believe that careful attention needs to be placed to such an issue as common method bias for this study, since both the independent variables and the dependent variables are coming from the same respondent measured at the same time within the same survey. As we investigated the potential sources of common method biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), we note that a number of those sources would have worked against the hypotheses and others are less relevant. For example, consistency motif argues that respondents have a desire to appear consistent. In that regard, one could expect them to select similar responses to question on both self-values and perceived

organizational values. Similarly, social desirability and leniency bias hint that they would rate themselves, their peers, and the organization higher than truth on average, creating an artificial positive correlation between self and organizational values. These are certainly also true in this survey where the correlation between them range from 0.3 to 0.6. However, the hypotheses we developed are predicting a negative correlation between those when the employee suffers conflict during the PMI process, i.e. opposite of the positive correlations that those sources of common method bias may generate. Therefore, we argue that, if anything, the presented results are conservative estimates of the potentially underlying phenomenon that we hypothesized. That being said, future studies should pay more attention to ensuring that more accurate estimates, rather than conservative estimates, are generated by better taking care of the potential methods biases.

In this study, we used both ordered logistic regression and multiple linear regression as the estimation procedures because two of the four dependent variables were ordinal variables with seven different values and the other two were average scores.

RESULTS

Descriptive statistics and correlation matrix are reported in Tables 1 and 2. Table 3 shows the regression results on how employees’ self-perception in terms of level of involvement, sharing, and innovation predicts their perceptions’ of the firm when moderated by the conflicts they suffered.

[Insert Table 1 and 2 about here]

Hypothesis 1 (H1) argued that those employees who face more post-merger conflicts will dissociate themselves from their firm such that how they perceive their involvement level in the firm (*Employee Involvement*) differs from how they see the firm encouraging involvement (*Organization Encouraging Involvement*). Model 2 in Table 3 presents results of ordered logistic regression analysis. The estimates for the interaction between *Conflict Exposure* and *Employee Involvement* is negative and statistically significant ($\beta = -3.2141$; $z = -2.86$, $p = 0.004$), strongly supporting H1. Employees facing post-merger conflicts perceive a value distance between themselves and their organization, such that they perceive themselves as more involved in organizational decision-making processes whereas, they do not think that their organization encourages employees’ involvement enough.

[Insert Table 3 about here]

Hypothesis 2 argued that those employees who suffer more post-merger conflicts will disassociate themselves from their firm such that they perceive their sharing level with the firm (*Employee Sharing*) different from how they see the firm is enabling sharing (*Organizational Enabling Sharing*) (H2a) and the firm is supporting sharing (*Organization Supporting Sharing*) (H2b). Models 4 and 6 in Table 3 show the results of the linear regression analysis for these two hypotheses. The estimates for the interaction between *Conflict Exposure* and *Employee Sharing* is negative and statistically significant both in Model 4 ($\beta = -1.00$; $z = -2.113$, $p = 0.037$) and Model 6 ($\beta = -0.822$; $z = -1.834$, $p = 0.070$). Therefore, H2a and H2b are respectively strongly supported. Interpretatively, when suffering post-merger conflicts, employees would perceive a value detachment between themselves and their organization such that they characterize themselves as ‘sharers’ who are willing to share, for example work contacts or knowledge, with colleagues whereas they do not think that their organization enables them or supports them to share.

Finally, Hypothesis 3 (H3) predicted that those employees who face post-merger conflicts will disassociate themselves from their firm such that how they perceive their innovation level (*Employee Innovation*) differs from how they see the firm is facilitating innovation (*Organization Facilitating Innovation*). Model 8 in Table 3 presents the results of the ordered logistic regression. The estimates for the interaction between *Conflict Exposure* and *Employee Innovation* is negative and statistically significant ($\beta = -2.5907$; $z = -2.052$, $p = 0.040$), supporting H3. Hence, when facing post-merger conflicts, employees would perceive a separation between their own values and their organizational values, i.e. they label themselves as ‘innovators’ who have the ability to develop new concepts in their area while they do not think that their organization facilitates innovative activities.

DISCUSSION AND CONCLUSION

This study investigated the effect of post-merger conflicts on employees’ perceived association between themselves and their organization. During the PMI process, those employees who suffer conflicts disassociate themselves from their organization by perceiving that instead of an overlap, there is a gap between the values they hold and the values the merged organization embraces.

The findings contribute to the organizational identification (OI) literature in several ways. Firstly, prior studies have conceptualized post-merger conflict as an outcome of OI rather than an

antecedent to OI. Post-merger conflicts between the employee and others (including the organization) have not been examined as a factor influencing employees' OI. This study investigated the role of post-merger conflicts as an antecedent of OI in a post-merger context. Furthermore, these post-merger conflicts emerged as situational factors that steer the identification boat away from the harbor. As such, post-merger conflicts are more dynamic and interactive antecedents than the traditional static ones examined in the literature.

In addition, current relevant literature has focused on factors that positively influence OI (e.g. Blader & Tyler, 2009; Liu, Zhu, & Yang, 2010), this study instead presents factors that are detriments to OI. Particularly, those employees who suffer conflicts during the PMI process will have a lower level of identification with their organization, if not end up dis-identifying with it. These employees selected to remain attached to their old organizational identity instead of changing their self-identity according to the identity of the new merged organization. Conflicts they suffered during PMI became the reason for this cognitive and perceptual disconnection between them and their organization. Also, the concept of "value congruence" which has been conceptualized and used in other literatures (i.e. Ren & Hamann, 2015; Vveinhardt & Gulbovaite, 2016) was brought into the OI literature. We find that post-merger conflicts make two sets of values less congruent, leading to a disassociation between employees and their organization, thus resulting in employees' non-identification or dis-identification.

In addition, current research on OI in M&A context highlights that PMI poses an identity threat to the merged organization that weakens post-merger OI and hinders its positive outcomes (Ullrich & van Dick, 2007). This study claimed that post-merger conflicts are detrimental to post-merger OI, thus threatening to the success of PMI, which further contributes to the M&A literature.

The limitation of this study was to employ three specific values for hypotheses testing. These values - involvement, sharing, and innovation are critical individual and organizational values which have been studied by many researchers and scholars in related fields (Dutton et al., 1994; Kabanoff et al., 1995; Voss et al., 2000), however they are only a few representative values. Acknowledging these limitations also opens avenues for future research. The literature needs future studies that investigate the role of conflicts with other important values (i.e. employee empathy), other level of association (i.e. between the self and their group or their department) and in other contexts (i.e. virtual

environment, restructuring or spin-off contexts). With these observations, the findings of this study, hopefully can set a foundation for further interesting and more generalized studies.

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FIGURE 1: The Dynamic shift in value congruence and overlap of employee and organizational identity within a merger context

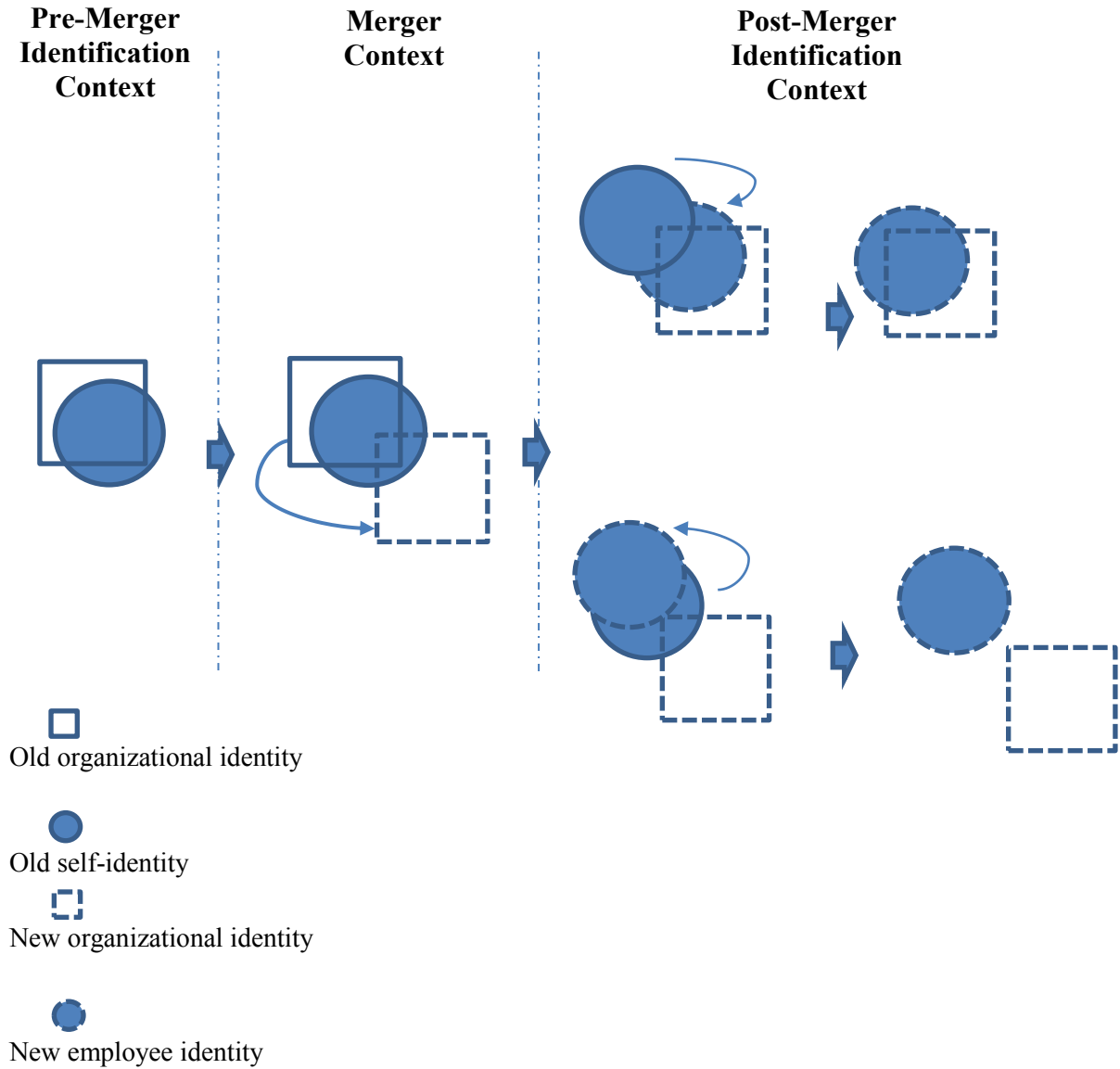


TABLE 1: Descriptive Statistics of the Variables

Variable	Obs	Mean	Std. Dev.	Min	Max	
Organization Encouraging Involvement	106	5.462	1.034	1	7	
Organization Enabling Sharing	106	5.591	0.866	2.333	7	
Organization Supporting Sharing	106	5.327	1.049	2	7	
Organization Facilitating Innovation	106	5.434	0.976	1	7	
Conflict Exposure	106	0.292	0.457	0	1	
Employee Involvement	106	0.304	0.306	0	1	
Employee Sharing	106	0.351	0.360	0	1	
Employee Innovation	106	0.658	0.350	0	1	
Employee Job Level						
	2	106	0.179	0.385	0	1
	3	106	0.019	0.137	0	1
	4	106	0.160	0.369	0	1
	5	106	0.028	0.167	0	1
	6	106	0.019	0.137	0	1
Employee Gender	106	0.698	0.461	0	1	
Employee Original Firm						
	2	106	0.123	0.330	0	1
	3	106	0.123	0.330	0	1
	4	106	0.500	0.502	0	1
LMX Quality	106	5.522	1.054	1	7	
Supervisor-Employee Social Relationship	106	0.660	0.476	0	1	
Employee Degree	106	6.783	4.453	0	18	
Employee Centrality	106	796.590	1182.089	0	5246.115	

TABLE 2: Correlation Matrix of the Variables

Variable	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
[1] Organization Encouraging Involvement	1													
[2] Organization Enabling Sharing	0.667	1												
[3] Organization Supporting Sharing	0.556	0.722	1											
[4] Organization Facilitating Innovation	0.582	0.749	0.787	1										
[5] Conflict Exposure	-0.087	-0.144	-0.228	-0.202	1									
[6] Employee Involvement	0.328	0.377	0.397	0.389	-0.151	1								
[7] Employee Sharing	0.348	0.445	0.381	0.354	-0.155	0.548	1							
[8] Employee Innovation	0.419	0.603	0.542	0.599	-0.096	0.138	0.171	1						
[9] Employee Job Level	0.059	0.062	-0.068	-0.005	0.061	-0.022	-0.029	0.213	1					
[10] Employee Gender	0.076	0.133	0.101	0.167	-0.029	-0.113	0.105	0.028	-0.138	1				
[11] Employee Original Firm	-0.054	-0.061	0.047	0.062	-0.096	0.084	-0.018	0.022	-0.597	-0.020	1			
[12] LMX Quality	0.342	0.365	0.320	0.270	-0.080	0.261	0.264	0.228	0.179	0.044	-0.210	1		
[13] Supervisor-Employee Social Relationship	0.109	0.037	0.072	0.095	0.155	-0.017	-0.032	0.109	0.143	0.006	-0.199	0.074	1	
[14] Employee Degree	0.018	0.117	0.099	0.195	0.003	-0.081	-0.039	0.182	0.455	-0.009	-0.312	0.144	0.010	1
[15] Employee Centrality	0.144	0.177	0.214	0.228	-0.093	0.136	0.050	0.162	0.195	-0.074	-0.153	-0.027	-0.181	0.569

TABLE 3: Results of Empirical Analyses on Overlap of Self Values and Perceived Organizational Values Moderated by Having Faced Conflicts during PMI process

VARIABLES	Org. Encouraging Involvement		Org. Enabling Sharing		Org. Supporting Sharing		Org. Facilitating Innovation	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Conflict Exposure	0.2503 [0.464]	0.3460 [0.628]	0.031 [0.181]	0.094 [0.518]	-0.239 [-0.991]	-0.188 [-0.741]	-0.488 [-1.029]	1.679 [1.405]
Employee Involvement	2.5755** [2.906]	3.1661*** [3.357]						
Employee Involvement x Conflict Exposure		-3.2141** [-2.860]						
Employee Sharing			0.890*** [4.853]	1.040*** [5.783]	0.885*** [4.657]	1.009*** [4.928]		
Employee Sharing x Conflict Exposure				-1.000* [-2.113]		-0.822+ [-1.834]		
Employee Innovation							4.441*** [3.933]	5.457*** [4.575]
Employee Innovation x Conflict Exposure								-2.5907* [-2.052]
Employee Job Level 2	-0.2641 [-0.465]	-0.0671 [-0.123]	0.266 [0.917]	0.234 [0.802]	0.413 [1.394]	0.386 [1.302]	-0.6935 [-1.068]	-0.7422 [-1.094]
Employee Job Level 3	2.9593*** [3.495]	3.1035*** [3.509]	0.123 [0.136]	0.119 [0.131]	0.345 [0.421]	0.342 [0.414]	0.0930 [0.064]	-0.0552 [-0.035]
Employee Job Level 4	0.0991 [0.195]	0.1385 [0.272]	-0.031 [-0.120]	0.024 [0.092]	-0.333 [-0.989]	-0.288 [-0.853]	-1.7737* [-2.192]	-1.7018+ [-1.935]
Employee Job Level 5	2.3283* [2.341]	2.5080* [2.487]	0.979* [2.175]	0.958* [2.120]	0.029 [0.038]	0.012 [0.016]	1.0264 [1.187]	0.8752 [0.973]
Employee Job Level 6	0.3541 [0.351]	0.2244 [0.196]	0.637+ [1.856]	0.666+ [1.929]	1.211** [2.825]	1.234** [2.881]	0.7862 [0.937]	0.7111 [0.831]
Employee Gender	0.8861+ [1.742]	0.8106 [1.599]	0.276 [1.421]	0.291 [1.487]	0.289 [1.249]	0.302 [1.291]	0.9445* [1.986]	0.8674+ [1.822]
Employee Original Firm 2	-1.3805* [-2.443]	-1.3874* [-2.408]	-0.388 [-1.359]	-0.341 [-1.225]	-0.067 [-0.183]	-0.028 [-0.076]	-0.6323 [-1.095]	-0.6485 [-1.127]
Employee Original Firm 3	-0.1658 [-0.259]	0.0411 [0.065]	0.135 [0.471]	0.111 [0.391]	0.629* [2.053]	0.609* [1.992]	1.3734 [1.632]	1.6818+ [1.933]
Employee Original Firm 4	-0.0393 [-0.075]	0.0303 [0.057]	0.194 [0.705]	0.181 [0.658]	0.524+ [1.861]	0.513+ [1.834]	0.2586 [0.331]	0.3166 [0.384]
LMX Quality	0.5263+ [1.931]	0.4863+ [1.856]	0.227* [2.457]	0.207* [2.271]	0.292** [2.868]	0.275** [2.713]	0.3457 [1.509]	0.3348 [1.453]
Supervisor-Employee Social Relationship	0.3249 [0.736]	0.3436 [0.775]	0.117 [0.651]	0.136 [0.753]	0.323 [1.585]	0.338 [1.643]	0.4053 [0.823]	0.2986 [0.573]

Employee Degree	-0.1304*	-0.1204+	-0.015	-0.008	-0.004	0.002	-0.0139	0.0115
	[-1.964]	[-1.821]	[-0.625]	[-0.343]	[-0.123]	[0.050]	[-0.196]	[0.151]
Employee Centrality	0.0005*	0.0005*	0.0002*	0.0002*	0.0003**	0.0003**	0.0006*	0.0006*
	[2.083]	[2.041]	[2.507]	[2.421]	[2.800]	[2.789]	[2.477]	[2.275]
Constant cut1	-1.7420	-1.8089					-0.7370	0.1492
	[-0.761]	[-0.796]					[-0.367]	[0.077]
Constant cut2	-0.2600	-0.3318					0.0342	1.0039
	[-0.140]	[-0.182]					[0.019]	[0.551]
Constant cut3	1.4944	1.4167					3.964*	4.927**
	[0.838]	[0.809]					[2.440]	[2.735]
Constant cut4	2.9423	2.8605					6.173***	7.188***
	[1.644]	[1.631]					[3.677]	[3.943]
Constant cut5	6.5739***	6.6536***					10.166***	11.292***
	[3.343]	[3.391]					[5.765]	[5.852]
Constant			3.714***	3.747***	2.656**	2.683**		
			[4.883]	[4.946]	[3.260]	[3.308]		
Observations	106	106	106	106	106	106	106	106
Number of Variables	15	16	15	16	15	16	15	16
Log-likelihood	-120.2	-118.9	-110.6	-109.1	-129.6	-128.9	-95.50	-93.64
Wald Chi	40.02	42.61					63.86	72.12
P>Chi	0.000451	0.000319					5.41e-08	4.23e-09
R-squared			0.365	0.382	0.380	0.388		
Robust z(or t)-statistics in brackets								
*** p<0.001, ** p<0.01, * p<0.05, + p<0.1								

Stream #1 Managing the Many Faces of Sustainable Work
Interactive Session

**Detecting and managing the risk of dementia-related cognitive impairment
among registered doctors and licenced pilots in New Zealand.**

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Stream #1 Managing the Many Faces of Sustainable Work

Interactive Session

Detecting and managing the risk of dementia-related cognitive impairment among registered doctors and licenced pilots in New Zealand.

ABSTRACT: *New Zealand's aging labour force presents challenges for employers. One risk is that the numbers of workers developing dementia and symptoms of cognitive impairment will likely increase. While declining cognitive ability among staff represents a challenge for all employers, it will be of greatest concern for organisations with employees holding safety-critical roles, such as commercial pilots and registered medical practitioners. This paper describes trends in aging, the management implications of these trends, and then reviews prevalence estimates for dementia among populations of New Zealand registered doctors and licenced pilots. A rationale for investigating current approaches to the detection and management of dementia among these two groups is outlined.*

Keywords: OHS/WHS HR Planning Performance Management

NEW ZEALAND'S AGING LABOUR FORCE

Throughout the developed world, life expectancy is increasing, birth-rates are declining and the general health of older workers is improving. New Zealand is no exception (Statistics New Zealand, 2013, 2016; Vettori, 2010). In combination, these trends will have a significant impact on the workplace.

Two statistics illustrate the local situation. Firstly the median age of the New Zealand labour force has grown from 35 to 43 over the last 25 years. Assuming nothing changes, demographers believe half the New Zealand labour force could be over 45 in 40 years' time (Statistics New Zealand, 2016).

Secondly, a significant cause of this increasing median age is the rapid growth of the segment of New Zealand's population over 55. Despite the total labour market growing only slowly in the decades ahead (Statistics New Zealand, 2016) the number of people over 55 active in the labour

market is expected to increase from around half a million today to 823,000 by 2036, while those in the labour force aged 65 and over will nearly double, from 160,000 today (6%) to around 300,000 (10%) (Statistics New Zealand, 2013, 2016).

Indeed, it is plausible the above figures underestimate the likely increase in the number of older people in the labour force, as they do not account for potential shifts in pension eligibility. Notably, over the last decade we have seen the New Zealand Retirement Commissioner, the New Zealand Treasury and the National Party all call for the age of eligibility for superannuation to be lifted from 65 to 67, in line with Australia, the US and the UK (Hosking, 2010; Walls, 2018). There are now calls for eligibility for pensions to rise to 70 in many countries across the developed world (World Economic Forum, 2017), with attempts to legislate such changes already seen in Australia (Australian Department of Human Services, 2014). Clearly, delaying the age of eligibility two, let alone five further years, will significantly increase the number of older workers remaining employed in New Zealand.

While most developed countries are experiencing similar trends to those described above, it is worth noting how dramatic these shifts have been in New Zealand, and therefore how internationally significant our response to these challenges could be.

Just twenty years ago most New Zealanders retired before or at age 60, a somewhat unusual situation compared to other countries (Yahanpath & Yahanpath, 2006). Following a shift in the age of eligibility to 65 in 2001, the country now records some of the highest mean ages for workers in the developed world. A recent report (PricewaterhouseCoopers LLP, 2017) noted that of 34 OECD countries, New Zealand ranks 2nd overall on the “Golden Age Index” (GAI) after tiny Iceland. The GAI measures a broad range of indicators relating to the participation of older people in employment and training. Notably New Zealand already has the second highest employment rate of 55 to 64 year-olds in the OECD and the third highest rate for 65 to 69 year-olds. By comparison, the US ranks 9th, in the GAI, Australia ranks 12th, Canada 16th and the UK 19th. Given the already high levels of

participation of older workers in New Zealand it is likely our efforts to manage the challenges of an aging workforce will be of interest to other countries facing similar challenges.

SHOULD THESE TRENDS CONCERN MANAGEMENT SCHOLARS?

An aging workforce is not, in itself, problematic. Indeed, increasing the number of older workers in the labour market is clearly desirable from a macro-economic perspective. With an ongoing decline in the number of younger workers entering the workforce there will be an increased need for older workers to stay engaged to compensate for this shortfall (Statistics New Zealand, 2016). Equally importantly, encouraging older workers to stay engaged in work will slow escalating demands on health, social and pension systems and “increase GDP, consumer spending power and tax revenues” (PricewaterhouseCoopers LLP, 2017, p. 1). There are clearly benefits if New Zealand can retain older workers in the labour force.

However, while economists may see positive macro-economic outcomes in the above trends, the increased participation of older people in the workforce will present a variety of significant challenges for organisations, managers and employees, which should be of interest to management researchers. For example older workers may possess skill sets that are increasingly out of date or specific to a declining industry and require retraining (“The potential opportunities and pitfalls in hiring older workers,” 2018).

Again, it may prove difficult for employers accustomed to hiring younger people to meet the higher salary expectations of increasing numbers of older workers, while a preference to work part time hours may also prove complex (Careers NZ, 2018). Maintaining motivation and engagement of older workers may also become an issue. There is a risk many older workers forced to remain in employment by rising eligibility criteria will disengage from work and become difficult to motivate as they “run out the clock” (Fleming, 2011). Traditional motivational tools such as offering promotions may lose their impact on workers evidently at the end of their careers.

THE CHALLENGE OF DEMENTIA AT WORK

None of the challenges mentioned above have been extensively researched. However, one particular problem facing organisations relying on older workers has received almost no attention. The challenge of detecting and managing cognitive impairment in workers who develop dementia, a disease that characteristically affects older people, has barely registered as an area of interest for academics and researchers. A literature review of British and international databases in 2015 identified “only six papers focusing on dementia in the workplace, with a 13-year gap between the two papers which directly addressed the experiences of people with dementia in employment. The majority of papers were based on qualitative research; the two papers which had a quantitative aspect had methodological failings” (Ritchie, Banks, Borrowman, Tolson, & Danson, 2015, p. 32). The situation two years later appears little better, with Ritchie repeating her concern over the “dearth of research around the experiences of developing dementia in the workplace and how best to support individuals with their employment post diagnosis” (Ritchie, 2017, p. 73).

This lack of management research is unexpected. Dementia is devastating in its personal consequences, its scale, and its costs. With populations aging and no cure on the horizon, the growing epidemic is predicted to escalate rapidly in the coming decades. Currently 35 million people are estimated to be living with dementia internationally, including 62,000 New Zealanders. These numbers are expected to double in the next 15 years and more than treble by 2050 (Alzheimers New Zealand, 2017). The global costs of the disease have been estimated at \$948 billion in 2016, with an annual growth rate of 16% (Xu, Zhang, Qiu, & Cheng, 2017, p. 47). In New Zealand, the costs associated with dementia have been estimated \$1,676 million in 2016 alone, rising to \$2.7 billion by 2030 (Alzheimers New Zealand, 2017). It seems perplexing that economic and social problems of this magnitude have drawn so little attention from management academics.

One possible reason might be a widespread, if erroneous, belief that dementia is a disease that only affects those over 65, and therefore of little direct interest to those studying management. This is clearly incorrect, on two counts. First, the burden of caring for increasingly dependent older relatives

is very considerable and often falls on those still in work and still supporting dependent children, with obviously negative health consequences for the employed carer (Mougias et al., 2015).

More importantly, while the bulk of dementia diagnoses are indeed given to people over 65, early (or “young”) onset dementia is slowly being recognised as a significant sub-population in its own right, with unique challenges and issues. Notably people in this age group often have significant responsibilities to work and to family, and the cognitive decline associated with dementia can cause significant disruption. The British Alzheimer’s Association estimate that there are over 40,000 people under the age of 65 in the United Kingdom living with a diagnosis of dementia, or 5% of the total diagnosed population (Alzheimer’s Society UK, 2014). The corresponding figures for the United States are currently thought to be 200,000 or 4% (Statistica, 2018).

While these figures are concerning enough, some commentators suggest these estimates are likely to be conservative and could be 50-100% higher (Young Dementia UK, n.d.). The reasons for such under-estimation are complex but involve significant levels of under-reporting in younger age groups and frequent misdiagnosis by general practitioners, who attribute symptoms in younger patients to more commonly occurring conditions such as stress or depression (Devineni & Onyike, 2015; Young Dementia UK, n.d.).

Unfortunately, when it comes to local prevalence rates “there is still no New Zealand-specific data available” (Alzheimers New Zealand, 2017). Indeed, an extensive search of the literature reveals only one small-scale attempt to measure prevalence in New Zealand, in 1983 (Campbell, McCosh, Reinken, & Allan, 1983). Two other published work on local prevalence rates simply adapt overseas estimates to New Zealand’s situation (Barney, 2015; Tobias, Yeh, & Johnson, 2008). Thus, we can do little more than assume UK and US prevalence estimates (that 4%-5% of the total population of those with dementia are under 65) can be applied in New Zealand.

Applying these estimates to New Zealand’s total number of dementia sufferers (62,000) suggests approximately 3000 New Zealanders under the age of 65 currently have the condition. How many are currently employed remains unknown. If current projections and estimates prove accurate,

by 2050, the number of New Zealanders with diagnoses of dementia under the age of 65 could triple to 9000. Should the age of eligibility for superannuation increase over this time, as many suspect it will, then these numbers will clearly grow in magnitude.

MANAGING DEMENTIA AT WORK

New Zealand currently has a labour force of 2,738,000 (Statistics New Zealand, 2018). Thus it could be argued that an estimate of 3000 people currently living with dementia under the age of 65 does not represent an important issue for New Zealand employers, affecting less than 1 in 900 people in the current labour force. Indeed, this figure assumes all people under 65 experiencing symptoms of dementia will be in the labour force, which is highly unlikely.

However, while these numbers suggest little reason for concern, challenges cannot always be understood in terms of simple numbers alone. Like a stone thrown in a pond, the consequences of an employee's increasingly poor decision making, time management, memory loss, misunderstood communications and personality changes ripple outwards through an organisation, its customers and its suppliers. Even when employees diagnosed with dementia are strongly supported by their colleagues, their employer and the Swedish welfare state, researchers note "the situation ...profoundly affected fellow workers" (Öhman, Nygård, & Borell, 2001, p. 34).

While the risk is low, the consequence of discovering a single staff member with symptoms of dementia is clearly significant for employers. Without the benefit of a specific diagnosis, identifying a cause for aberrant workplace behaviour, such as repeated forgetfulness, irrational beliefs and poor impulse control can be difficult (if not confronting) for all involved. As noted by Ritchie (2017) many individuals with symptoms of pre-clinical dementia face discipline or dismissal for poor performance, being made redundant or being required to retire early. Voluntarily, or otherwise, the majority of people of working age who develop dementia appear not to continue in employment (Bentham & La Fontaine, 2005).

Complicating matters further, most OECD countries, including New Zealand, have legislation specifically designed to protect workers with illnesses or disabilities from discriminatory treatment such as discipline for poor performance. Managing aberrant employee behaviour is complicated when there isn't an explanatory diagnosis, but it has the potential to be equally complex even when there is one.

If managing a junior employee who develop symptoms of dementia is complicated, the situation where a senior member of staff is affected is clearly worse. Errors in financial planning and forecasting, client management, cost control and staff supervision can have destructive effects on an entire organisation. Yet the detection and management of aberrant behaviour can be more complicated than in the case of a junior employee, particularly if subordinates' are reluctant to challenge decisions made by a superior, to check their work without authority, or question their perceptions of events and other people.

Worse still are the potential outcomes if the affected staff member holds a safety-sensitive role, particularly in a "high-consequence" profession such as aviation, energy management or medicine (Bigda-Peyton, 2010). Unchecked errors in piloting or air traffic control, drug dispensing or surgery, or the simple calculation of structural loads could all have catastrophic consequences.

Clearly the risk of any one pilot, surgeon, chemist or engineer developing symptoms of dementia at work is exceptionally low. However, it is not incalculably low. Using international prevalence rates for general populations, and numbers and age profiles of New Zealand commercial pilots and registered medical practitioners from 2012, Barney (2015) estimated the number of pilots and doctors practicing or employed in New Zealand in 2012, who might be at risk of dementia. The results suggest that between 36 doctors (low estimate) and 115 (high estimate) practicing in 2012 could be expected to develop symptoms. The equivalent figures for New Zealand Airline Transport Pilot Licenced (ATPL or 'pilot in command') pilots were 2 (low estimate) or 10 (high estimate).

These figures are very small, relative to the populations of registered practitioners (14,686) and ATPL pilots (1,696). However, prevalence rates employed were conservative, and in both

professions median ages are expected to continue to increase, notably in the case of doctors (Barney, 2015). While the risk of pilots and doctors exhibiting symptoms of dementia on the job remains remote, in coming years, without steps to identify and manage it, the risk is likely to increase.

THE CASE FOR STUDYING PILOTS AND DOCTORS

As stated above, New Zealand already has a very high level of participation of older workers in the labour market compared with other OECD countries. For this reason local employers are likely to experience the practical consequences of relying on a large aging workforce before employers in many other countries. New Zealand may have to evolve local policy and managerial responses to these issues with limited international models to follow.

As management researchers this situation may create interesting opportunities to observe and report on the mechanisms New Zealand organisations and industries use to adjust to the challenges posed by the aging labour force.

Two particular professions in New Zealand appear unusually good candidates for further study, particularly in terms of managing the risk of dementia in the workplace: commercial pilots and registered medical practitioners. There are three reasons why this is the case.

First, both professions have acknowledged problems associated with aging workforces. In 2016, the largest cohort of registered doctors in New Zealand were aged 55–59. In 2010 the largest group were aged 45–49 while in 1980, it was those aged 25–29. (Medical Council of New Zealand, 2018). With inadequate numbers of doctors coming through to replace them, many older doctors are reportedly electing to work on into their late sixties and seventies. The situation in aviation is harder to ascertain, as the main employers of pilots do not publish the ages of their employees. However in a newspaper article from 2011 an Air New Zealand pilot claimed the company had about 850 pilots, with more than 100 of these aged over 60 and about three over 70 (Goodger, 2011). Both professions

then, have or will soon have significant numbers of members who might be entering ages where the risk of dementia is heightened significantly.

Secondly, in combination with their significantly older workforces, both industry are tightly regulated, with well-established governing bodies with staff responsible for oversight of the profession. In medicine this body is the New Zealand Medical Council (NZMC) while the Civil Aviation Authority of New Zealand (CAA) oversees many matter relating to commercial pilots. Dealing with a single body that covers thousands of potential subjects is far easier than working with many smaller organisations and employers, assuming the body is amenable to external researchers working with them.

Thirdly, both the CAA and the NZMC are already somewhat aware of the risks associated with older staff operating in ‘high-consequence’ environments and both have taken some steps to monitor the mental health of professionals in their industry. These steps, outlined below, provide an obvious point of entry for further research.

In aviation, the CAA requires commercial pilots over 40 to undergo six monthly medical examinations with a qualified Aviation Medical Examiner (AME). In addition, the CAA requires the AME to complete a form (called an Aging Pilot Report) “at every CAA medical examination of pilots aged 70 years and over: and for younger pilots when appropriate” (Civil Aviation Authority of New Zealand, 1999, p. 1). Item 10 of a questionnaire in this form poses the question “Need for psychometric testing to exclude early dementia?”. While the existence of this form is heartening, it is not clear how many AME’s use this form appropriately, nor under what circumstances. Neither is it clear what training AME’s may be given in detecting subtle symptoms of dementia.

In medicine, the NZMC requires doctors to apply for an annual ‘Practising Certificate’. The application form requires doctors to disclose any ‘mental or physical condition that has the capacity to affect your ability to practise’ (New Zealand Medical Council, nd, p. 1). Information about any conditions must be forwarded to the NZMC Health Committee, who investigate and determine whether “the condition affecting the doctor is not affecting their practice in a way that could put

patients at risk” (New Zealand Medical Council, nd, p. 2). As was the case with the Aging Pilot Report, this process is heartening, but leaves questions around its implementation. Notably it is not clear how many doctors would willingly self-report problems with cognition, nor what would happen if they failed to do so.

CONCLUSION

Throughout the OECD workforces are aging. Managers will need to rely on ever increasing numbers of older workers to complete work. While there are clear benefits economically for governments and treasuries to require or incentivise older people to stay in paid employment, the day-to-day challenges of managing this process will fall to industries, organisations and employers. Few of the consequences of working with older employees have been well researched, and to date little significant research has been undertaken on the issue of detecting and managing workers who develop dementia while employed.

New Zealand appears to be at the forefront of the trend toward employing an older workforce. This provides New Zealand management researchers a unique opportunity to observe how local business overcome challenges arising from these trends. Two industries in particular seem well suited for further study – aviation and medicine. Both have comparatively older workforces, and both have already taken steps to attempt to identify professionals with mental health problems. How successful these steps have been, and how staff identified with problems are managed is less clear. Hopefully both will be willing to collaborate on future projects designed to assist employers working with staff identified as having problems with dementia.

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Understanding Sustainable Procurement: An Innovation Adoption Conceptual Framework

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Understanding Sustainable Procurement: An Innovation Adoption Conceptual Framework

Abstract

Sustainable procurement SP is a novel approach to the acquisition of goods, works and services whereby economic, social and environmental considerations are factored into procurement decisions and practices. As a new mode of procurement, one of the appropriate concepts that can be used to investigate SP uptake is the innovation adoption concept; a concept with a pedigree of validity and reliability. Though various theoretical lenses have been employed to conceptualise organisational adoption and practice of SP, innovation adoption concept has not been one of these, and this in the view of this paper is a serious scholarly oversight. To address this perceived oversight, the purpose of this paper was to develop a framework for conceptualising sustainable procurement using an innovation adoption conceptual approach. Literature review was the methodology enlisted to identify the major constructs which were used in developing the SP adoption framework. This framework is potentially useful for presenting a more holistic perspective of organisational adoption of SP for enhanced clarity and understanding.

Keywords: Sustainable Procurement; Innovation Adoption; Conceptual Framework

1. Introduction

A major global concern in this age is how to ensure environmental sustainability, social equity and cohesion, and economic wellbeing (Du Pisani, 2006; McCormack, 2017) . This concern has given rise to the concept which has come to be known as ‘Sustainability’; a concept of significant influence on organisational agenda both at the local and global level (Crespin-Mazet and Dontenwill, 2012; McCormack, 2017) . Sustainability is defined by the World Commission for Environment and Development (WCED) as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ WCED, 1987 P. 43. It is development that simultaneously focuses on environmental, social, and economic issues (Gunder, 2016; Thiele, 2016) .

The idea of sustainability has become a significant influencing factor for organisational functions including procurement (Meehan and Bryde, 2011; Roman, 2017) . The deployment of procurement to achieve sustainability objectives is referred to as ‘Sustainable Procurement’ (Brammer and Walker, 2011; Roman, 2017) . The primary focus of traditional procurement was on obtaining the best possible quality of goods, works, and services at lowest possible cost (Schwerin and Prier, 2013) however, the influence of sustainability is modifying this focus such that procurement functions have begun to incorporate social, economic, and environmental dimensions in their practices (Ho *et al.*, 2010) . This new approach to procurement is perceived as a potentially effective tool for delivering sustainability outcomes in both public and private sector organisations (Krause *et al.*, 2009; Sanchez *et al.*, 2014) .

A number of approaches have been used to conceptualise SP including: purchasing social responsibility (Walker and Brammer, 2009) ; organisational perspective of SP (Grandia *et al.*, 2014) ; organisational change perspective (Grandia, 2015) ; and organisational sustainable procurement practices model (Roman, 2017) . However, SP has not been conceptualised from an innovation conceptual perspective, though it is a novel approach to procurement.

Innovation adoption concept is a well-known and important approach in management science for exploring the mechanisms by which organisations adopt and implement new ideas or practices (Dibra, 2015; Frambach and Schillewaert, 2002) . The purpose of this article therefore is to develop a conceptual framework for SP using an innovation adoption perspective. Relative to the purpose of this paper the following research questions will be answered:

1. What major innovation adoption variables influence organisation uptake of SP?
2. What relationships exist between these innovation adoption variables?

The next section of this paper reviews relevant literature to identify the major innovation adoption variables which are involved in SP adoption.

2.0 Sustainable Procurement

Sustainable procurement is not easy to define, as many different definitions have been used to explain the same concept (Hoejmose and Adrien-Kirby, 2012; Walker and Phillips, 2009) . This paper makes reference to two of the most often used definitions; that of the Department for Environment, Food and Rural Affairs (DEFRA) UK, and Walker and Brammer 2009. The former defines SP as “a process whereby organisations meet their needs for goods, services, works, and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy whilst minimising damage to the environment” (DEFRA, 2006:10) . The later defines SP as procurement that is consistent with the principles of sustainable development (Walker and Brammer, 2009) . From these definitions the SP is understood to consist of social, economic, and environmental dimensions. The SP concept from the definition appears to be an amorphous phenomenon with imprecise objectives, the achievement of which will require factors outside the procuring organisations. Practicing SP has been found to be difficult and involving complex processes (Brammer and Walker, 2011; Lund- Thomsen and Costa, 2011) , and its uptake by organisations has been slow (Meehan and Bryde, 2011; Walker *et al.*, 2012b) .

Understanding the nature of SP and the processes involved in its adoption by organisations will help in identifying appropriate solutions. It is in this light that innovation adoption concept is considered apposite for theorising organisational adoption of SP, since it has been used successfully over the years to analyse and explain the adoption of new methods and practices (Bayer and Melone, 1989; Dibra, 2015) . In the next section the concept of innovation and its adoption will be discussed

2.1 Innovation and its Adoption

Innovation can be defined as a product, idea, process, method, practice, project or system which is perceived as new by the adopting entity (Damanpour and Gopalakrishnan, 1998; Rogers, 1995) . From the definition two forms of innovation can be identified: innovation as

a product and innovation as a process. Relative to innovation as a product, a tractor for example will be an innovation to a farmer who uses oxen to farm, and a desk top computer will be an innovation to an organisation that uses typewriter as its device of recording information. With regard to innovation as a process online survey for instance will be an innovative process to a researcher whose means of data collection is paper based questionnaire. Similarly, sustainable procurement as a means of acquisition of goods and services will be an innovative process of acquisition to an organisation which knows only about the conventional procurement practices whose bottom line is value for money. However, the product- process categorisation of innovation is blur as there are processes which at the same time may be products, and products which entail processes. For example the process of generating electric power through solar means instead of the use of diesel entails both process and product as the device used to generate the electric power is a product whilst the mechanism by which the power is generated is a process.

The absorption of a perceived new idea, method or product by individuals or organisations goes through a process often referred as the innovation adoption process. Innovation adoption may be defined as the decision to make use of an innovation in preference to other available options (Frambach and Schillewaert, 2002; Rogers, 1995) . It is a process that consists of two main stages: initiation and implementation (Rogers, 1995) . The initiation phase entails need recognition; search for solution; awareness of existing innovations; identification of suitable innovations; and proposal for adoption (Damanpour and Schneider, 2006) . The implementation stage on the other hand consists of preparing the innovation for use, trial use, acceptance of the innovation by the users, and sustained use of the innovation until it becomes a routine feature of the user entity (Damanpour and Schneider, 2006) . The decision to adopt an innovation is arrived at after subjecting the proposed idea to technical, financial and strategic evaluation and being satisfied that the innovation has high potential of delivering the desired solution, and worth the resources to be allocated to its acquisition (Meyer and Goes, 1988) . The major factors that influence innovation adoption by organisations are discussed in the following section.

2.2 Determinants of Innovation Adoption

To ascertain the major determinants of innovation adoption in organisations, the seminal Work of Everett Rogers relative to innovation adoption and diffusion was reviewed. Also reviewed were the publications of major innovation adoption theorists such as Damanpour

and Schneider, Frambach & Schillewaert, Tornatzky & Klein, and Meyer and Goes. Rogers (1995) identified five determinants of innovation's rate of adoption: the perceived characteristics of the innovation; type of innovation decision; the channels of communication; nature of the social system; and the change agent's promotion efforts. These five determinants of innovation adoption relate to three major conceptual elements: attributes of the adopting organisation; perceived qualities of the innovation; and the nature of the external organisational environment. Various determinants of organisational innovation adoption can therefore be grouped into three major categories of variables: the perceived attributes of the innovation; the characteristics of the adopting organisation; and the characteristics of the external organisational environment. A number of studies have centred on these three major variables including: Frambach and Schillewaert (2002); Damanpour and Gopalakrishnan (1998); and Wisdom *et al.* (2014).

Relative to the perceived attributes of the innovation, five characteristics have been identified as significant influencers of organisational innovation adoption. These are: perceived relative advantage, compatibility, complexity, trialability, and observability (Bayer and Melone, 1989; Frambach and Schillewaert, 2002; Rogers, 1995). Relative advantage refers to the degree to which an innovation is regarded as better than alternative ideas, processes or products; compatibility is the perceived consistency of the innovation with the needs, existing values, and past experiences of the adopting entity; complexity is the extent to which the innovation is perceived as difficult to understand or practice; trialability is the perceived ability of the innovation to be experimented with on trial basis; and observability is the degree to which the outcomes of an innovation are visible to others (Rogers, 1995).

Tornatzky and Klein (1982) suggest that three of the perceived innovation characteristics: relative advantage, compatibility, and complexity have the most consistent significant relationships with innovation adoption.

Major organisational attributes that have been found to have significant influence on organisational innovation adoption include: the leadership, culture, structure, size, absorptive capacity, resource capacity, and innovativeness of the organisation (Aarons *et al.*, 2011; Frambach and Schillewaert, 2002; Wisdom *et al.*, 2014). These key organisational attributes can be put into two broad categories the primary decision influencers of organisations such as organisational leadership and culture: and the abilities and endowments of the organisation. We refer to the primary decision influencers as the organisational central core, and the abilities and endowments of the organisation as organisational capacity. In other words two

categories of organisational attributes relative innovation adoption is being suggested in this paper; organisational central core and organisational capacity. Central core refers to the point or node from which emanate decisions and actions Abric, 1984 cited in Guimelli (1993). Organisational leadership and culture are pivotal in organisational decisions and actions (Brown, 1992; Tsai, 2011) , and have been found to have significant influence on organisational innovation adoption behaviour (Aarons *et al.*, 2011; Wisdom *et al.*, 2014) . For their central role in organisational decisions and actions, they are referred to in this paper as the *organisational central core*. The term *organisational capacity* has been used in this paper to refer to the ability and endowments of the organisation. Labonte and Laverack (2010) define capacity as the skills, resources, and structures required by an entity to achieve its goals. Organisational capacity is more of dynamic qualities than static properties (Labonte and Laverack, 2010) . Organisational capacity has been found to be one of the major influencing factors of innovation adoption (Frambach and Schillewaert, 2002; Lin and Ho, 2010) .

The third category of determinants of organisational innovation adoption is characteristics of external organisational environment. In the context of this paper external organisational environment refers to factors outside the organisation which have the potential of influencing the decisions and actions of the organisation. Factors such as government policy; rules, regulations and standards; activities of non-governmental organisations NGOs; international standards and requirements; and social network have been identified as key influencing factors of organisational innovation adoption (Aarons *et al.*, 2011; Damanpour and Gopalakrishnan, 1998) . Though external organisational factors have been found to have significant influence on organisational innovation adoption, we suggest in this paper that the degree of the influence will depend on the attributes of the organisation in question. For example though the same government policy may apply, the outcome of the policy may differ in different organisations because of differences in attributes of these organisations. Consequently, the attributes of the adopting organisation may have mediating or moderating effects on the influence of the external organisational environment on innovation adoption. The next section presents a theoretical perspective from which organisational innovation adoption can be conceptualised.

2.3 Diffusion of Innovation DoI Theory

The DoI theory is one of the major theories that have been used over the years to conceptualise the adoption and diffusion of innovation (Bayer and Melone, 1989; Dibra, 2015). Everett, M. Rogers is one of the key proponents of this theory (Dibra, 2015; Sahin, 2006). This theory states that the process by which an innovation spreads among members of a social system over time entails four main elements: the innovation; the channels of communication; the time span; and the social system (Bayer and Melone, 1989; Sahin, 2006). According to Rogers (1995) the nature of the innovation as perceived by potential adopters determines its rate of adoption and diffusion. Channels of communication in the context of the theory refers to the means by which innovation gets transmitted from one entity to another; this may be through mass media, research publications, and interpersonal communication among peers and close associates (Rogers, 1995). Time as an element of innovation diffusion refers to duration for an innovation to spread among members of a social system, and includes items such as the innovation diffusion process, the rate of adoption, and adopter categorisation (Sahin, 2006). The time dimension of innovation diffusion can be categorised into three time spans; the time for innovation diffusion, time for innovativeness, and the rate of innovation adoption (Rogers, 1995). The social system element of the DoI theory is about how group interrelated entities influence the spread of innovation (Bayer and Melone, 1989; Rogers, 1995).

The DoI theory explains the mechanism by which and the elements involved in transmission and acceptance of new ideas, processes, or products among members of a social system. Since sustainable procurement is a new idea and approach regarding procurement, the DoI theory appears apposite for conceptualising its transmission and acceptance in organisations, and should be considered as an alternative theoretical lens for explaining SP adoption in organisations. In the next section, the process by which organisations incorporate sustainability in their procurement function is analysed from the perspective of innovation adoption.

2.4 Sustainable Procurement from Innovation Adoption Perspective

Sustainable procurement is a new approach to organisational acquisition of goods, works and services (Meehan and Bryde, 2011; Oruezabala and Rico, 2012; Roman, 2017). As a novel approach to procurement therefore, it can be conceptualised from the perspective of innovation adoption. Among the most researched issues of SP are the drivers of and barriers

to SP procurement practices in organisations (Ansari and Kant, 2017; Lund- Thomsen and Costa, 2011; Walker *et al.*, 2012a) . The drivers include: organisational leadership commitment and support; organisational culture; government regulations; personnel with requisite sustainability expertise; and customers/consumers’ pressure (Ansari and Kant, 2017; Meehan and Bryde, 2011; Walker *et al.*, 2012a) . The barriers include: financial and other resource constraints; difficulty in integrating SP practices into organisational systems; poor understanding of the concept of sustainability; and poor employees and management attitude towards SP (McMurray *et al.*, 2014; Meehan and Bryde, 2011; Morali and Searcy, 2013) . The drivers and barriers emanate from three major sources; the external organisational environment, qualities of the organisation in question, and characteristics of SP. Factors such as government policy and customers’ pressure relate to the external organisational environment; issues regarding organisational leadership and culture relate to attributes of the organisation adopting or practising SP; and issues about the perceived difficulty to integrate SP into organisational system relate to the perceived characteristics of SP.

The analysis in the preceding paragraph relative SP and innovation adoption shows that the drivers and barriers to organisational uptake of SP align with the three major determining variables of innovation adoption; the perceived attributes of the innovation; the characteristics of the adopting organisation; and the characteristics of the external organisational environment. These three categories of innovation adoption variables are the constructs used in developing the ‘Sustainable Procurement SP Adoption Framework’ of this paper. The framework is presented in the next section.

3 Sustainable Procurement (SP) Adoption Framework

The framework is composed of four key constructs: perceived attributes of SP; characteristics of the adopting organisation; characteristics of the external organisational environment; and SP adoption. The first three constructs are the independent variables and the fourth construct is the dependent variable.

This paper suggests that the effects of external environmental conditions on organisational adoption of SP will be affected by the characteristics of the organisation involved.

Organisations differ in diverse ways, and respond to external influences differently as suggested in (Clemens *et al.*, 2008; Oliver, 1991) , in this respect it is reasonable to assume that the characteristics of the SP adopting organisation can modify the effects of the external organisational environment on SP adoption. We suggest that organisational variables can

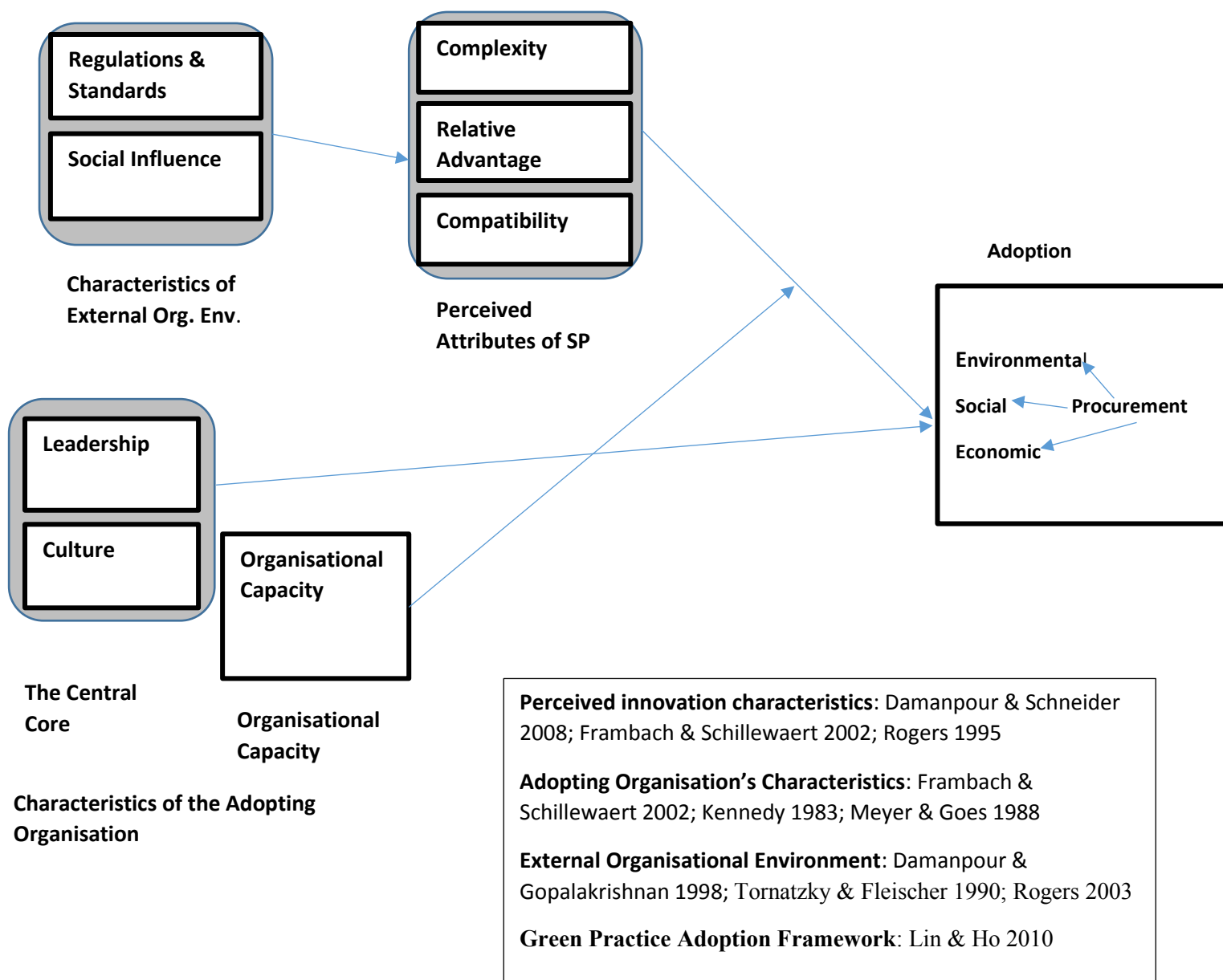
exert mediating or moderating effects on external organisational conditions relative to SP adoption. In the SP adoption framework, we have used regulations, standards, and social influence to represent the external organisational characteristics.

The characteristics of the adopting organisation is represented by two categories of variables: the organisational central core, and organisational capacity (please refer to section 2.2) for explanation. Since the elements of organisational central core: organisational leadership; and organisational culture are key in organisational decision making, we suggest that the organisational central core is likely to have direct influence on the adoption of SP. On the other hand, organisational capacity such as the human, financial, and infrastructural capacity, as well as the attitude of members of the organisation, and the ability of the organisation to absorb new ideas and practices can affect the extent to which various antecedents of SP affect the adoption of SP by organisations. Empirical studies such as Carter and Jennings (2004), Grandia (2016), and Morali and Searcy (2013) support the view that organisational capacity such as the attitude and behaviour of members of an organisation and also the human and financial resource capacity of organisations have enhancing or restricting effects on organisational uptake of sustainability principles. We therefore suggest that organisational capacity will moderate the effects of SP determinants on organisational adoption of SP.

The perceived characteristics of SP is represented by the three key determining factors of innovation adoption: perceived relative advantage, perceived compatibility, and perceived complexity (Tornatzky and Klein, 1982) . Perceptions of an organisation about a new idea or practice influences the decision to adopt it or not (Frambach and Schillewaert, 2002) . We suggest that perceptions of members of an organisation regarding SP will mediate the effects of external organisational forces on organisation adoption of SP.

The dependent variable of the framework; SP adoption is represented by the three sustainability dimensions of society, economy, and environment. The SP adoption framework is presented in Figure 1 below.

Figure 1: Sustainable Procurement SP Adoption Framework



Source: (Authors, 2018)

From the SP Adoption framework above, there are three categories of independent variables: the characteristics of external organisational environment; the perceived attributes of SP; and the characteristics of the adopting organisation. The dependent variable is SP adoption. The perceived attributes of SP mediates the effects of external environmental characteristics on SP adoption. The central core aspect of the characteristics of the adopting organisation has a

direct effect on SP adoption whilst the organisational capacity aspect has a moderating effect on the determinants of SP adoption. Next is the discussion section.

4 Discussion

Drawing on the SP adoption framework, this section discusses the research question posed in the introductory section. The first research question sought to ascertain the major innovation adoption variables that influence organisational adoption of SP.

From the literature review and also from the SP framework developed there are three major variables that have potential influence on organisational adoption of SP, namely: the perceived attributes of SP; the characteristics of the adopting organisation; and the characteristics of the external organisational environment (Frambach and Schillewaert, 2002; Tornatzky and Klein, 1982). The categorisation of the myriads of factors that influence SP adoption into three key determining variables brings orderliness and simplifies the phenomenon. This will make the SP phenomenon simpler to conceptualise and has implications for enhanced understanding of the concept. One of the major criticisms against the SP concept is its lack of clarity and vagueness (Hoejmose and Adrien-Kirby, 2012; Meehan and Bryde, 2011). The SP adoption framework concretises the major categories of variables and processes involved in organisational adoption of SP. This will contribute towards making the SP concept clearer and more understandable.

The second research question is about the relationships that exist between variables involved in SP adoption. External organisational factors such as government policy, rules and regulations, standards, and customers' pressure have been identified as having positive effects on organisational adoption of innovation (Aarons *et al.*, 2011; Frambach and Schillewaert, 2002; Rogers, 1995). It is therefore suggested that the external environmental characteristics presented in the SP adoption framework will have positive relationship with SP adoption. We however suggest that since perception about an innovation determines its adoption and practice, the positive relationship between the external organisational characteristics and SP adoption will be mediated by the perceived attributes of SP. Relative to the perceived characteristics of SP, publications such as (Rogers, 1995); (Wisdom *et al.*, 2014); and (Bayer and Melone, 1989) suggest positive relationship between perceived relative advantage, and perceived compatibility of innovation and innovation adoption. However, perceived complexity of innovation has been found to have negative relationship with organisational innovation adoption (Rogers, 1995; Wisdom *et al.*, 2014). We suggest

therefore that, perceived relative advantage and compatibility of SP will positively affect organisational adoption of SP, whilst perceived complexity of SP will negatively affect its adoption by organisations. With respect to organisational characteristics, organisational leadership and culture have been found to positively affect organisational adoption of innovation (Damanpour and Schneider, 2008; Wisdom *et al.*, 2014). A positive relationship has also been established between organisational capacity and innovation adoption (Frambach and Schillewaert, 2002; Wisdom *et al.*, 2014). It is therefore suggested that organisational central core will have a direct positive effect on SP whilst organisational capacity will moderate the effects of SP determinants on organisational adoption of SP. We suggest that organisational capacity will be more of a moderating variable rather than a direct variable because we assume that organisational capacity such as financial and infrastructural capacities do not in themselves determine SP adoption, but they can be employed to facilitate SP adoption. The next section is the conclusion.

5 Conclusion

The objective of this paper was to ascertain the key categories of variables that influence organisational adoption of SP, and the relationships that exist between these variables. Reviewing literature on SP and innovation adoption revealed three major groups of factors that influence organisational adoption of SP, as well as related relationships. The insights from the literature review informed the development of a framework for conceptualising SP from an innovation adoption perspective. Potential significance of this paper includes simplification of the SP concept, and presentation of an alternative conceptual perspective for analysing organisational uptake of SP. This has implications for understanding and application of the concept. Sustainable procurement is an innovation, and conceptualising it from an innovation adoption perspective will enhance understanding of the variables and processes involved in organisational adoption of SP for theoretical extension and practical utility.

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International Comparative Research on IoT-based Supply Chain Risk Management

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ABSTRACT

In this paper, we firstly discuss current status and problems of food supply chain, which has been attached more importance in supply chain studies in recent years. And then, a review and analysis of the research on traceability systems for IoT-based food supply chains will be conducted. In the latter part, we introduce and explain the establishment of food supply chains in Thailand and China and their respective traceability systems with case studies. Moreover, we conduct a systematic analysis regarding the changes and effects the blockchain made on supply chains. Furthermore, through a case analysis of Japan, explicit speculation and forecast would be made on how blockchain affects the development of traceability systems of IoT-based food supply chain.

Keywords: Food Supply Chain, Risk Management, IoT-based Traceability System, Blockchain

INTRODUCTION

In 2011, Thailand suffered a severe flooding which occurs once in 50 years. Its traditional industrial base - Ayutthaya Industrial Park was flooded and nearly 200 factories were closed down. In the same year, Japan's 311 Kanto Earthquake also caused serious losses to the manufacturing industry and numerous supply chain companies in Japan. And recently, scandals involving data falsification in automotive, steel and carbon fiber have caused great impact on a large number of related supply chain companies and they are faced with the dilemma of supply chain disruption. In China, Sanlu Milk Powder Incident and Shanghai Fuxi Incident caused by the fact that information on manufacturer's irregular and unethical behavior was not shared with other enterprises in the supply chain in time, giving rise to serious losses to supply chain companies and leading to public's distrust. In particular, information asymmetry and insufficiency on food supply chain brought serious risk and hidden dangers to supply chain node enterprises. Therefore, how to prevent the above mentioned various types of supply chain crises and properly deal with them after the occurrence so as to promptly restore supply chain to normal and re-establish the trust of public are urgent issue.

In this context, establishing an IoT-based traceability system across the supply chain is most essential for implementing resilient supply chain. In this paper, we will first discuss current status and problems of food supply chain, which has been attached more and more importance in supply chain research in recent years. After this, a review and analysis of the research on traceability systems for IoT-based food supply chains will be conducted. In the latter part of the paper, we will introduce and explain the establishment of food supply chains in Thailand and China and their respective traceability systems through examples. After this, we will conduct a systematic analysis regarding the changes and effects the blockchain, which has become widely known as a result of the focus on fictitious cryptocurrency - bitcoin made on supply chains and especially, food supply chains. In the end, through a case analysis of Japan, explicit speculation and forecast will be made on how blockchain affects the development of traceability systems of IoT-based food supply chain.

THE DEVELOPMENT OF FOOD SUPPLY CHAIN

In 1996, Zuurbier et al. first proposed the concept of food supply chain on the basis of supply chain, and considered food supply chain management as a vertical integration mode of operation conducted by organization of agricultural products and food production and sales for the purpose of reducing logistics cost of food and agricultural products and improving quality stability and level of logistics services (Zuurbier, 1999). The research on food supply chain management has gone through several phases: the first phase is business flow management phase, and research scope covers business flow phase from output of agricultural products and food processing enterprises to their delivery to consumers. The research content is usually concluded in marketing category. The next phase is integrated logistics management phase. The logistics management of agricultural products is separated from marketing and extended upstream to the process of production and processing in enterprises manufacturing agricultural products and food, emphasizing market-oriented production and cost control on the entire procedure of logistics. In the last phase, regarding integrated supply chain management phase, research scope extends further to the most upstream enterprises of agricultural products, the purpose of which is to follow and trace security issues regarding quality of agricultural products and food, so problems can be detected and solved effectively.

Current Researches of Traceable Food Supply Chain

The emergence and development of food supply chain is an inevitable result of continuously enhanced demand of food consumption in recent years. Consumers are also paying more and more attention to the quality and safety of food. To meet consumers' demands on types and quantities of food and agricultural products, enterprises are constantly exploring and developing new technologies, nevertheless, when consumer demands being fulfilled, excessive use of new technologies and methods hazard human body and thus causes food quality and safety issues inevitably. Reason for this is information asymmetry between buyers and sellers in the market. In detail, when consumers purchase food or agricultural products, they lack product's hygiene, environmental and safety information. Therefore, it is necessary for enterprises to inspect and test products in all the phases of production procedure and disclose the information to consumers in time.

According to the definitions made by Codex Alimentary Commission and the International Organization for Standardization, traceability system can be expressed as: "a technical tool to assist an organization to conform with its defined objectives, and is applicable when necessary to determine the history or location of a product or its relevant components." (ISO, 2007). Food safety depends on every node in supply chain. Therefore, it is essential for every node firm to store relevant information of food production process for future reference. Traceability systems include internal traceability system and external traceability system. The former one refers to the tracing of products and relevant information within certain organizational chain of supply chain, such as quality traceability system of wholesalers' commodities, which is often a quality assurance system embedded in an organization. While the latter one is a vertical retrospective one across the entire supply chain, referring to the tracing of data and transaction process at every node. Gandino et al. (2009) studied the impact of Radio Frequency Identification (RFID) on food supply chain traceability. Regattieri et al. (2007) established a conceptual framework model for traceability systems. Alfaro and Rábade (2009) studied the inventory management of traceability system. Narsimhalu, et al. (2015) studied performance evaluation and optimization of traceability systems.

IoT-BASED TRACEABLE FOOD SUPPLY CHAIN

Widespread application of Internet of Things (IoT) technology has made a profound impact on food supply chain. The so-called IoT refers to a huge network constructed through the combination of a variety of information sensing devices such as RFID devices, product electronic codes (EPCs), infrared sensors, global positioning systems, laser scanners and other devices with the Internet (Yan et al., 2012). Its purpose is to have all items connected to the network for better identification and management. Wireless network is connected through electronic tag RFID, EPC, sensors, two-dimensional code and other interfaces installed on various objects, so as to intelligentize objects and realize communication between human beings and objects. In the meantime, communication and dialogues among objects can also be actualized. Therefore, IoT is widely applied in fields including transportation and logistics, medical system, intelligent environment, personal and social applications.

From the perspective of risk management, it is necessary to identify potential major risk factors in the chain, and to analyze in depth the causes and manifestations of various risk factors. With analyzing the causal relationship between this key factor and other risk factors, effective measures to control risk might be sought from the causation, accordingly, various countermeasures for risk control are put forward for the purpose of risk prevention. Based on IoT technologies, historical production process of products is automatically sensed and recorded through RFID, and the information is integrated into traceable network so that the entire process of recording and monitoring products from procurement, production, processing, storage, packaging and distribution can be achieved, network tracking can also be conducted in the application terminal at any time through IoT.

INTRODUCTION OF BLOCKCHAIN

Along with the development of IoT technologies and the advent Big Data era, realization of decentralized operation mode that has been unsolved in business field for years becomes possible. A typical example of this operation mode is blockchain which supports the highlighted virtual crypto currency bitcoin as backstage technology.

At present, there is no unified definition for blockchain. Satoshi Nakamoto pointed out that blockchain is jointly maintained, managed and supervised by nodes in network, and it is decentralized and trustless (Nakamoto, 2008). According to Swan, M (2015), blockchain technology is a decentralized, open and transparent database. Noguchi, Y. (2017) considers blockchain as a decentralized and database trusted technology formed through integrating mathematical algorithms to constitute orderly data block.

In the application of blockchain, Rieke et al. (2017) indicated that blockchain can make robots work without being affected by improper human-computer interactions and data tampering of supervisors, ensuring the authenticity of sensing data of microbiological sampling robot system. Based on the characteristics of blockchain, Tapscott et al. (2016) changed the thinking of energy internet and explored practical and potential application of blockchain in energy Internet. They suggested that blockchain may fundamentally change the modern financial credit system and reduce financial risks, breaking through financial sector and expanding the application range of blockchain. On the basis of blockchain, coupling analysis combing the blockchain with supply chain logistics information resource management is conducted, and supply chain logistics information ecological model is constructed. In the meantime, the application of blockchain in supply chain logistics information resource management is also explored.

The Combination of Blockchain and Supply Chain

The updating and maintaining of blockchain database is accomplished by distributed subjects corporately rather than being implemented by a certain traditional central agency, which embodies the decentralized characteristic of blockchain technology. Supply chain is a diversified, multi-level and multi-functional chained organization in which manufacturers, suppliers, distributors, retailers and customers realize resource sharing through information sharing. Blockchain technology and supply chain information resources distributed management are based on the idea of decentralization, and main bodies equally exchange and store information and have the same rights and obligations, which reflects the general coupling relationship of them (Edwards, 2017).

From the next chapter, we will conduct in-depth analysis and argumentation of the above concepts and elaborations through case studies from different countries.

TRACEABILITY SYSTEM FOR SUPPLY CHAIN RISK MANAGEMENT OF CHAROEN POKPHAND FOOD

Charoen Pokphand (CP) Group, is the biggest integrator in Thailand and also the country's largest comprehensive food company. Among the CP group, the largest subsidiary is CP Food (CPF), covering each stage from food processing to distribution (CPF, 2018). The company's main production base is in Thailand, but also has overseas bases. Foods to be handled are mainly poultry meat, livestock products such as pork, and marine products such as shrimp and fish. CPF introduced Good Manufacturing Practice (GMP), HACCP, International Standard (ISO) 9002, etc., ensuring food safety and quality assurance more reliably. In addition, CPF independently develops a quality check system to be carried out at each process of food production and a traceability system that can trace raw materials to the production stage.

The traceability system of CPF consists of the following three elements.

Individual identification system is indispensable for identifying diseased animals and is the basis for the entire system. For this purpose, each livestock is assigned a unique number. For domestic animals, devices with numbers recorded are attached to individuals. This device has a type such as ear tag and wireless chip (RFID). In the case of broilers, unlike in the case of cattle and pigs, instead of identifying individuals using ear tags or wireless chips, a method is adopted in which numbers are allocated and managed for each flock group.

By registering the positions of individuals and flocks in the position confirmation system, it is possible to quickly grasp the areas and livestock in which producers are affected when disease occurs. In addition, this will help administrators in charge of animal health help to locate risky livestock, make accurate judgment to minimize the damage, and smoothly respond to containment of disease and prevention of spread.

The tracking system consists of livestock location information and a record of movement. This system can provide information on the location and movement history of livestock to administrative officials in charge of animal hygiene in order to investigate the fact that diseases of livestock have occurred.

In this traceability system, both the seller and the consumer can confirm the series of records of the feed, the livestock and the processing from the start of livestock rearing on the Internet. According to the report (Netherlands Embassy in Bangkok, 2016), many importing countries are requesting traceability of the

whole process of food production, requesting documents to confirm the quality of foods. In particular, as it is becoming a prerequisite, implementing the traceability system will work advantageously for chicken exports.

THE REAL-TIME CONTROLLABLE AND FULLY TRACEABLE SYSTEM OF XIANYI GROUP WITH IOT

Henan Fresh Easy Supply Chain co., LTD (Xianyi Group in Chinese) is one of the temperature control model of supply chain enterprise in China, based on cloud temperature control supply chain system (Xianyi, 2018). Based on the Internet background of the fresh industry, the supply chain service is positioned in Online to Offline (O2O), and the temperature control supply chain integration service platform is built to its own. The networked service capability provides customers with six product systems: warehouse transportation, collection and distribution, distribution processing and supply chain finance.

Figure 1. The Diagram of Xianyi’s Cold Chain Traceability System (Cui, 2018)

Fresh foods are extremely demanding on temperature, and the entire chain is the most fundamental for food safety. Simply providing a single aspect of the service makes it difficult to achieve effective links from the origin to the end, nor to meet increasingly diverse customer needs. Xianyi builds a One-stop temperature control supply chain services system that is fully end-to-end visualized, thus providing partners with standard certification, procurement execution, customs declaration, cold chain logistics, circulation processing, and warehousing under the premise of ensuring food safety. In China, the entire chain of fresh produce from the origin to the end is difficult to regulate, standardization of miscellaneous categories, and quality control is difficult. Xianyi breaks down the company’s temperature-controlled supply chain services into standardized products through service productization: standardized management, standardized processes, standardized equipment, and strict operation of each circulation link to form standardized and integrated process.

Building Traceable Food Supply Chain

In recent years, Xianyi has integrated new technologies with the fresh food supply chain, and applied the Internet of Things (IoT) to all aspects of fresh foods industry, such as raw material procurement, production and processing, circulation processing, temperature-controlled warehousing, cold chain transportation and distribution, etc., in order to achieve the traceability of food safety (Cui, 2018). Based on cloud computing and big data, Xianyi builds a smart warehousing and transportation system, and uses Internet of Things technologies such as RFID tags, GPS, temperature sensors, and driver application to monitor the status of fresh products in circulation during real-time, including temperature, cargo status and GPS positioning information, food status and quality information, to ensure that the entire process of the waybill can be visualized and platformized, and to ensure food safety (see Figure 1.).

In the upstream farming and animal husbandry environment, Xianyi sets up a cloud agriculture and animal husbandry industry service platform, and through the data exchange with the upstream breeding base, opens

up the industrial data chain, monitors the pig breeding environment and process, realizes the quality trace of agricultural products, and ensures the source safety and quality. In the processing and manufacturing process, Xianyi transforms the production, processing and manufacturing production line through new technologies such as IoT, and realizes online operation equipment operation analysis, fault warning, quality diagnosis, remote maintenance, through equipment intelligent transformation and facility function upgrade. Therefore, the digitization and intelligent levels of production equipment are enhanced, the visualization of production services is realized in order to ensure food and production safety.

EACH FARMER CROSS – MONITORS PRODUCTION INFORMATION IN THE JAPANESE EXPERIMENT

The company of Information Service International-Dentsu, which deals with system construction, to utilize benefits of difficult tampering for food traceability (tracking production history). Since the beginning of October 2016, Dentsu has been conducting demonstration experiments to ensure the quality of organic agricultural products in cooperation with Aya-cho, Miyazaki Prefecture’s district.

Organic vegetables take 2 to 3 times more time and effort than ordinary farming methods. However, with the current agricultural mechanism, its cost cannot be reflected in the price as it is. In addition, Japanese consumers stick to whether vegetables are domestic, but they are not very interested in further value (ISID, 2018). Therefore, organic vegetables do not sell very well in normal supermarkets. However, there are certain consumers who are seeking safe vegetables. If reliable vegetables can be delivered to such consumers, the labor of organic farming can be valued (ISID, 2018).

Each farmer in Aya-cho carries out planting and harvesting, use of fertilizers and agricultural chemicals, quality check of soil and agricultural products, etc. based on certification criteria established by Aya-cho (see Figure 2). In the field trial, all of these histories are recorded on the block chain. Aya-cho grants a unique ID along with an approval mark by its own standard to agricultural products shipped after this process. By searching with this unique ID, consumers can confirm on the Internet that the agricultural products are definitely produced by Aya-cho, that they were produced based on Aya-cho’s strict certification criteria, that their history has not been tampered. If these vegetables are sold to consumers directly by Marche etc., the value of organic farming method can be reflected in price.

The blockchain that registers production management information by this demonstration is a so-called “private type” blockchain which Aya-cho operates and manages. Such unique private blockchain are characterized by faster processing than public blockchain used in bit coins and the like. However, this system alone can not maintain objectivity like a public block chain. Therefore, in Aya-cho, data was first written to a rapidly processing blockchain, and the information was managed by a public blockchain provided by Estonia's Guardtime. In this way, by realizing information management with high reliability and security guaranteed by using blockchain technology, it is possible to create new value in the field that has been overlooked so far.

Figure 2. The Structure of Dentsu’s Traceability System based on Blockchain (Created by authors)

DISCUSSION AND FORESIGHT

The purpose of supply chain management is to minimize system cost under certain service levels. Traditional supply chain management is simply connecting node enterprises in series to form a chained entirety. In digital era, supply chain enterprises realize the efficient flow of logistics, information flow and capital flow through information network, with logistics and capital flow as the foundation of supply chain structure. Information flow constitutes the neural network of supply chain and is the link connecting all parties. While in terms of information flow, various information generated by supply chain operations are separately stored in the system of separate link, resulting in a lack of transparency and traceability of information flow.

About the case of Thailand, CPF realized traceability of the entire process of food production by its own system, and utilizing IoT technology, thorough risk management in emergency such as disease occurrence is done. However, Thailand Department of Livestock Development (DLD) provides electronic systems and databases for managing the quality of livestock products, and provides e-services that enable stakeholders to apply for various applications efficiently. A distributor and/or processor who wishes to move livestock and carcasses that submitted an e - movement (a system that can apply for moving livestock on the Web) is supposed to receive a permit from the DLD via the internet in advance. That is to say, the information of livestock products needs to be managed directly and/or indirectly by government departments, and even intergovernmental information management involvement is necessary for risk management of livestock distributor, processor and other stakeholders.

About the case of China, Xianyi has created a PaaS information service platform and a self-developed cold chain traceability system through the innovation and application of IoT, realizing the standardization, informationization and visualization of the whole process of order logistics, allowing products to be seamlessly monitored in the entire chain. However, the traceability system not only need the government involvement as well as CPF, but also fundamentally be built as a centralized architecture. This will cause some significant potential problems such as system overload, vulnerability, asymmetry of information, etc., and information quality and instantaneousness of the traceability system will be suspected as the core of risk management.

About the case of Japan, Dentsu and Aya-cho conducted the first experiment in vegetables production and distribution, aided by the technology of blockchain which is operated under a decentralized architecture. In this experiment, data was written at the stage when producers planted vegetables, weeded, and harvested the fields. Not only the growth situation, but also soil condition will be upgraded sequentially with photos. When the production farmer's writing reaches a certain amount, data can be blocked. After that, the data is shared with the computer owned by each producer via the Internet. Then, everyone always monitors whether the written information is correct or not.

In the other hand, there are some new conceptual and practical models be proposed and partially given solutions to the above issues. For instance, Pang, et al. (2012) proposed a value-centric design of the internet-of-things solution for food supply chain. They insist that the system paradigm must be extended from the traditional traceability-centric design to the value-centric design. And a systematic value-centric business-technology joint design framework is presented and verified by prototype system. However, as authors mentioned in the paper, a limitation is that a static sensor portfolio strategy was used, so that some sensors could not be changed. Furthermore, even the dynamic sensor portfolio approach can be used, the system is still built as a centralized architecture, and those problems such as vulnerability and overload, won't be solved eventually.

In addition, Verdouw, et al. (2016) purported a virtualized architecture of food supply chains with the internet of things. They introduced an approach to virtualization of business control in food supply chain, and proposed the Flspace platform which is presenting how the approach can be implemented by using generic technology enablers, such as IoT and Cloud Computing capabilities. Even though this approach certainly provided to us a novel prospect such as the application of Virtual Reality (VR) technology in food supply chain, they didn't mention about information distortion and information security which are critical issues from the risk management point of view.

By the way, the introduction of blockchain technology enables all supply chain node companies to accurately grasp data and information, forming a smooth and transparent information flow in blockchain supply chain, and problems existing in operation process can also be timely detected and solved. At the same time, the time-stamped blockchain data and information can resolve the disputes among the participants in supply chain and trace existing problems of product circulation in supply chain.

To conclude, with the development of big data, Internet of Things and cloud computing, blockchain technology is expected to be applied to all walks of life. The research on blockchain technology is also in full swing in the industry and academia. The application of supply chain risk management based on blockchain technology will further enhance the security of member enterprises, their capital flow, information flow and logistics and present a more efficient and robust supply chain with a wide range of applications. From the overall development of its process, the development of food supply chain based on blockchain technology is still in its infancy. On the one hand, with the standardization of data based on blockchain technology platform, can the interconnection of values be realized and the problems regarding standardization of embedded technologies, business and various interface data be solved, and it is possible to actualize large-scale application and promotion in future. On the other hand, issues such as whether the performance of supply chain platform based on blockchain technology is stable, whether the capacity can be expanded, whether traceability can be guaranteed, and so on, still need to be explored in applications and be verified by practice constantly.

CONCLUSIONS

In this paper, we first describe and analyze the status and characteristics of food supply chain in detail. And then we conduct a systematic research on the establishment of IoT-based food supply chain and the traceability of safety management system. And on this basis, related cases of representative enterprises in Thailand and China are introduced and analyzed. In the latter part of the paper, the innovative and rigorous blockchain technology, and the opportunities and challenges it brought to supply chain risk management system are analyzed and refined. We take Japan's case as an example, analyze and predict the development and prospect of its application. In the end, we make summarization and prospects for the realization of blockchain technology – orientated and IoT-based supply chain risk management system.

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APPENDIX

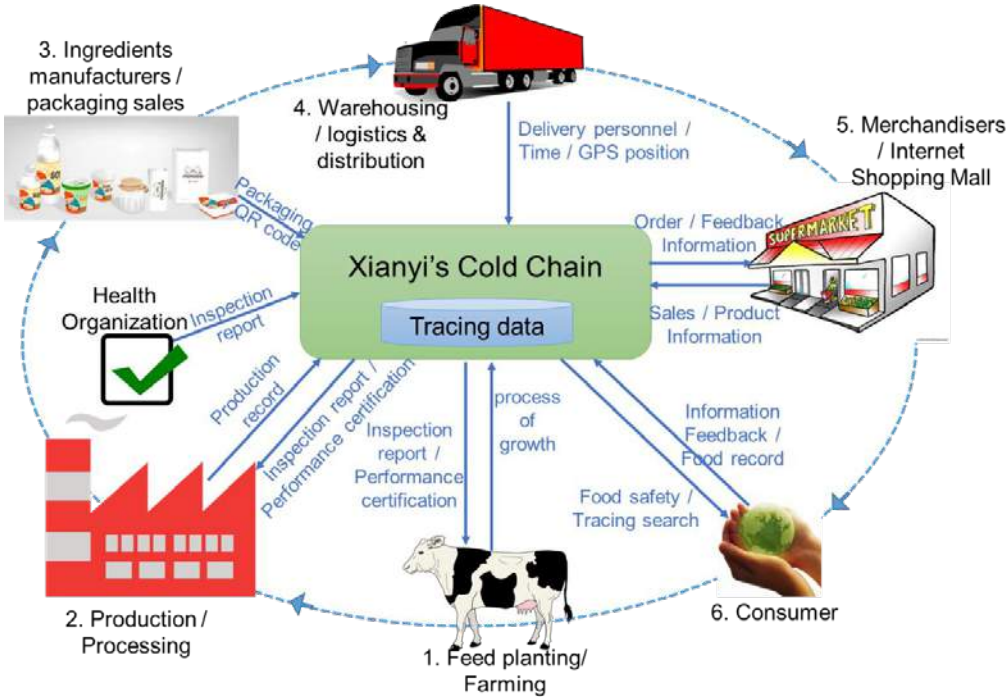


Figure 1. The Diagram of Xianyi's Cold Chain Traceability System (Cui, 2018)

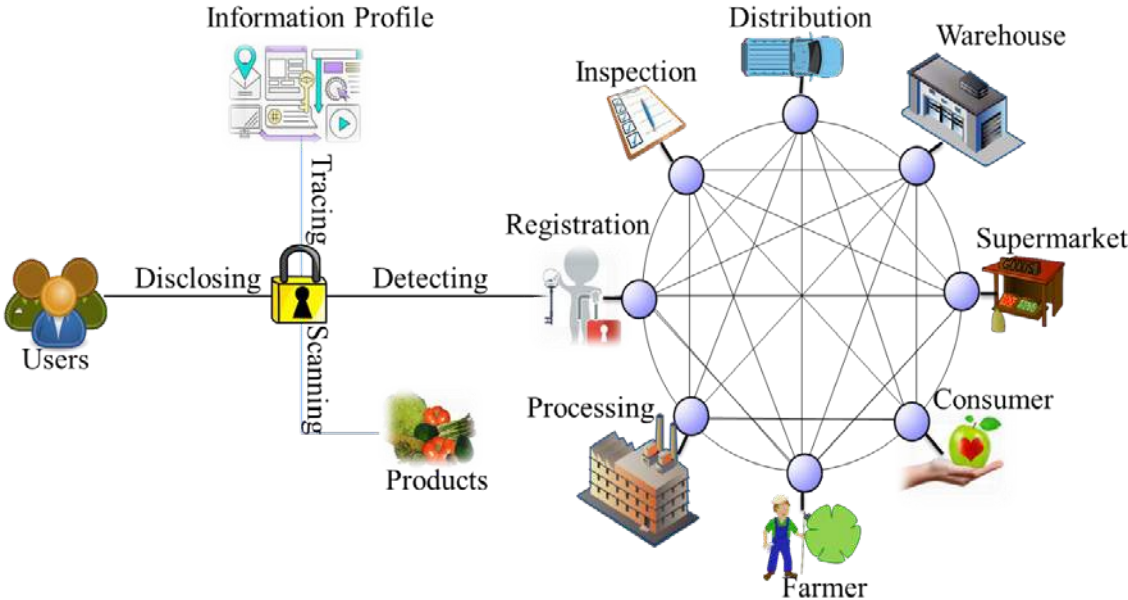


Figure 2. The Structure of Dentsu's Traceability System based on Blockchain (Created by authors)

Revision list	
Before	After
The Chapter of INTRODUCTION OF BLOCKCHAIN in p.5B	Transferred all the contents to p.3 and 4, in order to respond comments of reviewer 1 and 2.
The Chapter of TRACEABILITY SYSTEM FOR SUPPLY CHAIN RISK MANAGEMENT OF CHAROEN POKPHAND FOOD in p.3	Revised all the contents in this Chapter, in order to respond comments of reviewer 2.
The Chapter of COLD CHAIN OF XIANYI SUPPLY CHAIN in p.4 and 5.	Revised all the contents in this Chapter, in order to respond comments of reviewer 2.
The chapter of EACH FARMER CROSS – MONITORS PRODUCTION INFORMATION IN THE JAPANESE EXPERIMENT in p.6 and 7.	Revised all the contents in this Chapter, in order to respond comments of reviewer 1 and 2.
The places of origin of Figure 1 and 2 in p.4 and 6.	Added the places of origin of Figure 1 and 2, in order to respond comments of reviewer 2.B
The chapter of DISCUSSION AND FORESIGHT in p.7.	Revised all the contents in this Chapter, in order to respond comments of reviewer 1 and 2.B
The section of References in p.8 and 9.	Added several new references, in order to respond comments of reviewer 2.

Stream 08 Management Education & Development

Refereed Delivered Paper

Learning from Student Experience of a Business Capstone Course

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Stream 08. Management Education & Development**Refereed Delivered Paper****Learning from Student Experience of a Business Capstone Course****ABSTRACT**

Final year capstone course is typical for addressing graduate employability. The dearth of study on the development and implementation of capstone is limited. This study examined student experience in undertaking a business capstone course in Asia. This qualitative study extracted 117 significant statements that resulted in six subtheme clusters (i.e., adaptability, multi-tasking, mind shift, unfamiliarity with assessments nature, unfamiliarity with cross disciplinary learning, and workload). The six subtheme clusters resulted in two clusters, namely, soft skills development and learning and assessment clusters that points to newness in student experience. The benefits and intended learning of western centrically designed capstone courses may not be universal. Contextual learning needs necessitates adaptation. Practical implications are discussed along culture and learning styles.

Keywords: capstone, curriculum design, student experience, qualitative, Asia

INTRODUCTION

In recent decade, there has been considerable debates on the existence of universities in the society. Gone are the days when a university degree was safely perceived as a ticket to good employment (Cullen & Callaghan, 2010, p.126). With rapid advancement in technologies, complex business environment and fluid job market, knowledge, skills as well as technologies have shorter shelf life, mandating workers to constantly acquire new knowledge and skills to stay effective and relevant.

There is a gap between the graduate qualities that universities produced and the skills that employers are looking for hiring. Universities are questioned of its currency in preparing their graduates for the marketplace (The Guardian, 2014). Universities have been criticized for churning out graduates that are poorly equipped with relevant skills to function effectively in the workplace.

The criticism comes partly as a result of an increasingly complex and flexible labor market that changes more quickly than the universities (Rae, 2007), rendering knowledge and skills to be increasingly irrelevant (Rae, 2007). With the fast-changing demand in the workplace, the marketplace is facing shortage of graduates with broad knowledge, diverse skills and the right attitude (Rae, 2007). Universities are under constant pressure to revisit education curriculum and explore different teaching pedagogies (Cullen, 2015) to address the short-term and long-term expectations of graduate employability. Employability skills are generic soft skills that are important for effective performance in the workplace (Rae, 2007). Being employable requires both the knowledge and skills for the current job, and the agility to unlearn and relearn so as to adapt to a constantly changing business environment.

The climate of continual change and innovation redefine and disrupt traditional careers that is predominantly based on discipline or specialization. The evolving marketplace also creates new job functions that cut across different disciplines to serve the current employment market. Therefore, workers are expected to know beyond their academic specialization to hold a broad understanding of business and

to integrate cross-disciplinary knowledge for effective decision making. Consequently, graduates need to evolve along with the market changes to stay relevant.

Evidently, a university degree that predominantly built on knowledge and discipline-based skills may limit its graduates in being versatile, adaptable and successful in work and life (P21). In other words, it is not sufficient to step up to provide learning avenues for students to acquire discipline-based knowledge and develop skills to narrow the gap between academic learning and professional work. It is also equally important for universities to instill lifelong learning skills among university graduates (Dunlap & Grabinger, 2003). Lifelong learning skills enable graduates to evolve with market changes and reskill to stay relevant to the marketplace, thereby making it possible for them to move across jobs and sectors. Hence universities need to aspire to produce graduates that are lifelong learners (Dunlap & Grabinger, 2003). The P21 Framework that represents the 21st century learning student outcomes advocates four key attributes or skills for readiness of students, namely, critical thinking, communication, collaboration and problem solving.

One of the common ways to cultivate lifelong learning skills to address graduate employability is the introduction of capstone courses in the final year of a university degree program (Aaker, Wilson & French, 2014). Capstone courses carry the purpose to integrate fragmented knowledge acquired throughout the university years as a unified whole (Kift, Field & Wells, 2008) to connect students' education with their lives in preparation for the transition to a professional status (Schroetter & Wendler, 2008). Capstone courses are tailored suitably to student and workplace needs (Thomas, Wong & Li, 2014) by provide learning experience for students to build on and connect with their lives that they can be more prepared for the transition from university to the marketplace (Kift, Field & Wells, 2008).

The dearth of study on the development and implementation of capstone is limited and the achievement of learning outcomes are still poorly understood. There is a clear lacking in literature to address how well changing curriculums in capstone courses are developing students with employability skills to address the current trends and market pressures (Thomas, Li & Wong, 2014).

This study intends to examine final year student experience of undertaking a newly introduced capstone course in 2016 for a business degree program in which one-third of its students are international students from Asia. This exploratory study is in view that the design of a capstone course can vary from business school to business school and thereby affects student experience. The capstone course considered expectation and resources of various stakeholders (Todd & Magleby, 2005). It reflects typical elements of capstone course that are advocated by Brooks, Benton-Kupper and Slayton (2004) such as reflection, cross-disciplinary learning and contribution to others via group project. The study warrants an examination when the capstone course is western centrically designed while scholarly work on student experience of capstone course in the Asian context is lacking.

By understanding the learning experience of students in the Asian context, this research provides an avenue for academicians to consider how capstone courses can be better introduced. The findings help to identify areas for adaptation and enhancement to support student in achieving the graduate attributes important for employability. It may provide insights into curriculum design and support that is inclusive to diversity.

LITERATURE REVIEW

One of the common ways to cultivate lifelong learning skills to address graduate employability is by introducing capstone courses in the final year of a university degree program (Aaker et al., 2014). Since it is no longer sufficient for graduates in this contemporary world to stay discipline-specific to be highly employable (Keller, Chan & Parker, 2010), capstone course provides the platform for students to acquire knowledge and skills beyond discipline-specific capabilities to enable them to be versatile. This platform is intended by integrating fragmented knowledge acquired throughout the university years as a unified whole (Kift et al., 2008).

Capstone courses are tailored suitably to student and workplace needs (Thomas et al., 2014). This can be achieved by building learning experience of students and connect the experience with their lives that they can be more prepared for the transition from university to the marketplace (Kift et al., 2008). This experience typically facilitates the integration of learning in a student's major with other disciplines (Brooks, Benton-Kupper & Slayton, 2004) to link learning to more general education themes, global issues and purposes (Rowles, Koch, Hundley & Hamilton, 2004).

Beyond discipline-specific skills, the workplace often expects employees to also possess generic skills such as the critical thinking, learning, adaptability, communication, teamwork and problem solving skills (Dunne & Rawlins, 2000). As such, the curriculum of the capstone course can be designed to develop and assess various higher order thinking skills (Payne, Flynn & Whitfield, 2008, p. 141) that are much appreciated by employers. The capstone course is also believed to connect students' education with their life planning since it provides the platform to engage in meaningful reflection at academic, personal and professional levels (Kavanagh & Drennan, 2008; Rowles et al., 2004). In this way, the capstone course prepares students for the transition to a professional status (Schroetter & Wendler, 2008).

Past research found positive learning outcomes among students who have completed capstone course. For instance, 21st century skills such as problem solving, decision-making, critical thinking and communication (Kift et al., 2008). Rhodes and Agre-Kippenhan (2004) found that students reported to have gained interpersonal skills, leadership ability, tolerance, volunteerism. A perception study (Keller, Chan & Parker, 2010) illustrated that students perceived to have improved their negotiation, collaborative teamwork, conflict resolution and problem solving skills.

Thomas et al. (2014) found that the reported levels of four characteristics of capstone (i.e., integration, reflection, closure and transition to the workforce) was significant higher for graduates who have undertaken final year capstone course than those who have not. It was also found that both groups reported quite highly of capabilities (i.e., critical thinking, lifelong learning) and a weak relationship between conducting final year project and graduate attributes.

METHOD

Context of study

This study is designed to understand learning experience of final year university students in a business capstone course in a university located in Malaysia. The business program has approximately 30 per cent of international students from across Asia and receives a small number of exchange students from western countries. The program expects students to commence with specialization of discipline in the first or second year of the program. When the business capstone was introduced, it affected students who have commenced their degree program prior to its launch in that students had to undertake the business capstone course as an extra course in addition to the regular 24 courses over a period of three years. Hence the debut launch came with various financial and career planning implications on the part of students.

The business capstone course is designed to promote collaborative learning, peer learning, teamwork, adaptability and critical thinking skills. It incorporates reflective essays and business simulations as specific assessments for each discipline of accounting and finance, economics, law, management and marketing. In this manner, students were expected to consider various perspectives to identify their personal learning as well as in decision-making. Guest speakers were invited to provide talks that narrow the gap between academia and industry as well as to relate the talks to student life, personal aspiration and planning. This is followed by in-class assessment via reflective essay. This cycle repeated for each of the discipline area. The business capstone also created a platform for collaborative and peer learning. Five discipline-specific business simulation cases were introduced to students as a simulation project to solve operational problems of selected firms over a 10-week period. In this experiential learning project, students formed groups to solve problems and make decisions.

Sample procedure and research design

A qualitative method was employed in consideration of the explorative nature of the study in understanding student learning experience of a western-driven capstone design in a diverse Asian context.

A qualitative method via learning reflection is deemed appropriate to capture the experience and journey of learning process. It provides a better and richer description compared to a quantitative research (Eriksson & Kovalainen, 2015).

After obtaining ethics approval to conduct the study, a paper-based questionnaire survey was conducted in 2016 to invite voluntary participation from a population of 220 students. The survey has Likert-scaled items to represent constructs under the study as well as a broad column for students to note their learning reflection. This current paper uses the latter set of reflective data. The inclusion criteria for the purposive sampling were (a) final year student undertaking the capstone course, (b) 18 years of age or older, and (c) the degree pursued is a business degree. In the first round of study, a total of 140 students have volunteered to participate in the survey that incorporated quantitative survey design. The survey also allocated a column that invited participants to note their thoughts and experience about learning the capstone course. The qualitative responses provided by 140 students in the first round of data collection are used along with 2017 data set to understand learning experience and perceived course enhancement as a result of various educational interventions. The same data sets are also employed to develop the current paper.

Data analysis

Colaizzi's (1978) phenomenological method was employed in analyzing the qualitative responses. In consideration of rigor in this qualitative research that adopts thematic analysis, the team of researchers delegated research work to address the reliability of the study. The research team consists of three researchers in which the main researcher led the teaching for the capstone course and the remaining researchers oversee the course enhancement of the newly launched capstone course. The main researcher operationalized the data collection and recorded the qualitative responses onto an Excel file. The second researcher verified the accuracy of the data entry. Both the main and second researchers read the qualitative responses several times to acquire a sense of feeling. This is followed by a discussion with

tutors who observed and actively interacted with students to verify researchers' understanding of the qualitative data.

In qualitative research, the researcher transcends past knowledge and experience to understand a phenomenon at a deeper level. Bracketing is a process of putting aside one's belief, feelings and perceptions to be more open to the phenomenon (Colaizzi, 1978). Since the main researcher delivered the teaching of the capstone course and is part of the research team, bracketing is addressed by having the second researcher who is also experienced in qualitative research to drive the full process of data analysis and coding.

In the initial stage of data analysis, the main researcher and the second researcher separately conducted the analysis. Significant phrases from the data set were highlighted using luminous pens of different colors to represent early identification of different themes. The two researchers compared their preliminary analyses over two sessions of peer debriefing for peer evaluation. To address bracketing, thereafter, the second researcher immersed in four rounds of analysis and reflective note-keeping over nine months of prolonged engagement. The iteration process between data and interpretation was necessary for identification of emerging themes. From the 140 responses, 117 significant statements were distilled to formulate more general restatements or meanings. The formulated meanings were clustered into six clusters of themes that enabled the emergence of two secondary-level common themes that directed to newness as the major theme for learning experience of all the survey participants. Subsequently, all of the researchers discussed over two debriefing sessions on the interpretation of distilled statements into meanings and common themes.

RESULTS and DISCUSSION

The exploratory study reveals interesting findings for academicians to reflect in curriculum design of business capstone courses. Indeed, student experience in this business capstone differs from

those in the past literature that presented the numerous learning benefits. Despite having considered expectation and resources of various stakeholders and reflected typical elements of capstone course (i.e., reflection, cross-disciplinary learning, contribution to others), the debut launch of the course seems to show that the western centrally designed capstone was too challenging for students from various aspects. The findings reveal the importance of student context when incorporating well-intended teaching pedagogies. The student context that affects their learning process presents some context-specific challenges that informs the inappropriate degree of new assessments in a single course and the weaknesses of implementation (i.e., support versus self-directed learning).

From the 140 qualitative responses, 117 significant statements were extracted. Table 1 includes examples of formulated meanings from the significant statements that resulted in six subtheme clusters (i.e., adaptability, multi-tasking, mind shift, unfamiliarity with assessments nature, unfamiliarity with cross disciplinary learning, and workload). Sorting the six subtheme clusters into secondary level major theme clusters resulted in two clusters, namely, (I) soft skills development (Table 1) and (II) learning and assessment clusters (Table 2). The two clusters points to a single major theme that is newness.

Theme 1: Adaptability. In this cluster, respondents focused on the uneasiness associated with being outside of their comfort zone given the multi-disciplinary nature of the business capstone course. While being repeated informed that the business capstone is designed with some reflection of the work environment, the capstone course was envisioned as an over-whelming course that left them ‘handicapped’ – in learning, meeting deadlines, and scoring. The following statements are evident that respondents found it hard to adapt and have had different kinds of negative affectivity. A respondent expressed fear and helplessness in coping with the capstone course while another wrote about confusion and anxiety.

“I am scared. I don’t know what I’m learning. I feel like I can’t master the course. I feel suffocated. Individual assessments twice per week makes me feel stressed.”

“I think multiple guest speakers and tutors [for specific discipline-based topics] make student nervous and confused.”

Despite being informed of the typical nature of capstone design and its intended benefits, a respondent seemed to understand little and revealed resistance to embrace the multi-disciplinary capstone course by noting, *“We are not necessarily specialized in all aspects.”* Another student expressed appreciation for the course design in preparing one to face the tough corporate world but also expressed concerns to embrace and adapt, *“I think this course is great & it is useful to me in the future. ... [but better to] gives us a bit more prep ...such as in the 1st and 2nd year of my program so that I don't feel so overwhelmed of this course now.”*

A respondent showed frustration in the reflection of managing assessment tasks across various courses in the semester when assessments were due in the same week. It seems that the respondent could not find sufficient time to attend to assessment tasks, *“Don't do reflective task every 2 weeks as it clashes with our other assignments and make us have no time to do all of them.”*

Theme 2: Multi-tasking. In this cluster, focusing on the demand to multi-tasking so as to juggle well with the capstone course was the pervading image for many respondents undertaking this capstone course. Students were new to the nature (i.e., multi-disciplinary, small but many assessment tasks) and assessment types (i.e., reflective essay, business simulation) of the capstone course. The sense of not being able to cope was evident in their description of the capstone course. A respondent reflected, *“I feel like I am doing multiple courses.”* Another noted, *“We are unable to complete so many things.”*

Theme 3: Mind shift. Respondents focused on the pressure for cognitive changes associated with their study. Students undertaking the capstone course attempted to cope by doing their best to shift their lenses. However, it was evident that respondents faced challenges to learn and analyze beyond their own specialized discipline. The various reflections were evident that multi-disciplinary design was thought as unnecessary for graduates. A respondent expressed loss in learning, *“We don't know what we will learn or achieve... this course is diversifying itself too much that it sometimes confuses me.”* The following

shows some similar reflection: “*Since the students major in very different areas, it may not be very relevant for one [with different major] to reflect on a certain area as we have very different thinking scope.*” and “*...maybe this course can be divided and focus on major of students...*”

Table 1: Illustration of the emergence of subtheme clusters to soft skills development

Formulated Meanings from Significant Statements	Subtheme Cluster	Secondary-level Major Theme Cluster
<p>6. It is difficult to cope with all. 11. This course requires multi-disciplinary knowledge that we are not specialized in. 7. Confusion over simulated scenarios makes it difficult to advance analysis to the next scenario. 25. Having reflective essay completed during tutorial is not right. 31. This course is hard to master. 111. Learning support is needed so as not to overwhelm student learning. 122. The different nature of assignments and the overlapping period of assignments makes completion of work tough.</p>	<p>Adaptability: Learning experience of curriculum that reflects work environment pushes students out of their comfort zone and to adapt to various learning, and tasks.</p>	<p>Soft skills development</p>
<p>5. This course feels like doing multiple courses within one course. 15. It is difficult to complete multiple tasks. 31. Lost in learning. This course is hard to master. 122. The different nature of assignments and the overlapping period of assignments makes completion of work impossible.</p>	<p>Multi-tasking: Learning experience creates awareness of workplace nature that are challenging, concurrent, and cross-disciplinary that students are expected to develop multi-tasking skills.</p>	
<p>5. Students faced difficulty in shifting thoughts between personal for reflective learning and company perspectives for business simulations. 14. The cross-disciplinary nature or diversity of the course is confusing. 86. It is new and confusing to learn this course due to a specific major or specialization. 89. The discipline-specific lectures for reflective learning are slightly hard to grasp and scattered. 93. Students find it less relevant to reflect on areas outside their major given their different thinking approach. 131. Multiple guest speakers and tutors make student nervous and confused. 140. The lack of knowledge across all disciplines is perceived as troubling and confusing for doing assignments.</p>	<p>Mind shift for critical thinking: Learning experience and assessments (i.e., reflective essays, business simulation) challenges students to have better cognitive skills to overcome mental block so as to see the inter-relations of cross-disciplinary learning and to shift cognition across different discipline-specific content.</p>	

The following responses was also echoing similar concern and challenge in shifting one’s mind. It touches on a different types of shifting, that is between personal reflection and corporate simulation scenarios that are separate assessment tasks: “*Running both business simulation and individual reflective*

essay simultaneously is confusing and too complicated. I had to constantly shift my thoughts between personal and company perspectives.”

All the three secondary-level theme clusters in Table 1 reflect the major theme called soft skills development that are much needed by the respondents to cope with the business capstone course. Another major theme (Table 2) is learning and assessment that is constructed from secondary-level theme clusters such as unfamiliarity with assessment, cross-disciplinary learning and workload.

Theme 4: Unfamiliarity with assessments. Students undertaking the capstone course attempted to score well by understanding the marking rubric or criteria of assessments new to them (i.e., reflective essay, business simulation). The capstone course reflects work environment that provides the platform to recognize individual ways of achieving organizational goals. In other words, there are many ways to skin a cat. In a similar fashion, students were expected to demonstrate more self-directed or independent learning as well as creativity in achieving various assessment tasks. For instance, students can creatively solve their learning challenges by sourcing useful materials to learn how to develop reflective writing. They can also read up on other disciplines or seek peer learning and support. Students can also seek consultation with the teaching team for clarification about the marking rubrics.

Focusing on negative experience arising from ambiguity, unfamiliarity with assessments was the pervading image for many respondents. Being used to structured form of learning in other courses, students hereby face less risk to score well. In contrast, the sense of not being able to grasp clearly the formula to score well in the capstone course or the poor grading that is feared causes worries. The sense of defeat have led to mounting stress:

“There are no scope of materials for us to study. I feel demotivated and frustrated.”

“The course feels unstructured as the lecture contents, business info... [various learnings] have not much relation...”

“Students forget about the points to write and this causes them to have lower marks.”

“...my study life very stressful with 5 reflective tasks due every 2 weeks and so far I have no confidence in producing a good reflective writing.”

“...A clear structure was not given so it is difficult to prepare for reflective writing. It would be great if a clear and constructive structure was given.”

“Proper and more detailed guidelines should be provided for the assignment... I do not know what the maker really wants. The assignment weights 50% of the overall grade...”

“I do not prefer the way reflective essay is done... to be written in class. I find this way very uncomfortable... As not everybody can write a perfectly structured essay with perfect flow, with the stress of not knowing about what we are writing are correct, the reflective essay ends up really messy and ugly. In other words, not my best work.”

“I made up plans which I think will give me marks [in reflective essays] but is not my true plan... as a student, my objective is to gain good grades... I am not here for career evaluations.”

It was also evident that respondents were uneasy with the nature of assessments. For instance, students are used to final examination and commonly exposed to assignments of which they can work in their flexible time. However the sharing by respondents seemed to reveal the uneasiness of completing reflective essay during tutorial for their learnings in lectures and tutorials. A respondent strongly asserted in writing, *“I think having reflective writing in the tutorial is not a really right thing to do.”* Some respondents that preferred traditional type of task submission made some reflection on how better to maintain reflective essay as assessment: *“It would be better if we could do the reflective essay before handing it during the tutorial rather than having a test during tutorial.”* and *“Less reflective essays. Open book reflective essays and other speakers’ slides....”* The reflections seems to inform that reflective essays is less desired form of assessment.

They still prefer final examination while viewing the completion of reflective essay during tutorial as a form of examination. For instance, *“Would rather have a final exam by the end of the semester rather than having reflective essay every two weeks. It felt stressful and nervous.”*, *“The course should include a final exam to test students in a way they are more familiar with.”* and *“I feel that I have five final exams.”* Another respondents noted with much stress of the same preference, *“I would choose*

to have a final exam instead of going through the turmoil of a class test [reflective journal] every 2 weeks.”

Table 2: Illustration of the emergence of subtheme clusters to learning and assessments

Formulated Meanings from Significant Statements	Subtheme Cluster	Secondary-level Major Theme Cluster
<p>29, 42 & 59. Students prefer a final exam by the end of the semester because bi-weekly reflective essay is stressful, ambiguous and seen as a form of test. 71. Student prefers exam because of familiarity. 85. Student is uncomfortable with completing reflective essay in the class because of the lack of ability to best present one’s thoughts well in hand written submission. 121, 123 & 140. Students appreciate this course being beneficial but need more direction from the assessment criteria to address their confusion and worry arising from discipline-specific knowledge and unfamiliarity with assessments.</p>	<p>Unfamiliarity with assessments: Unfamiliarity with new assessment tasks makes students feel vulnerable in scoring good grades. Students prefer exam and more direction to facilitate learning because of their unfamiliarity with new assessment tasks and criteria that such ambiguity worries and stress them up.</p>	<p>Learning & Assessment</p>
<p>24. Students prefer the traditional way of learning via lectures, lecture slides and discussion in tutorials over reflective learning essays. 29 & 31. The cross-disciplinary range is too wide to master and stressful to learn. 33. Student feels cross-disciplinary learning is useful for every student and business simulation is good practice to apply knowledge. 43. Student feel being forced to learn. 79, 101 & 123. The learning is interesting because guest speakers share about real life problem and the different discipline-related aspects of business. 91. The course helps in self-reflection and thinking about future. 93 & 98. Students prefer learning that focused on their own major. 131. Multiple guest speakers and tutors in their specialized field make student nervous, stressed and confused.</p>	<p>Unfamiliarity with cross-disciplinary learning: Cross-disciplinary learning can help expand business knowledge and skills beyond major but students feel nervous having to learn outside of the comfort zone.</p>	
<p>15, 28, 42 & 78. Students are unable to complete many tasks and find the mastering of technical knowledge for reflective essays to be too much of work and stress. 69, 102 & 103. Students enjoy the learning but they also have heavy internal assessments from other third year courses. 131. Most students are in their last semester in the degree program with too much work to do.</p>	<p>Workload: The core course has heavy internal assessments like other third year courses that final year students find them all too heavy to manage together.</p>	

Theme 5: Unfamiliarity with cross-disciplinary learning. Respondents seemed to miss their past learning experience with their chosen discipline. Students in their final year have to undertake the capstone course that is a compulsory course. The learning and application of multiple disciplines in different assessments were With the cross-disciplinary nature of business capstone course along with other assessment-related ambiguity, the learning of various disciplines in a single course were perceived as tough and challenging. A respondent interesting used a metaphor of a lab rat to describe the learning journey while others described the challenges and benefits associated with various expertise-based learning:

“I felt it is useful for every student to understand to learn. In addition, business simulation is good practice for student to apply their knowledge and question should be more open ended.”

“I feel like a lab rat forced to learn how to swim in a pool of toxic waste.”

“The demand is high and marking is strict. We try our best. Our group does not have law, marketing and management students which make this task more difficult...”

“There are some major that we do not have any expertise in it, in which is troubling us when doing assignment.... which makes me worry and confused in this upcoming assessment.”

Learning reflection and recommendations for teaching pedagogies

The west has been leading in education excellence and its education innovation and positive outcomes are often assumed to be universally applicable (Kember, 2016). While the business capstone course in this study was designed in accordance to typical elements to optimize student experience, the research findings revealed otherwise. The qualitative findings that revealed poor student experience pointed to students’ inability to adapt and cope with many newness from learning to assessment that placed students out of their comfort zone. The journey of designing and implementing a business capstone course was enriching and humbling.

The course design can also benefit in understanding student background. The western centrally designed capstone course introduced many new elements of learning and assessments for Asian students.

Asian students typically learn through memorization first and are familiar with relatively structured form of education systems and examinations prior to tertiary education (Kember, 2016). Asian students who have undergone the local education systems may be rarely exposed to self-reflection as a form of learning as the local education system has little appreciation. Hence Asian students may have no or limited exposure to such exercise and therefore found it peculiar for the capstone course to award marks and grades based on student opinions and views.

While capstone course expects students to be self-directed learners, Holtbrugge and Mohr's (2010) assertion that students' learning expectation is the product of their cultural background and experiences. Holtbrugge and Mohr (2010) noted power distance as one of the cultural background. Past literature asserted that students in high power distance cultures are not expected to actively seek knowledge through their own learning experience (Jaju, Kwak & Zinkhan, 2002) and they accept knowledge from teachers at face value without questioning the power of the teacher (Joy & Kolb, 2009). In hindsight of the high power distance in Malaysia, some of the students' expectations for structure and certainty are reasonable. Learning support could have been provided more extensively and proactively.

Extending from the context of different education systems in Asia, Kember (2016) found that Chinese learner in Hong Kong excel in academic performance differently from other learners. Kember (2016) found that Chinese learners approached learning with intermediate levels of engagement between surface (memorization) and deep learning (understanding) to reach understanding. Chinese learners tend to adopt surface learning to cope with the pressure from examination-dominant education system. In consideration of this context, future capstone course may provide a variety of reading materials that covers the cross-disciplinary knowledge to suit the initial learning approach (rote learning) of Asian students prior to gaining deeper understanding that is necessary for demonstration of application skills. Future capstone course could also benefit by incorporating less reflective essays.

Holtbrugge and Mohr (2010) found that cultural values may affects learning styles, rendering the need to rethink learning support services. Besides less of the newness in capstone course to facilitate

student adaptation to learning, more importantly is to hold formal teaching on reflective writing to demonstrate how a good reflection involves deep cognitive process. The teaching may also inform students how self-reflection is unique to each individual and therefore a rigid structure or marking rubric may not be advisable. Another way to address the newness is to allow students to develop drafts to get constructive feedback. The feedback may help students to progress and produce better pieces of reflective work.

Further analysis and reflection revealed that the new assessments were allocated with relatively heavy weightage. For instance, there are five reflective essays of which each was worth 10 marks. Similarly, the weightage allocated to business simulation was high too. The sense of inability to master any of these two would have easily put students in a vulnerable state especially for Asian students who tend to be grade-oriented. The unfamiliarity of learning and assessments coupled with the lack of soft skills created uncertainty for Asian students who are grade-oriented to gauge how well they can score. Like a fish out of water, for students who found the course challenging to adapt and score, they reflected their journey and noted negative emotions. In consideration of this context, future design of the capstone course could consider a combination of new and familiar assessment tasks that could still meet the learning objectives and provide the conducive platform to develop transferable skills.

Thomas et al. (2014) cited that the University of California, Los Angeles tailored its capstone course (e.g., individual thesis, senior seminar, group projects, internships) to suit diverse needs and abilities of students. Since the capstone course in this current study was the first capstone for the degree program, students have had to undertake the course. The lesson learnt from this study has prompted the university to actively consider alternative offers of capstone course.

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Building trust to create crowdsourcing acceptance

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BUILDING TRUST TO CREATE CROWDSOURCING ACCEPTANCE

ABSTRACT

Organisations aspire to access human capital that provides competitive advantage. Historically, organisations looked internally to access these resources. With technology and entrenched penetration of the ‘internet’ this aspiration has crossed the boundaries of organisations. The incentive for crowdsourcing for the employers can be attributed to strategic and economic rationale however for the crowd workers the incentives seems elusive. This paper proposes a conceptual model to understand the motivation of crowds to opt for crowdsourcing at the level of the organisation. We propose the firm size and reputation of an organisation leads to trust amongst the crowdsourcing community, moderating the relationship between participation in crowdsourcing and acceptance in the community. Our model is supported by the Exchange Theory.

Keywords: institutional trust, crowdsourcing, resource-based, gig economy

INTRODUCTION

Organisations have mostly looked internally to create a competitive advantage in the market (Barney, 1991; Rothaermel, 2012). Human capital has been one of the major resources, to establish this competitive edge in the market. However, in the world of “internet” of things and proliferation of knowledge, the internal facing resource-based view becomes redundant. Sources of human capital are strewn across geographies that are enriched with the internet and organisations can initiate unhindered association with these mines of competencies. It implies that if there is need for any requisite resource or capability, this demand can be made available on a global platform, and isomorphic groups with an inclination would attempt to fulfil that demand without any ties under a chronologically isolated contract or deemed obligations in the future. Crowdsourcing is an institutionalisation of this phenomenon where organisations’ boundaries are porous with respect to availability of deemed human capital. Crowdsourcing has been defined as “the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call” (Howe, 2006). The push from organisations to delve into the format of crowdsourcing for resources seems intuitive, however the motivation for hordes of individuals to contribute their cognition, skills and time is currently amorphous at the firm level. Though a modicum of literature has looked at the individual level motivation to participate in crowdsourcing (Bonaccorsi & Rossi, 2006; Lerner & Triole, 1999; Ligeon, 2012); this paper aims to explore the motivation and appeal of crowdsourcing at the level of organisations. Organisations are currently using crowdsourcing as a peripheral and spasmodic resource acquisition activity, however with the advent of the gig economy, the volatility of the millennial workforce, the impulsive speed of technological growth and the uncertainty in the competitive market, crowdsourcing as a model will have to be more strategically at the centre-fold. Ensuing that organisations need to build capabilities that are not only agile internally but also are amenable to a crowdsourcing model. It is therefore imperative for organisations to build a first-mover advantage to build their proficiency in using crowdsourcing as a robust alternative model to maintain a competitive advantage in terms of human resources. We posit that “trust” in organisations would be the foremost driver of this model. The underlying theories utilised to support our

conceptualisation are Exchange Theory (Blau, 1964; Kelley and Thibaut, 1978, Homans, 1961) and Rusbult, 1983; Thibaut & Kelley, 1959). The Exchange Theory proposes that relationships are formed due to mutual cost-benefit analysis and the relationship that provides maximum benefit supersedes other alternatives. The conceptual framework introduced in this paper suggests that in a crowdsourcing strategy where there is lack of any contract or protective binds crowd workers will work with organisations that impart a sense of higher degree of trust in the crowdsourcing community to attain maximum benefit from the brief liaison.

LITERATURE REVIEW

Crowdsourcing

Crowdsourcing has been borrowed from the open source philosophy which stands on the pillar of peer production where all the codes are accessible to all, and coders can voluntarily amend them. Open source is antithetical to proprietary principles and there are arguments for both the sides for furthering innovation. Open source though is not restricted to the software industry it was revolutionised by Stallman with the Free Software Foundation, which aimed at a system where everyone could access reliable software codes free of cost (Bonaccorsi & Rossi, 2006). Though it seems that such products would be inferior to proprietary products which are paid (Khalak, 2000) and unable to compete with a force of paid and skilled employees, it is surprising that they are as successful and consumed. In fact, Linux held over 20% of the market share and is known as one of the most successful & widely accepted operating system (Stackoverflow, 2016). All this is done by widely engaging a large community known as the LUGs (Linux User Groups), who own, modify, innovate & use the software (Bagozzi & Dholakia, 2006).

Some of the popular open source products are application software like Inkscape, Mozilla Firefox, NASA World Wind; Operating systems like Linux, Android; programming languages like PHP, Python and Server software like Apache, Drupal, Moodle, Wordpress, Joomla etc. Not only in the software segment but other in segments products like istockphoto a photo accessing website, Simputer a computer, beverages like Open Source Colas, Wikipedia, Khan Academy etc. are also highly prominent

in the consumer market. Crowdsourcing as a phenomenon has become “the biggest paradigm shift in innovation since the [the] Industrial Revolution,” (Wendy Kaufman, 2008 as cited in Felstiner, 2010). In fact, crowdsourcing as a practice has been in use since centuries (Wexler, 2011). One of the first examples documented is that of the British Government in 1714, announced the Longitude prize to anyone who could devise a way of locating the position of ships at sea and they did get a practical solution from the crowd (Dash and Petricic, 2000; Quill, 1963 as cited in Wexler, 2011).

Process of crowdsourcing

Though an employment activity, there is no physical office space or organisational rules to bind the workers in a crowdsourcing work set up. The workplace is dotted by anonymous workers completely in the cyberspace (Felstiner, 2010). The workflow is extremely fluid (Banks & Humphreys, 2008) and it is a challenge for HR to ensure that there is no abrasive collision (Banks & Humphreys, 2008) while enmeshing crowdsourcing in a traditional set up. Like open sourcing it completely depends on the social & financial concept of co-creation (Banks & Humphreys, 2008; Ligeon, 2012). The word co-creation was introduced by Prahalad & Ramaswamy, (2000) to describe the mutual relationship between producers & consumers to innovate & progress. Building on this concept, consumers are more like co-workers who take part in the production of the product being consumed blurring the boundaries between consumers & producers (Kleemann, Voß, & Rieder, 2008; Ligeon, 2012). However, this social & financial value enhancing relationship ultimately remains under the control of the company. The origin of customers being a part of the products that they are consuming can be traced back to self-service & McDonaldisation of products where a portion of control rests with the customer (Kleemann et al., 2008).

To understand crowdsourcing, we can think of proprietary forms as “cathedrals” (Zeitlyn, 2003) and crowdsourcing as “Bazaars” (Barley & Kunda, 2006; Khalak, 2000; Zeitlyn, 2003). In the former, they are planned right in the beginning & carried out as planned. In the bazaar model, an informal forum is present where like-minded people congregate, exchange information & material. Some of the other models to describe crowdsourcing would be through Social Capital – where more than economic gains are assessed, Kinship Amity – where the community considers themselves as a family and derive identity from this association (Zeitlyn, 2003), Tragedy of Commons – where certain people contribute

but everyone benefits from the common pool of resources and the cooking pot where there is a mixture of products free available for all to use (Khalak, 2000).

Motivation for crowdsourcing

In crowdsourcing there are two major stakeholders along with the vendors who provide crowdsourcing platforms - the organisations who outsource and the workers who take on the jobs (Felstiner, 2010). The crowdsourcing community displays certain aggregate behaviours such as a collective conscience that all the members of the community feel towards each other and the distinction that they feel who are not members, shared rituals & traditions, their ideology and the usage of colloquialisms and a sense of obligation toward the whole community (Bagozzi & Dholakia, 2006). Though the economic rationality model suggests extrinsic motivation for motivation, however it was found that there is no correlation between the motivation (operationalised through, number of people opting for crowd-work and quality of output) and the amount being paid (Deci, 1975; Ipeirotis 2010; Mason 2009; Rogstadius et al., 2011). Though, money offered does increase the accuracy as well the swiftness of completion, it does not explain the quality of work or the willingness to spend higher amounts of time to solve the problem introduced (Chandler & Kapelner, 2010; Rogstadius et al., 2011). Additionally, the type of work (Chandler & Kapelner, 2010) and the skill variety required also determine the motivation of the crowd-workers (Kaufmann, Schulze and Veit, 2011). The significance that humans attach to the work, affects the degree of motives for performing. Most of these factors have been reflected in the employee-employer scenario as well. Conversely, the relationship embodied in crowdsourcing is non-contractual and ephemeral, hence additionally there is a pure altruistic motive that might be omnipresent, which exemplifies the intrinsic kernel of motivation. The extrinsic factors other than money seem to be the chance of association, peer community, competition and reputation (Leimeister et al., 2009; Hossain, 2012). At an individual level the major clusters of motivational factors as articulated by Ke & Zhang (2010) are external motivation (financial or any other personal gain), introjected motivation (recognition, reputation enhancement and the opportunity to be acknowledged), identified motivation: (identification with the community), integrated motivation (Value based, pro-open source and anti-proprietary mechanisms) and lastly, intrinsic motivation (intellectually

stimulating). These studies explain the motivation of crowd-workers towards the idea of crowdsourcing. From the perspective of competitive advantage how firms should mould their strategies to ensure that the preeminent portion of this labour pool is driven to specifically work with them has been completely disregarded by several researchers. This study therefore aims at understanding how organisations can identify the motivators to enhance their crowdsourcing strategy. Though, previous literature hints that the type of job posted, the extrinsic value deemed, and the cognitive abilities requested would affect the strategy at the organisation level to impact motivation levels, we will explore the merit of “trust” as an endemic factor that will influence the motivation to work with a firm.

BUILDING A CONCEPTUAL MODEL OF TRUST

Organisational Trust

Trust has been researched and examined at various levels across multiple disciplines (Rousseau, Sitkin, Burt and Camerer, 1998). Trust has been looked at the individual level from the lens of conflict (Fichmen, 1997), from the economic point of view (Williamson, 1993), from the psychological perspective (Deutsch, 1962; Rotter, 1967; Tyler, 1990), as a social construct (Grannovetter, 1985) and at the institutional level (Zucker, 1975). In this paper we will look at trust at the institutional level between organisations and the nebulous crowds that form pool of human capital. Though trust is mostly a demonstration of vulnerability (Mayer, Davis and Schoorman, 1995), Rousseau et al., (1998, p. 395) have define it as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intention or behaviour of another”. In our context, considering that crowdsourcing is mostly an altruistic-collective activity extracts talent from the crowdsourcing community at almost zero cost, the organisations can leverage and even exploit the vulnerability of the crowdsourcing crowds. If organisations need to build their capabilities and strategically use crowdsourcing as a robust alternative resource-based model, *trust* assumes a significant cog in the functioning of this paradigm. As shown below in Figure 1, when organisations build crowdsourcing capabilities, in an environment where they can develop a relationship of high-trust with their crowdsourcing environment, it will lead to a stable crowdsourcing framework which would become progressively become stronger as the usage and the loop of trust becomes more resilient.

Consequently, if the organisation is unable to build a relationship of trust in their crowdsourcing milieu, there will be eventual dissolution of crowd. Additionally, crowdsourcing within a particular format is based on word of mouth, and credibility and reputation are highly internalised and specific within the community. Once trust is diminished, trustworthiness of the organisation would be adversely affected. Analogous to employer branding, reputation within the crowdsourcing community is palpable for a competitive crowdsourcing strategy. Considering that crowd workers perform purely on the basis of the organisational trust that they deem on the organisation, it is critical that organisations behave and strategize to ensure the development and maintenance of the trust, which can be derived not only from the invisible sense of benevolence but also from factors of authenticity and competency in addition to integrity (Mayer, Davis & Schoorman, 1995; Scholtes, 1988). Organisational trust would allow crowd workers to assume character, competency, fair communication, sense of justice and communication when there is no formal or psychological contract (Starnes et al., 2010).

Insert Figure 1 here

As mentioned, crowdsourcing as a phenomenon is growing and futuristically organisations would scramble for the limited cognition and time of the crowdsourcing community. The challenge for organisations is how to handle a large group of invisible people with whom there is no communication or contact. All previous motive models would fail in this case since it is not a typical employer-employee relationship, even though organisations are extricating “work”, possibly for a small sum of money.

Size of firm and trust

Trust at the institutional level is derived from the sense of security that is ingrained in the structure of the organisation (Shapiro, 1987; Zucker, 1986) and Cognition based trust is derived from the perceptions of organisation in the market (Meyerson et al., 1996). This indicates that the more positive is the perception of the brand the higher will be the attraction for crowds to align themselves with this organisation (Leana & Van Buren, 1999). Large brands with a positive image in the market would therefore naturally attract larger crowds at lower transaction costs (Wasko & Faraj, 2005). Working

with substantial and reputed organisations would also allow crowds to construct their identity through their association with these brands even if it might be limited to their online community (Gefen, Karahanna, & Straub, 2003). Without a formal and continued relationship formation of trust is vague and untenable. Firm size is an important indicator that suggests authenticity, reputation and stability since they are more impervious to uncertainties in the environment and mostly enjoy bargaining power over their competitors (Chandrapalart, 2000; Park & Luo, 2001; Pfeffer & Salancik, 1978; Trevino & Grosse, 2002; Xin & Pearce, 1996). Therefore, firm size does positively influence the degree of trust amongst suppliers and customers (Doney & Cannon, 1997; Jiang et al., 2011). Additionally, reputation is a key factor in the online community for businesses to function. Most online communities trade and interact with companies that are deemed to be reputed since the degree of deceit is more plausible (Jøsang, Ismail, & Boyd, 2007). Consumers, suppliers and partner organisations derive trust on the basis of the reputation created online and otherwise (Casalo, Flavián, & Guinalú, 2007; Doney & Cannon, 1997). Therefore, in an environment where the a concerned party has only part visibility, size of the firm and reputation are both proxies for trust-worthiness (Jarvenpaa, Tractinsky, & Vitale, 2000). Similarly, we can extend that reasoning that firm size and reputation lead to the perception of trust among the crowdsourcing community.

We therefore posit:

Proposition 1a: The larger the size of the firm the higher the trust of the crowds in the organisation.

Proposition 1b: The more positive the brand reputation of the firm the higher the trust of the crowds in the organisation.

Impact of trust

Trust is crucial to create a space in the crowdsourcing labour market. Though most literature has looked at trust as an integral tool for organisations to filter the quality of work provided by the crowds, we look at how exactly would trust impact the crowdsourcing capabilities. The concept of dynamic capabilities (Prahalad & Hamel, 1990) suggests that the more the organisation would work and utilise a strategic

intent, the more they will develop capabilities in it. It has been shown that crowds are not passive spectators anymore and would want to participate more actively with the platforms (Zhao & Zhu, 2012). Additionally, any form of crowdsourcing is a collaborative pursuit (Stantchev, Prieto-González, & Tamm, 2015), however the possibilities of exchange are exiguous and purely dependent on the scope of the platform. Therefore, engagement using the boundaries of the platform become pertinent to build a relationship with the crowd. Additionally, the quality of the interaction and the overall strategy of crowdsourcing depends on the management of the initiative by the organisation. It has been shown that the more seamless the interaction in terms of payments, control and communication, the lesser are the issues of trust (Jain, 2010). Therefore, the more familiar the organisations with crowdsourcing as a strategy the more they would be aware that increased participation would lead to a better relationship thus inducing a feeling of trust amongst the crowds. As organisations initiate utilisation of crowds/ crowdsourcing for their strategic intent (e.g. the case of US Navy) the more proficient they would become and therefore the assumption is higher will be the acceptance of the crowdsourcing community. We therefore propose that:

Proposition 2: The higher the participation of the firm in crowdsourcing the higher will be the acceptance of the organisation by the crowds.

It can be suggested that despite high participation levels, there might not be high acceptance from the crowds. The crowds belong to a crowdsourcing community and therefore the relationship of the firm with the community would eventually impact the success of their strategy. This acceptance therefore would be moderated by the trust that the crowds will have on the organisation. The more the trust the crowds have, the higher will the acceptance by the crowds. We therefore propose that:

Proposition 3: Trust will positively moderate the relationship between participation by the firm and the acceptance by the crowds.

Insert Figure 2 here

Role of crowdsourcing platforms

A crowdsourcing platform is the medium that connects the crowds with the organisation (Ford, Richard & Ciuchta, 2015). It also consequently shapes the norms and the systems that govern the crowdsourcing processes across organisations (Zhao & Zhu, 2012). Platforms allow organisations to build and create their crowdsourcing strategy. The credibility of a crowdsourcing platform not only depends on the user interface for both the crowds as well as the organisation but also the degree of utilisation. The better the interface in terms of features, format, layout, frame attributes, resolution and dexterity across technology medium (Mea, Maddalena & Mizzaro, 2013) the higher will be the degree of usage and increased penetration amongst its users, the precocious will be the trustworthiness of the platform. Therefore, the role a crowdsourcing platform becomes highly pertinent.

CONCLUSION

The labour-capitalist dichotomy exists in crowdsourcing. Researchers have often said that cyber workers are a cheap source of labour and are exploited and given low wages. However, researchers also state that this is a voluntary and mostly altruistic activity and that no one has forced these crowds to take up these tasks. The whole idea of an open source philosophy is collectivism or joint ownership. To understand this paradoxical dichotomy, we propose a conceptual model that uses trust as the central force to comprehend this phenomenon. The Exchange Theory supports this conceptualisation considering that “trust” is the proxy that drives crowd workers to work with altruistic and pro-social intentions assuming they will receive status and practical usage of their skills in the crowdsourcing community. The limitation of this model is that crowdsourcing though popular is still in the fringe organisations’ resource strategies and therefore we have not arrived at the scale that would allow to build constructive empirical data to test these propositions. However, it is also assumed that organisations that would build crowdsourcing capabilities sooner than later to ensure they don’t miss the bandwagon of competitive edge in the talent market.

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- <https://insights.stackoverflow.com/survey/2016#technology-desktop-operating-system>

Figure 1: Conceptual role of trust in building crowdsourcing capabilities

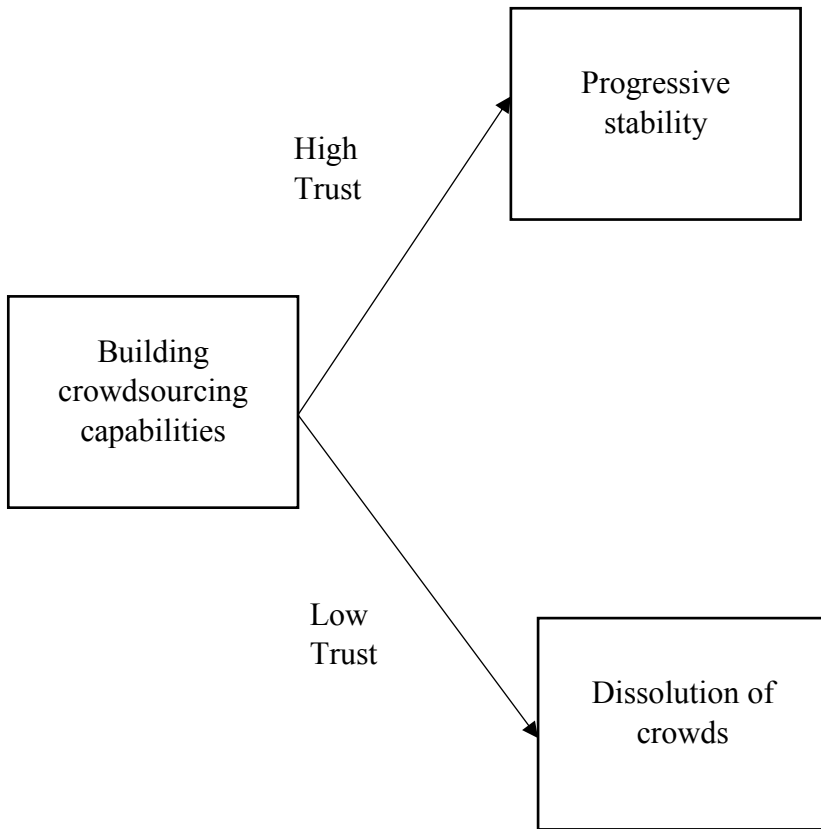
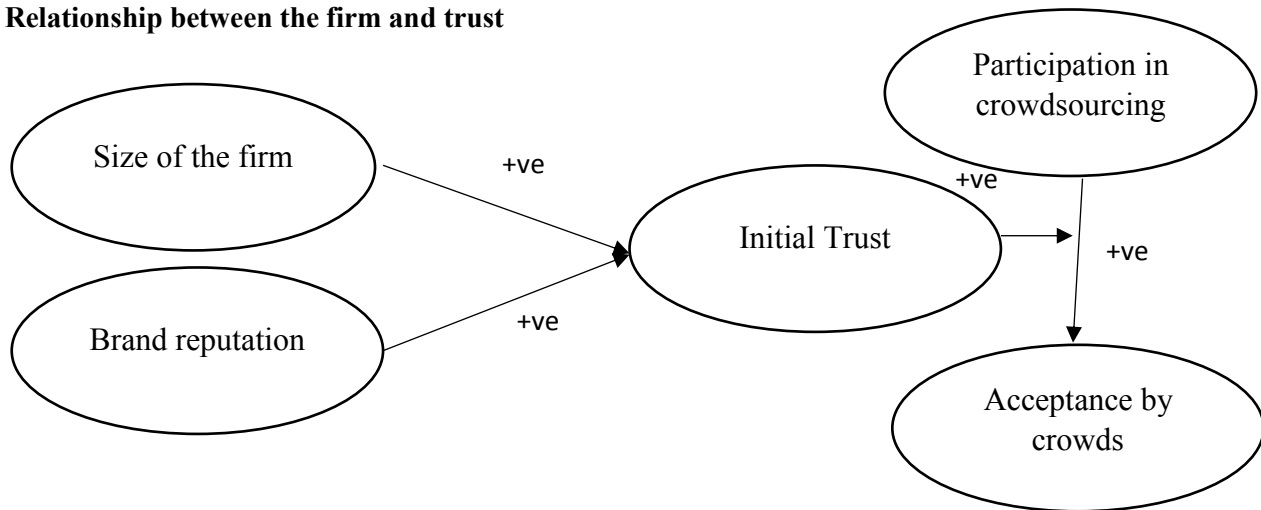


Figure 2: Relationship between the firm and trust



Stream 03: Gender, Diversity and Indigeneity
Competitive Session

**#heto0: Exploring the role of expectancy violation and workplace gender ratio
in perceptions of male targets of sexual harassment**

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#hetoo: Exploring the role of expectancy violation and workplace gender ratio in perceptions of male targets of sexual harassment

ABSTRACT: *Sexual harassment is a topical and important workplace and social issue, with most focus on women as the principal targets. However, men may also be victims of sexual harassment and may face a unique set of challenges, as male victims are not consistent with our schema of how sexual harassment is constructed. This study explores the existence of a negative bias towards male victims and proposes that, perhaps ironically, workplaces that are more dominated by women provide the best opportunity to remove the negative perceptions attached to men who are the victims of sexual harassment. The implications of the findings are discussed.*

Keywords: sexual harassment, gender in organisations, workforce diversity, discrimination at work

Sexual harassment is a notable workplace issue associated with a host of negative organisational and personal outcomes. These include higher perceived stress and staff turnover intentions, reduced organisational commitment, negative mood, depression, anxiety, decreased job satisfaction, self-esteem and productivity (Chan, Chow, Lam & Cheung, 2008; Kath, Bulger, Holzworth & Galleta, 2014; McDonald, 2012; Lee, 2018). The U.S. Equal Employment Opportunity Commission (EEOC, 2017) received 6,696 charges of sexual harassment equating to \$46.3 million in monetary benefits in 2017 alone.

While sexual harassment of women has received a lot of attention not as much focus has been placed on sexual harassment experienced by men (Holland, Rabelo, Gustafson, Seabrook & Cortina, 2016; McDonald & Charlesworth, 2016; Stockdale, Berry, Schneider & Cao, 2004). Most research has focussed on the male prevalence and propensity to harass, their sexist attitudes and the environment which is most conducive to enabling sexual harassment of women by men (Russell & Oswald, 2016; Madera, Podratz, King & Hebl, 2007; Berdahl, 2007).

There is good reason for this. Numerous studies indicate the prevalence of sexual harassment is very much focussed upon women as victims. A recent Australian Human Rights Commission survey (AHRC, 2012) indicated that 21% of women compared to 9% of men have experienced sexual harassment within Australian workplaces. Clearly men do experience sexual harassment within the workplace and may face a host of hidden implications compared to female victims (AHRC, 2012; McDonald & Charlesworth, 2012; Russell & Oswald, 2016; Holland et al, 2016). A few studies have

begun to address some of these issues – primarily focussing on ideology, perception, male-to-male, and gendered harassment (Holland et al, 2016; Russell & Oswald, 2016; Scarduzio & Geitz-Martin, 2010; Stockdale et al., 2004).

This paper seeks to investigate how being a male target of harassment may influence the way a potential sexual harassment situation is perceived and then what may be done to address this schematic bias. Firstly, it proposes that existing schemas and stereotypes in relation to gender and sexual harassment may reduce the credence given to individuals who do not match the harassment schema (Herrera, Herrera & Expósito, 2016; Kulik, Perry & Pepper, 2003; Madera et al., 2007). This is referred to as expectancy violation (Bond et al., 1992; Burgoon & Hale, 1988; Hackett, Day & Mohr, 2008). Secondly, if this assumption is held, then we propose that the way to combat potential negative impacts of expectancy violation is to reframe the issue in relation to the victims and perpetrators of sexual harassment. We contend that, based on ways to offset implicit gender stereotype activation (De Lemus, 2013), that workplaces with a higher proportion of female staff will show reduced sexual harassment schema effects.

REVIEW OF LITERATURE

Schema Violation

Schemas are mental structures that individuals invoke to process and organise incoming information and knowledge in a manner that is consistent and in alignment with their existing or prevailing ideals (Bem, 1981; Burgoon & Hale, 1988; Madera et al., 2007; Wiesenfeld, Reyt, Brockner & Trope, 2017). Because of schemas we expect certain groups or types of people to behave or appear in certain ways. When they adhere to these expectations we may be inclined to ‘instinctively’ place more trust in them, or conversely less if they do not conform (Burgoon & Hale, 1988; Madera et al., 2007).

One of the ways in which we see schematic confirmation or dispute influence our perceptions is in expectancy violation theory. Expectancy violation occurs when the information we receive in a specific context violates our schematic expectation of what should happen (Bond et al., 1992; Burgoon & Hale 1988; Hackett et al., 2008). Although violation of societal norms, rules, roles and stereotypes may in some instances yield positive responses, most research implies that the outcome will generally

be viewed as negative (Burgoon & Hale, 1988; Förster, Higgins & Strack, 2000). Considered from the lens of male targets of sexual harassment, a man who complains or alleges to being subjected to sexual harassment may be seen less positively, as less of a man, perhaps weak or less masculine as it is a violation of the masculine gender stereotype or schema we hold (Scarduzio & Geitz-Martin, 2010).

Men as the Targets of Sexual Harassment.

Multiple studies have provided support that it is primarily women who are subjected to sexual harassment (e.g., Lee, 2018; AHRC, 2012; Madera et al., 2007; McCann, 2005). This is further supported by figures from the AHRC Survey which identified that 33% of women had experienced sexual harassment in comparison to 9% of men (AHRC, 2012).

However, this is not to say sexual harassment does not occur the other way. Figures cited from the U.S., Merit Systems Protection Board Report (1994) suggested that whilst almost all (93%) women surveyed reported that they were harassed by men, 65% of men also reported they were harassed by women. Thus, the gender-constructed schema of harassment is not absolute.

Based on the above this study proposes the following hypotheses to support the previously mentioned research and confirm the existence of a gendered sexual harassment schema whereby males alleging sexual harassment are disadvantaged due to violation of the schema.

H1: Ambiguous scenarios of sexual harassment featuring male targets will be deemed as less severe harassment than scenarios featuring female targets.

H1b: Male targets in ambiguous sexual harassment scenarios will be less believed by third parties than female targets in ambiguous sexual harassment scenarios.

Implicit Gender Based Sexual Harassment Schema

So how do we establish a perception among individuals that harassment is equally inappropriate and potentially damaging for the individual and organisation irrespective of the victim's gender? How can we intervene in this process? Perceived group variability is of considerable importance to stereotype change because there is a reliable tendency for members of an outgroup to be seen as less diverse and more stereotypic (Brewer & Miller, 1988). Brewer and Miller (1988) suggested that by increasing the complexity of intergroup perceptions perceivers can identify that members of a specific group are diverse, and that the overarching group is not homogenous.

Increasing perceived group variability has potential merit to minimise the potential negative double-bind faced by male targets of sexual harassment. Exposure to counter-stereotypical exemplars has been shown to reduce the strength and activation of gender stereotypes (Dasgupta & Asgari, 2004; Blair, Ma, & Lenton, 2001). A number of studies have found multiple ways to offset automatic schema perceptions and biases. For example, specific training and awareness of strategies to avoid automatic responses based on stereotyped assumptions has been found to reduce automatic prejudicial responses (Blair et al., 2001; Kawakami, Dovidio, Moll, Hermsen, & Russin, 2000). Of most relevance to this study, is that a number of other studies have demonstrated that automatic stereotypical consistent responses can be modified or offset by changing the context individuals inhabit (Dasgupta & Greenwald, 2001; Wittenbrink, Judd, & Park, 2001).

We contend that one way to reduce the strength of gender-based sexual harassment schema, and its negative impacts on male targets, is to reframe the context of sexual harassment. We propose that as sexual harassment has stereotypically been seen as a ‘woman’s problem’, contexts (i.e., workplaces) that are female dominated will result in less stereotypical responses to sexual harassment stimuli. This is due to higher exposure to the issue, and a context that allows for modification of the stereotypical response (Wittenbrink et al., 2001). This proposition draws on Pettigrew (1998), who argued that one of the four processes that influence outgroup perception is learning about the outgroup. As the outgroup in this schema is the sexually harassed, and given women dominate that group, a workplace with a greater female composition may reflect a less stereotypical response to sub groups of the outgroup – the male victim of harassment.

Workplace Gender Ratio

Workplace gender ratio has been shown to impact on the frequency of sexual harassment (Fitzgerald, Drasgow, Hulin, Gelfand, & Magley, 1997; Willness, Steel, & Lee, 2007). However, while research indicates that women are more susceptible to sexual harassment in male dominated environments, this is generally not reflected for men in female-dominated environments (Lee, 2018). Based on this we can conversely assume that workplaces dominated by women would be less tolerant of harassment and would be less likely to stereotypically respond to a male target of harassment. This is predicated on Brewer and Miller’s (1988) assertion on the importance of perceived group

variability, Pettigrew's (1998) importance of learning about the outgroup, and the importance of context for offsetting automatic stereotypical responses (Wittenbrink et al., 2001).

Sexist Attitudes

The level of sexist attitudes an individual holds may also play a key role in whether they interpret and perceive certain sexual conduct as constituting harassment (Cowan, 2000; Herrera et al., 2016; Lonsway, Cortina & Magley, 2008). Linked to the idea of context as critical in establishing the dominant discourse, more sexist attitudes tend to be formed through exposure to more stereotypical views of gender. In relation to sexual harassment, perceivers with more sexist attitudes attributed greater blame to a female target compared to their less sexist counterparts (De Judicibus & McCabe, 2001). Accordingly, we propose the following hypotheses.

H2a: Respondents from workplaces that have a higher proportion of female staff will record (1) lower levels of sexist attitudes and (2) lower levels of tolerance to sexual harassment than workplaces with higher proportions of male staff.

H2b Respondents from workplaces that have a higher proportion of female staff will be more likely to 1) consider harassment to be more severe if the target is male and 2) believe male targets of sexual harassment compared to workplaces with higher proportions of male staff.

METHOD

Overview of Hypothetical Scenario Development

The present study employs a hypothetical scenario in the workplace that may, or may not, be perceived as sexual harassment. In the scenario the “complaint” was operationalised as the target requesting initial, informal advice from their friend. Background on the respondent's friendship with the target was provided. The setting was constructed as a fictitious conversation between two parties to encourage more realism. This scenario describes a series of ambiguous potentially sexually harassing behaviours experienced by the target from another employee of the opposite sex. The behaviours reflect the U.S. definition of a hostile work environment where the definition states, “...other verbal or physical conduct of a sexual nature” (U.S. EEOC, 2018).

Instrument, Measures and Scales

Gender of the Target and Perpetrator

Gender of target and perpetrator were determined via a staff profile provided to the respondent and randomly assigned.

Attitudes toward Sexual Harassment and Sexual Conduct

Attitudes toward sexual harassment and sexual conduct were assessed via two scales. Firstly, the 19 item Sexual Harassment Attitudes Scale (Mazer & Percival, 1989) was used to assess respondents' perceptions and attitudes towards sexual harassment. Secondly, the Ambivalent Sexism Inventory (ASI) (Glick & Fiske, 1996) was used to measure the level of sexist attitudes held by the perceiver. The scale contains 22 items. Both scales were measured on a seven point Likert Scale from 1 (totally disagree) to 7 (totally agree) and have demonstrated good internal reliability.

Gender

Gender was assessed via a single demographic question (i.e., Are you male/female?).

Workplace gender composition

Workplace gender composition was determined by a single item asking respondents if they worked in a workplace that was predominately male in terms of its gender profile, predominately female, or a roughly even mix of male and female.

Harassment Severity

Respondents were asked to determine to what severity they perceived the incident. Following the approach of Lartigue (2001), the study employed a single item seven-point Likert scale (from 1 "not sexual harassment" to 7 "serious sexual harassment").

Believability

Believability of the target was assessed via the complainant believability scale (Madera et al., 2007).

Participants

Data was collected via Qualtrics, an online platform employed to both recruit and deliver the instrument to an online sample of adults working in Australia. In total, 410 respondents completed the survey. Once missing data and outliers were removed the final sample comprised 361 respondents.

Procedure

Participants were invited to complete the survey online. The online survey commenced with a background to the study, informing participants they are involved in a study on workplace interactions. They were then asked to imagine they were a friend of the target, read the information provided and to respond to a series of statements relating to their perceptions of the target, the perpetrator and the scenario.

RESULTS

Sample Characteristics

The sample (N=361) comprised of a roughly even distribution of Australian males and females (N = 175 males (48.5%) and 186 females (51.5%)). Respondents were aged from 18 to 82 years of age, with a mean age of 44 years (SD = 13.31). Respondents’ age breakdown is outlined in Table 1.

INSERT TABLE 1 ABOUT HERE

Workplace gender composition, occupation and education

Almost 50% of respondents indicated they worked in organisations with a roughly even balance of male and female staff, with 28.3% working within predominantly male staff dominated organisations and 22.2% employed in organisations where predominately females are employed.

Hypothesis 1

H1a: Ambiguous scenarios of sexual harassment featuring male targets will be deemed as less severe harassment than scenarios featuring female targets.

INSERT TABLE 2 ABOUT HERE

INSERT TABLE 3 ABOUT HERE

H1a was supported with respondents’ perception of the severity of sexual harassment in the scenario being significantly lower ($F = 11.26, p = 0.001$) when the target was male ($\bar{x}_m = 4.77; SD = 1.29$), compared to when the target was female ($\bar{x}_f = 5.23; SD = 1.27$).

H1b: Male targets in ambiguous sexual harassment scenarios will be less believed by third parties than female targets in ambiguous sexual harassment scenarios.

INSERT TABLE 4 ABOUT HERE

INSERT TABLE 5 ABOUT HERE

As can be seen in Tables 4 and 5 male targets ($\bar{x}_m = 5.16$; $SD = 1.00$, $F = 13.31$; $p < .001$) were significantly less likely to be believed compared to female targets ($\bar{x}_f = 5.54$; $SD = 1.11$). Accordingly, H1b was also supported.

Hypothesis 2

H2a: Respondents from workplaces that have a higher proportion of female staff will record (1) lower levels of sexist attitudes and (2) lower levels of tolerance to sexual harassment than workplaces with higher proportions of male staff.

Table 6 and Table 7 outline the means and ANOVA results for H2a (1) and H2a(2).

INSERT TABLE 6 ABOUT HERE

INSERT TABLE 7 ABOUT HERE

H2a(1) was supported, with respondents who worked in a predominately female workforce ($\bar{x}_{pf} = 3.44$; $SD = 0.93$, $F = 7.71$; $p < .001$) recording significantly lower levels of sexist attitudes compared to both respondents from predominately male workplaces ($\bar{x}_{pm} = 3.98$; $SD = 0.86$), and respondents from workplaces with a roughly even gender mix ($\bar{x}_{eg} = 3.71$; $SD = 0.93$).

H2a(2) tested the hypothesis that respondents from predominately female dominated workplaces would record attitudes that were less tolerant of sexual harassment compared to respondents from male dominated, or equal gender composition workplaces.

INSERT TABLE 8 ABOUT HERE

INSERT TABLE 9 ABOUT HERE

H2a(2) was also supported, with respondents who worked in a predominately female workforce ($\bar{x}_{pf} = 3.14$; $SD = 1.04$, $F = 10.10$; $p < .001$) recording significantly lower levels of tolerance for sexual harassment compared to respondents from other workplaces ($\bar{x}_{pm} = 3.83$; $SD = 1.11$, and $\bar{x}_{eg} = 3.31$; $SD = 1.14$).

H2b Respondents from workplaces that have a higher proportion of female staff will be more likely to 1) consider harassment to be more severe if the target is male and 2) believe male targets of sexual harassment compared to workplaces with higher proportions of male staff.

Results for H2b(1) are outlined in Table 10 and Table 11, with results for H2b(2) outlined in Table 12 and Table 13.

INSERT TABLE 10 ABOUT HERE

INSERT TABLE 11 ABOUT HERE

H2b(1) was not supported, with respondents who worked in a predominately female workforce ($\bar{x}_{pf} = 5.09$; $SD = 1.17$, $F = 1.84$; $p=ns$) not recording significantly higher levels of perceptions of severity of sexual harassment for male targets compared to respondents from other workplaces ($\bar{x}_{pm} = 4.61$; $SD = 1.34$ and $\bar{x}_{eg} = 4.71$; $SD = 1.32$).

INSERT TABLE 12 ABOUT HERE

INSERT TABLE 13 ABOUT HERE

In contrast to H2b(1), H2b(2) was supported, with respondents in a predominately female workforce ($\bar{x}_{pf} = 5.51$; $SD = 0.83$, $F = ; p=ns$) recording significantly higher levels of believability of male targets of sexual harassment compared to respondents from other workplaces ($\bar{x}_{pm} = 4.61$; $SD = 1.34$ and $\bar{x}_{eg} = 4.71$; $SD = 1.32$).

DISCUSSION

This study sought to investigate two key points. Firstly whether sexual harassment situations featuring male targets would be considered as less severe, and whether the male would be less likely to be believed. We proposed this would happen due to the presence of a gendered schema in relation to sexual harassment. Secondly, we sought to determine if respondents from workplaces with a greater female gender representation would show less evidence of this schema effect as female dominated workplaces, as the outgroup in the schema of sexual harassment, will have less schematic responses to subgroup variations (i.e., male targets) to the sexual harassment schema.

The results for H1a and H1b supported the existence of the gendered sexual harassment schema, and the impact of violation of that schema. Ambiguous sexual harassment scenarios were seen as not as severe if the target was male, as well as male targets being less believed by respondents. This supports previous research that has confirmed the existence of a gendered sexual harassment schema, with women the victims and men perpetrators (Lee, 2018; AHRC, 2012; Madera et al., 2007; McCann,

2005). It also supports that, consistent with expectancy violation theory, violating the schema results in negative consequences (Scarduzio & Geitz-Martin, 2010). This potentially results in further consequences. Schemas are universal. Accordingly male victims of sexual harassment may assume that they will not be taken seriously or believed. The AHRC (2012) survey identified negative impacts of reporting, including victimisation, demotion, shift changes, negative reputation and resignation. Add to this a suite of other issues men may face (for example, ridicule, questioning of their masculinity) and it is no surprise that male reporting of sexual harassment is particularly low (Scarduzio & Geitz-Martin, 2010). This creates a minority of silent sufferers, their harassment going unnoticed and unresolved (Russell & Oswald, 2016; Scarduzio & Geitz-Martin, 2010).

The second focus of the study was also generally supported. Respondents from workplaces that had a predominately female gender composition recorded less sexist attitudes and lower tolerance for sexual harassment compared to respondents from workplaces with higher proportions of men. In addition, respondents from predominately female workplaces were more likely to believe a male target of ambiguous sexual harassment. However, they were not statistically more likely to view the harassment of a male target as more severe than respondents from other workplaces.

These results may be explained by the exposure of people in the workplace to the issue. Both Dasgupta and Greenwald (2001) and Wittenbrink et al. (2001) found that stereotypical consistent responses at the automatic level can be influenced and even offset by adjusting the context. In a predominately female workplace the dominant discourse that frames the gender-based schema surrounding sexual harassment can be challenged as the subcomponents that feed into the sexual harassment schema (male domination of the agenda, victim blame, reprisals for reporting and similar) may be diminished (Madera et al., 2007; Berdahl, 2007; De Judicibus & McCabe, 2001; Russell & Oswald, 2016). This may lead to a greater openness about the issue of sexual harassment, exposure to victims and a more open dialogue. This in turn reduces the stereotyped assumptions surrounding sexual harassment, including assumptions regarding the target and perpetrator. Indirect support comes from Lee (2018), who found that while women were more vulnerable to be victims of sexual harassment in male dominated workplaces, men were not more vulnerable to sexual harassment in women-dominated workplaces.

A point of note was that the results support that male victims of alleged sexual harassment were less likely to be believed. There was no support for whether the harassment would be viewed as more severe based on the gender composition of the workplace. Examination of the mean perception of harassment however (see Table 2), indicates that harassment was seen as relatively severe across all workplaces, regardless of composition. Again, what may explain this is that harassment is currently a salient issue, with the #metoo movement and recent press coverage (Chiu, 2018). People's perception is that harassment shouldn't happen. However, the automatic nature of the gendered schema surrounding sexual harassment is still reflected in how believable someone violating the schema is considered. It is here that reframing the context (a predominately women workplace) can be seen to have a positive affect for believability of victims of harassment who do not match the schema.

LIMITATIONS AND FUTURE RESEARCH

This study does have some potential limitations, and areas for further research. Firstly, the level of generalisability of the findings for real life organisational settings may be limited due to the use of a hypothetical scenario (Braun, Peus & Frey, 2012). Although hypothetical scenarios have been suggested to reduce error variance and social desirability bias, they may potentially suffer from reduced ecological validity (Schoenberg & Ravdal, 2000). Two final areas for further research could be to replicate the study across different cultures to assess whether cultural context plays a role (Herrera et al., 2016) and to consider the impact of same-sex harassment, particularly given men are more likely than women to experience same sex harassment (Russell & Oswald, 2016; Stockdale et al., 2004).

CONCLUSION

Sexual harassment is a notable workplace issue that is once more gaining the attention it deserves in the media. It has major potential negative consequences for individuals and organisations. Whilst women are traditionally the victims, this study shines a light on some of the issues male victims of harassment face. It also ironically presents some support for the fact that one of the best ways to combat the negative stereotypes associated with being a male and a victim of sexual harassment is through greater representation of women in the workplace.

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Table 1: Respondent Age Distribution

Age Category	%
18-29 years	16.3
30-39 years	23.8
40-49 years	23.8
50-59 years	20.5
60-69 years	15.2
70 plus years	0.3

Table 2: Means and Standard Deviations Sexual Harassment Severity by Target Gender

	Sexual Harassment Severity	
	M	SD
Male	4.77	1.29
Female	5.23	1.27

Table 3: ANOVA Results Sexual Harassment Severity by Target Gender

	Type III Sum of Squares	df	Mean Square	F	Sig.	η
Target Gender	18.62	1	18.62	11.26	.001	.03
Error	593.37	359	1.65			

Table 4: Means and Standard Deviations Believability by Target Gender

	Believability	
	M	SD
Male Target	5.16	1.00
Female Target	5.57	1.11

Table 5: ANOVA Results Believability by Target Gender

	Type III Sum of Squares	df	Mean Square	F	Sig.	η
Target Gender	14.78	1	14.78	13.31	<.001	.03
Error	398.70	359	1.11			

**Table 6: Means and Standard Deviations
Sexist Attitudes by Workplace Gender Composition**

	Sexist Attitudes		
	M	SD	N
Predominately male workforce	3.98	0.86	102
Roughly even gender composition	3.71	0.92	179
Predominately female workforce	3.44	0.93	80

**Table 7: ANOVA Results
Sexist Attitudes by Workplace Gender Composition**

	Type III Sum of Squares	df	Mean Square	F	Sig.	η
Workplace Gender Composition	12.73	2	6.37	7.71	<.001	.04
<i>Error</i>	295.54	358	0.83			

**Table 8: Means and Standard Deviations
Tolerance of Sexual Harassment by Workplace Gender Composition**

	Tolerance of Sexual Harassment		
	M	SD	N
Predominately male workforce	3.83	1.11	102
Roughly even gender composition	3.31	1.14	179
Predominately female workforce	3.14	1.04	80

**Table 9: ANOVA Results
Tolerance of Sexual Harassment by Workplace Gender Composition**

	Type III Sum of Squares	df	Mean Square	F	Sig.	η
Workplace Gender Composition	24.95	2	12.48	10.10	<.001	.05
<i>Error</i>	442.34	358	1.24			

**Table 10: Means and Standard Deviations
Severity of Sexual Harassment for Male Targets by Workplace Gender Composition**

	Severity of Sexual Harassment		
	M	SD	N
Predominately male workforce	4.61	1.34	54
Roughly even gender composition	4.71	1.32	87
Predominately female workforce	5.09	1.17	43

**Table 11: ANOVA Results
Severity of Sexual Harassment by Workplace Gender Composition**

	Type III Sum of Squares	df	Mean Square	F	Sig.	η
Workplace Gender Composition	6.14	2	3.07	1.84	.162	.02
<i>Error</i>	<i>302.28</i>	<i>181</i>	<i>1.67</i>			

**Table 12: Means and Standard Deviations
Male Target Believability by Workplace Gender Composition**

	Target Believability		
	M	SD	N
Predominately male workforce	5.09	1.05	54
Roughly even gender composition	5.04	1.01	87
Predominately female workforce	5.51	0.83	43

**Table 13: ANOVA Results
Male Target Believability by Workplace Gender Composition**

	Type III Sum of Squares	df	Mean Square	F	Sig.	η
Workplace Gender Composition	6.67	2	3.34	3.44	.034	.04
<i>Error</i>	<i>175.61</i>	<i>181</i>	<i>0.97</i>			

Embodied Leverage Practices for Sustainable Development in Organisation

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Embodied Leverage Practices for Sustainable Development in Organisations

Introduction

Considering the global role of organizations as intermediary agents that make decisions, operate and generate effects with significant, often negative impact on both, the natural environment and society, the problematic status of corporate social (ir-)responsibilityⁱ and (un-)sustainability have been discussed critically (e.g. Barth & Wolff, 2009; Küpers, 2011; Tench et al. 2018). Often conventional approach towards sustainable practices are not sufficiently incorporated, integral, nor transformational, or even sustaining unsustainability (Blühdorn, 2011). Therefore, there is a need for developing and enacting new approaches and practices that are serving as enablers for forms of sustainability that are embodied, mindful, and engaged in responsive and responsible orientations and actions.

Accordingly, the purpose of this paper is contributing to a more integral understanding of sustainable practices. Such integral perspective and approach sees the sustainable practices as a function and emergent process of living bodily subjects and dynamic embodiments that comprise material, social and cultural dimensions. These processes are situated in a continuum in which practitioners and their practices in organisations as well its stakeholders are enmeshed inter-relationally.

Considering that practices of sustainability are very complex, multi-dimensional and dynamic, in urgent need for an transformative enactment in and through organisations and their “worldmaking interactions” (Bendor, 2018; Goodman, 1978), so-called leverage-points may help to develop reopen possibilities, and mediate deep change (Abson, et al. 2017; Ives et al., 2018, Meadows, 1999).

In general, these leverage-points can be interpreted as those places to intervene, where a small amount of effort or change, will produce a large alteration in the ‘intelligence’ and ‘behaviour’ of a system.

Importantly, leverage-points refer to the ability to reconnect with nature, revising institutions that are guiding markets, and reconsidering how knowledge is generated and utilized, especially for sustainability as part of transcending mind-sets and paradigms (Meadows, 1999). This re-orientation becomes even more acute in the context of the so-called Anthropocene and its relationship to management (e.g. Küpers & Gunnlaugson, 2017) and organization (e.g. Kalonaityte, 2018). In the anthropocene age, human-induced environmental change and domination of the Earth’s ecosystems have reached a global scale with all-pervading impact in pungent ways of hyper-modernistic, neo-liberal market-oriented globalism, reaching and surpassing planetary and regional-level boundaries. If we are continue to transgress these boundaries, continued anthropogenic practices could inadvertently drive the Earth system into a destabilization and inhospitable state, leading to not only a deterioration of human well-being (Steffen et al., 2015), but threatening the entire planet with all its life-forms.

Leverage points can help to overcome the dichotomy and separations between nature and culture among others that structure the order and our understanding about as well as organizing and acting in the anthropogenic world. ‘Leveraging’ here points to radical form of re-thinking and re-doing (Küpers et al., 2017) to usher in an onto-ethical transformations. These may include a radical change of affective dispositions, perception and attitudes, and habitual ways of conceiving as well as of practicing differently, individually and collectively. Thus, the leveraging is reaching out for anthro-decentric transformational futures, beyond apocalyptic dystopia (Slaughter, 2004) or bleak optimism (Campbell, 2018). Thus, they are not following neo- and eco-modernist visions and agendas, of progress, salvation and mastery that are re-elevating humans as reborn Prometheus (Baskin, 2015; Küpers, 2019).

For leveraging towards a prudent, responsive-responsible and sustainable forms of managing, organising and living (Küpers, 2011), this paper proposes to focus on an integrative and embodied understanding of *practices* in organizational lifeworld and its management, practitioners and stakeholders functioning as embodied actors and agencies.

Accordingly, first the move from reinterpreting leverage points as leverage practices is outlined and an integrative and embodied understanding of leveraging processes, qualified by wisdom are presented. Afterwards, and based on the concept of practice architectures that is integrating different spheres, processes and modes, specific leverage practices in organisations are discussed and some implications and conclusions offered.

From Leverage Points to Leverage Practices

Leverage-points have been discussed for some time and again recently as those that are offering possibilities for realizing sustainability development (Abson, et al. 2017; Ives et al. 2018, Meadows, 1999). As mentioned before, these points are positions of intervention that render comprehensive and effective change in complex systems for example in a living body, a corporation, an economy, a city or an ecosystem. As little shift in one thing can produce big changes in everything “leverage points are points of power” (Meadows, 1999, p.1). The practice of acupuncture helps to understand the concept of leverage-points. For inserting the needle (intervention), the acupuncturist tries to find the ‘right spots’ (leverage-points) on the body of a patient. This would gradually cure the problem experienced by the patient in various parts of the body that have been targeted. The early development interpretation of leverage-points by Meadows (1999) can be aggregated into four broad types of system characteristics that interventions can target - from shallowest to deepest- : parameters, feedbacks, design and intent or paradigm shift.

As Ives et al (2018) have shown, human–nature connectedness is a multifaceted concept incorporating (1) material connections such as resource extraction and use; (2) experiential connections such as recreational activities in green environments; (3) cognitive connections such as knowledge, beliefs and attitudes; (4) emotional attachments and affective responses; and (5) philosophical perspectives on humanity’s relationship to the natural world, including design and its intentions and goals in particular.

What is needed for realising these conceptual re-interpretations of points adequately is an *integral* approach (Küpers & Edwards, 2008, Stafford-Smith et al. 2015) that understands leverage points in relation to interventions as *embodied practices*. An ‘integral’ approach concerns besides various dimensions in embodied organisations (Küpers, 2015), the status and relevance of the natural and the cultural as a nexus and the continuum of ‘non-human’ and ‘human’ also for a more sustainable organisational life. The entanglements of ‘non-human’ materialities and social ‘culturalities’ – interpreted together as ‘materio-socio-culture’ refers to an entwinement that is a plural and complex process, unfolding as uneven and contingent, relational and emergent (Jones, 2013). These entanglements involve a wayfaring travelling of fluxes *between* matter and mind, body and soul, nature and culture. Moving into these and other ‘in-betweens’ is opening up an active theory-formation and entailing far-reaching implications with regard to ‘natural’ and ‘cultural’ practices.

An integrative and embodied understanding of leveraging practices

The recent (re-)turn towards practice in contemporary research (Schatzki et al. 2001) is marked by a search and research for developing more adequate approaches, vocabularies and interpretations that allow transcending divisions between entities and levels, especially for organization and management studies (Nicolini, 2012; Miettinen et al. 2009; Sandberg, & Tsoukas, 2016).

Different practice-oriented approaches take various perspectives and understandings of practice that are inspired and guided by diverse philosophies and meta-theoretical orientations. For Schatzki, practices are defined as 'open-ended spatial-temporal manifolds of actions' (Schatzki, 2005, p. 471) and also as 'sets of hierarchal organized doings/sayings, tasks and projects' (Schatzki, 2002, p. 73). Importantly, as an overarching pattern the practice turn tends towards re-turning forward to materiality, embodiment, thus including, artefacts and bodies as well as a phenomenological and processual orientation of embodied practicing in organization and leadership (Küpers, 2013, 2015), relevant for an understanding of leverage as embodied practices. As both, practices and praxis are realized as a situated and embodied doing, they are not only an ethico-political sphere for critique and deliberation, but serve as concrete leveraging media. As embodied ones, a leveraging practices and actions, mediate enhanced capabilities and enactments of actors and agencies to take wiser actions in changing and fluid circumstances. These circumstantiated practices are situated in a continuity in which bodies, environments and meanings of sustainability are an integral, occurring and emerging process. In turn, such prâxis of practices - both qualified as wise (Küpers, 2013a) - can contribute to personal and eco-social transformation (Murphy, 2015, p. xxiii). Such transformations involve materio-cultural dimensions for developing more responsible and sustainable realities in business and society. Concerning the need for a transformed relationship of human and more-than-human beings, embodied leveraging practices can serve a way to retreat from anthropocentric towards more eco-centric orientations and practices while connecting more directly to sustainability development.

Practice architectures of embodied leveraging

In resonance with a phenomenological approach, also for Kemmis (2012, p. 150), the happeningness of practices in prâxis is the embodied action itself ‘in all its materiality and with all its effects on and consequences for specific dimensions and configurations of practices that are materially, historically, discursively, socially and culturally formed and prefigure the actions of particular actors.^{iv}To explicate these dimensions and the particular nature of prâxis-related relationships, power, agency and solidarity in the enactment of professional practices, Kemmis and Smith (2008), developed a theory of practice architectures. This architecture serves not only to account for sayings and doings in practices, but also for various forms of relating. Furthermore, such architecture allows to understanding different ways of how these three dimensions of practice simultaneously shape and are shaped by one another and how specific architectural arrangements affect interactions. Based on this Kemmisian approach, the following is modifying this architecture, rearranging it as an inter-mediated configuration for prâxis. Such configuration helps to explore pre-condition for and enabling and constraining influences of practices in prâxis. For Kemmis et al. (2014), practices as instances of prâxis are enabled and constraining by specific arrangements that occur at sites, namely, material-economic, social-political and cultural-discursive, dimensions.

- *Material-economic arrangements* are resources that enable and constrain the actions and activities that characterize the practice – the *doings* of the practice.
- *Social-ethical and political arrangements* are resources that enable and constrain the relationships that come to describe the practice – the *relating* of the practice.
- *Cultural-discursive arrangements* are pre-existing resources that enable and constrain the language and discourses that constitute practices – the *sayings* that characterize the practice.

This framework of practices architectures suggests that practicing in the social world hang together in three present dimensions formed in a physical space-time, in a social space and in a semantic space. While ‘productiveness’ of practices in material-economic dimension are situated in physical space-time, and in the medium of work or activity, their value in establishing ‘solidarity’ among the people involved in and affected by a practice of a particular kind as in social-political dimension, are in a social space, and in the medium of power. Finally, ‘meaning’ and ‘comprehensibility’ of practices in the cultural-discursive dimension are in a semantic space, and in the medium of language. Examples for material-economic arrangements that enable and constrain the doings in physical-temporal space are connected to the physical set-ups of various kinds of rooms and indoor and outdoor spaces and management of time in an organisation. In relation to organizing and organization, this relates to the physical layout of working spaces and construction sites conditions actor coordination, teamwork and creativity (Kornberger & Clegg, 2004).

Instances for social-political arrangements in the dimension of social-ethical and political space not only make possible the relationships between people and non-human objects. Rather, these are also processed by the functions, rules and roles in an organization. Furthermore, they are influenced by the communicative requirements of reaching shared understandings and practical agreements about what to do. Moreover, social solidarities cultural-discursive arrangements in the dimension of semantic space in relation to language and discourses used in and about this practice; enable and constrain the sayings refer to what it is relevant to say, or what language or specialist discourse is appropriate for describing, interpreting and justifying the practice.^{vii}

Likewise, there exist ecologies of practices that can be defined as distinctive, interconnected webs of human social activities - characteristic arrangements of sayings, doings and relatings - that are mutually-necessary to order and sustain a practice as a practice of a particular kind and complexity (Kemmis et al. 2012).

Practices are ecologically arranged in two ways as they ‘arise in relation to one another in a particular site’ and they as they are ‘interdependent and inter-related’ (Kemmis et al., 2014). It would make sense to situate the interrelationships in-between the (semantic) cultural-discursive domain of thinking and saying, extended to communication and the (somantic) material-economic sphere. This allows including resources, bodies, performing, doing, things in an extended prâxis-oriented configuration. Such a web of practices, where people and other things meet and interact with one another (Kemmis et al., 2009, p. 7) is always already and on-goingly an embodied one. Therefore, the ways of material, social as well as ethical and political relationships is reinterpreted here as responsive and responsible connections of and between individual and collective embodiments. As specific modes, it is possible to differentiate between ‘production’ and ‘productiveness’, following a more instrumental orientation (‘proto-tékhnê’) in the material-economic sphere. While the socio-ethico-political sphere is characterized by a mode of ‘connections’ and ‘solidarity’ that pursuis a orientation that is related to practical wisdom (‘proto-phrônêsis’). Finally, the mode of the cultural-discursive sphere is one of ‘communications’ and ‘comprehensiveness’, represents more an orientation in favor of a theoretical wisdom orientation (‘proto-sophian’). The following figure shows a modified and rearranged figure of the practice architecture, integrating the different specific spheres, processes or focus and modes or features.

Sphere/Milieu		Process / Focus	Modes/Feature
Cultural-discursive (semantic space)	Practices	thinking, saying, understanding (language, symbols) <i>Theoretical Reasoning</i>	Communications Meaning/ Comprehensiveness (proto-sophia)
Socio-ethico- political (social space)		relating, mediating (sociality, community) <i>Practical Reasoning</i>	Connections Solidarity (proto-phrónêsis)
Material-economic (physical-temporal space)		making, <i>poiêsis</i> performing, using (things, resources, equipment/tools) <i>Instrumental Reasoning</i>	Productions "Productiveness" (proto tékhnê)

Figure 1. Spheres, processes and modes of a practice architecture (own figure)

Kemmis et al. (2009) argued that these practice architectures hung together in ‘teleo-affective structures’ that give a sense of purpose (the ‘teleo’ element) and shaped participants’ commitment in embodied realization (the ‘affective’ element) as they are all present in practices. In addition, Kemmis and his colleagues (Kemmis et al., 2009, pp. 2-3) emphasized that practices not only are embedded in practice architectures, but also as “clustered together in relationship with other practices”, defined as meta-practices that is practices that shape other practices. As such, they are part of prâxis as overarching configuration on a holonic meta-level. New and innovatory practices are shaped by and shape by meta-practices and prâxis. In turn, meta-practices and prâxis determine and allocate resources, infrastructure and policies that influence (enable or constrain) the conditions for practice by focusing on different participants’ practices and actions as well as how all of these are shaped by and shape. ‘Practice architectures’ act as existing preconditions that influence (enabling and constraining) practice in prâxis, even as they are simultaneously produced by the particular doings, sayings and relating that

constitute any given practice. The complex assemblages of this architecture their associated material-economic, social-political and cultural-discursive spaces and arrangements constitute and mediate practices, corresponding to and as prâxis and effectuating the doing of actions. All of the domains enable or constrain, facilitate or impact practices and thus prâxis. While there is no clear route, it is only through careful research examining specific practices and concrete actions in various contexts – qualified by phrônêsis – it is possible to approach and judge whether and how specific acts and decisions are likely to be beneficial for both individuals and broader society (common good). Moreover, this conceptualization allows to determine how more prâxis-oriented practices can be cultivated and qualified as practically wise to challenge the more reductive conceptions and effects of managerialism and neoliberalism.

Practice Architecture for Leveraging

This architecture can be used for specifying leveraging practices of and for sustainability and its development. Specifically, the semantic space of the cultural-discursive sphere corresponds to leveraging practices of cultures of sustainability that are using metaphors, stories, and other expressions. In a complementing way, the socio-ethico-political sphere offers leveraging processes and practices of communities of sustainability and practical wisdom guided by values, virtues visions of solidarity. Finally, the material-economic sphere is the leveraging space for materialities of sustainability, in place and time. The following figures show these different leveraging processes and practices as part of the architecture.

Sphere/Milieu	Practices	Process / Focus	Modes/Feature	Leveraging
Cultural-discursive (semantic space)		thinking, saying, understanding (language, symbols) <i>Theoretical Reasoning</i>	Communications Meaning/ Comprehensiveness (proto-sophia)	Cultures of Sustainability (metaphors, stories, expressions)
Socio-ethico-political (social space)		relating, mediating (sociality, community) <i>Practical Reasoning</i>	Connections Solidarity (proto-phrónēsis)	Communities of Sustainability & Practical Wisdom
Material-economic (physical-temporal space)		making, <i>poiēsis</i> performing, using (things, resources, equipment/tools) <i>Instrumental Reasoning</i>	Productions "Productiveness" (proto tékhnē)	Placed Materialities of Sustainability

Figure 2. Leveraging Practice as part of practice architecture (own figure)

Leveraging practices as changing ones imply and means transforming what practitioners *do*; transforming understandings means transforming what they *think* and *say*; and transforming the conditions of practice means transforming the ways they *relate* to others and to things and circumstances around. The challenge will be to cultivate forms of leveraging saying, relating and doing in ways that are wise and prudent, and informed by theoretical knowledge made available in traditions of thought and traditions of living

Interrelationships and Role of Practical Wisdom

Leveraging ways of sayings, relatings and doings can each be transformed, but each is always transformed in relation to the others. To make leveraging be sustained, we will need our sayings, relatings and doings to cohere – to form coherent patterns that hang together. Accordingly, there are various interrelationships between different specific spheres, processes or focus and modes or features as well as leveraging processes.

Embodied leveraging and its actions in all those can find concrete manifestation in organisation in forms of for example energy consumption and re- or upcycling practices, transport and food practices in relation to natural and social ecology, all as part of environmental workplace behaviors. Such behaviors are realised by those ‘green employees’ who are having an environmental identity, an intrinsic motivation to protect the environment through work, consistent with private behaviors (Ciocirlan, 2017).

For example, the meaning of energy consumption, is considered systematically and symbolically expressed in an energy-saving culture of sustainability, shared and enacted in a social community, while using material eco-efficient possibilities, like isolation, solar or photovoltaic power or other renewable sources and infrastructures. Or in terms of transport, car-sharing is explored and used for the organization for a coordinated communing with electronic cars. Food practices are reflecting and focusing on slow food/eating as communal event with organic local ingredients in an aesthetically appealing canteen. In relation to leveraging practices, practical wisdom (*phrónêsis*) emerging out of socio-ethico and political realm, is needed to specify and qualify wise ends and means for the leveraging in particular situations (Küpers, 2013a).

As *phrónêsis* is used in and for leveraging practice, thus acting for the common good, it manifests a situated practical reasoning, knowledge and habit, which directs action for acting well (*eu prâxia*) and living well (*êu zén*), thus mediating sustainability.

For specifying and evaluating whether practices or the practice architectures are sustainable, Kemmis (2009: 35) offers specific criteria. In general, practices are not sustainable if they do not meet criteria necessary for their continuation in one or more of five dimensions:^{viii}

- *Discursive sustainability*: the practice is not incomprehensible or irrational, in the sense that it does not rely upon false, misleading or contradictory ideas or discourses.
- *Social and political sustainability*: the practice does not include or exclude people in ways that too greatly corrode social harmony or social integration; the practice is not unjust because it is oppressive in the sense that it unreasonably limits or constrains self-expression and self-development for those involved or affected, or dominating in the sense that it unreasonably limits or constrains self-determination for those involved or affected.
- *Material and environmental sustainability*: the practice is not physically and materially infeasible or impractical, and does not consume physical or natural resources unsustainably.
- *Economic sustainability*: the practice is not too costly; its costs do not outweigh its benefits; it does not transfer costs or benefits too greatly to one group at the (illegitimate) expense of others; it does not create economic disadvantage or hardship.
- *Personal sustainability*: the practice does not cause harm or suffering; it does not unreasonably “use up” the personal knowledge, capacities, identity, self-understanding, bodily integrity, esteem, privacy, resources, energy or time of the professional practitioner or others involved in or affected by the practice.

As we have seen leveraging practices for sustainability can be seen as a function and emergent process of living bodily subjects and dynamic embodiments that comprise material, social and cultural dimensions. These processes are situated in a continuum in which practitioners and their practices are enmeshed inter-relationally. This entwinement between practitioners and their embodied leveraging practicing allows considering multi-folded spheres of experiences, meanings and realities, qualified as wise and connected to praxis on a macro-level. However, there exist tensions and conflicts between excellence (intrinsic virtuous and wisdom orientation) and success of practices extrinsic, performance- and result-driven orientation).

Or between strategy and virtue (Tsoukas, 2017). What is needed are political economy-based, approaches that are focusing on the search for possibilities for excellent and successful action and thus on ideas of a transformation process within everyday social life (Dellheim, 2016) to enact a sustainability practice 'from below'.

Practical Implications

With its experiential, and thus dynamic, status, the described forms and transformational qualities embodied leveraging practice are not completely controllable and elude full manageability. Because these integral, relational practices of leveraging do not exist as a given, stable, fixed knowledge, they cannot be easily organized or taught, but enable. Instead of being designed directly *as*, the task is to design *for* these practices to happen that is facilitated and encouraged in an ongoing organising and learning processes. Part of this challenge is to prepare and offer supportive conditions and relationships that engender catalytic circumstances on a situation-specific basis. The complex intricacies of bodies at work and working of bodies and embodiment in leveraging practices, calls to prepare, facilitate and create favourable circumstances, supporting contexts, and relationships that engender conditions by which embodied leveraging practices can flourish. Leveraging need to be organised in tailored ways, according to needs and requirements of the given state of affairs or transformational goals aspired.

To practice embodied leveraging can be enacted through improvisation individually or in communities of improvisation also via de- and rehabilitation (Küpers, 2011a). Supporting embodied leveraging can be realized when mindful bodies or body-minds can serve as media and agencies for sensory knowledge and imaginative, intuitive and emotional processing. Through such processing bodily experienced, situated 'felt-sense' and co-emerging transformative 'felt-shifts' can be enacted (Gendlin, 1992).

Especially, inter-relational sensitive ways of arts-based learning (Taylor & Ladkin, 2009) are helpful for developing inter-practices of embodied and artful leadership design practices. These are drawing on various collage, video, drawing or painting, poetry, sound or other art-forms to embody aspects of experience that are then available to develop including an ethical sensibility. Embodied responsive, responsible and artfully design practices for enacting wisdom and sustainability are examples of how this can be realised practically (Küpers, 2016). Furthermore, to realise embodied, leverage-practices, creatively organizational members require access to available material, financial as well as affective, emotional, cognitive and social resources. [Nudging for Sustainable Energy Consumption](#) (Kasperbauer, 2017) that is promoting certain choices over others via sustainable default options (“green defaults”) behaviourally (Momsen & Stork, 2014; Sunstein & Reisch, 2016), combined with other policies.

Theoretical and methodological implications

The outlined ideas of practices as embodied have various theoretical and methodological implications (Küpers, 2015). To further approach and interpret bodies and embodiment in relation to leveraging practices of and for sustainability in an integral way, requires multi-, inter- and trans-disciplinary orientation. Taking research itself as a form of embodied organising and relational practice, cross-disciplinary bridging helps to show the significance of bodily affection and various embodied issues, processes and realities as entangled. Exploring the embodiment of organising and inter-practicing, requires an integral epistemology and methodological pluralism. Such pluralistic approach requires taking into account first-, second- and third-person perspectives in singular or plural forms. This implies each of their specific, inherent methodologies or modes of inquiries as well as their complex interplay (Küpers & Weibler, 2008).

Future research could explore bodily-mediated spatial, temporal and cultural realities and transitory, often tacit experiences in leveraging best by using a sensually oriented methodology and aesthetic ethnographies and interpretations (Warren, 2008). Research is “fully alive and creative when wide-eyed and involved, when it sees, touches, hears, tastes, and feels” (Sandelands & Srivatsan, 1993: 19), thus when it is using and refining embodied sensory faculties. Such research explores the experiential richness of embodied leverage practices by asking questions like: What does the sustainable leveraging feels, looks, sounds, or tastes like? Which senses are involved in its sense-making? But also what are sources or reasons of discomfort and gaps or blind spots, unexplored directions and not yet activated potentials in these leveraging practices? What cannot be leveraged why? The research avenues for leverage-practices can also be connected to the practice turn in social science and in particular organisation and management studies.

Conclusion

“In the end, it seems that leverage has less to do with pushing levers than it does with disciplined thinking combined with strategically, profoundly, madly letting go”
(Meadows, 1999: 19)

Considering the daunting challenges and severe limitations of the undertaking of developing leveraging practices for and of sustainability a spirit of an ethos of letting-go (‘Gelassenheit’) might be helpful. This ethos is a practice of releasement, serenity, composure or detachment that refers to a non-objectifying ethos of active and ongoing passivity. It entails an attitude of accepting by a careful ‘letting’ that is an abandonment of habitual, representational and appropriating orientations as well as corresponding actions. This bearing appears as very challenging in contemporary organization with its performance-driven ‘practicalism’ and corresponding constraints also in relation to sustainability. However, it is exactly because of this increasingly unviable form that a mindful letting-go is and will become even more urgently needed for a more sustainable present and future.

In this letting-be, practitioners as co-designers in organization do not attempt to manipulate, master or compel. Instead, in a post-heroic mode, they let possibilities of design appear and process in their revealing and vital ways. Importantly, this is not indifference or lack of interest, but rather an ‘engaged letting’ without appropriating projection and totalising closures of enframings. Entering a modus of letting-be in and through embodied and artful design-ing is realized through a receptive waiting and listening, thus more an ‘active non-doing’ in relation to what ‘matters’, rather than a willing and controlling business as usual.

Specifically, it moves from a representational and calculative mode towards more mindful eco-poetic relations, intermediated via a presencing, atmospheric sensitivity ‘open-minded sensing, listening and looking. In this way, organizational members can learn to perceive and related to things they are affected by and deal with while relating to other members and stakeholders, as not only resources’ to be exploited, but inspiring sources to be explored. By stepping back away from or out of customary and habitual representations within the horizon of objectivity with its limited, quick-fixing hastening operations, this attitude allows them to enter into a letting mode that is not in a hurry to impose its ordering and grasp on things. Thus, such orientation is not on a mission to pursue the modernist project of putting questions to phenomena and forcing them to answer or being exploited or ill-treated.

It is hoped that the perspectives as outlined here provides possibilities to re-assess and re-vive the relevance of the embodied practices of leveraging sustainability in and through organisations and management. Enacting this bodied, performative practicing in and beyond organizational life-worlds, pursuit in the spirit of a well-understood engaged releasement, may then leverage and mediate an organisational-related incarnation and unfoldment of genuine alter-native to unwise and unsustainable realities and practices.

‘Alter-native’ here is understood as ‘other-birthly’ processes in relation to economic, political, societal and ethical orientations, ‘inter-ests’ and inter-relationships that are **enlivening** (Weber, 2016) and thus transformative for flourishing sustainable worlds to be-come.

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^{viii} In turn *unsustainable* practices are characterised by the opposite dimensions (Kemmis, 2009a)

- *Discursively unsustainable*: incomprehensible or irrational, relying upon false, misleading or contradictory ideas or discourses.
- *Morally and socially unsustainable*: excluding people in ways that corrode social harmony or social integration; unjust because it is oppressive in the sense that it unreasonably limits or constrains self-expression and self-development for those involved or affected, or dominating in the sense that it unreasonably limits or constrains self-determination for those involved or affected (Young, 1990).
- *Ecologically and materially unsustainable*: ecologically, physically and materially infeasible or impractical, consuming physical or natural resources unsustainably.
- *Economically unsustainable*: too costly; costs outweigh benefits; transferring costs or benefits too greatly to one group at the (illegitimate) expense of others; creating economic disadvantage or hardship.
- *Personally unsustainable*: causing harm or suffering; unreasonably “using up” the people’s knowledge, capacities, identity, self-understanding, bodily integrity, esteem, privacy, resources, energy or time.

**Psychosocial safety climate and leadership as antecedents to prevent
bullying: Their importance in high emotional labour jobs**

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Psychosocial safety climate and leadership as antecedents to prevent bullying: Their importance in high emotional labour jobs

Abstract: Public sector employees report high levels of workplace bullying, many of whom are in high emotional labour jobs (such as nursing and customer service). Focussing on such employees, we test the effect of organisational psychosocial safety climate in minimising bullying and maximising job satisfaction, directly, and by reducing laissez faire leadership behaviours while enhancing constructive leadership behaviours. Using data from 1,231 high emotional labour public sector employees, in 46 New Zealand public sector agencies, using Hierarchical Linear Modelling, we found the majority of hypotheses were supported. Constructive leadership behaviours was related to less bullying, while laissez faire leadership behaviours was related to more bullying. Psychosocial safety climate was related to less workplace bullying and was related to increased job satisfaction.

INTRODUCTION

Emotional labour is defined as the ‘management of feeling to create a publicly observable facial and bodily display’ (Hochschild, 1983, p. 328). Accordingly, occupations such as flight attendants, nurses, teachers, hospitality workers, public servants or emergency call centre employees are categorised into emotional labour employment (Humphrey et al., 2015). Much research on emotional labour has shown that such occupations have experienced severe abuse and aggression from their customers that increase the level of emotional exhaustion and threaten their psychological health and safety (Grandey et al., 2007). However, little is known about the influences of insiders’ negative behaviours on the emotional and behavioural outcomes of these particular occupations and how the organisations can help to prevent the negative behaviours experienced at work (Grandey et al., 2007).

Bullying is defined as a group of negative behaviours such as spreading gossip, ignorance or insults and these behaviours frequently and repeatedly occur in a specific period of time (Einarsen,

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Hoel, Zapf, & Cooper, 2011). Bullying can be severe than in the public sector because management is often impersonal and leadership ineffective (Cowell, Downe, & Morgan, 2014; Lewis & Gunn, 2007; Omari, 2006). The New Zealand public sector has high levels of reported bullying (NZ State Services Commission, 2014; Plimmer et al., 2013; Plimmer & Cantal, 2016). This is unfortunate, as bullying is devastating to workers, and public servants often have to deal with it while also dealing with citizens in difficult circumstances, such as exposure to poverty or crime. Despite high bullying work environments, public servants frequently need to express positive and helpful emotions to citizens, while also experiencing a mix of organisational, managerial, job and work demands that can both lead to bullying and lessen job satisfaction (Salin, 2003).

Bullying research has advanced extensively in recent years, with a number of organisational, leadership and job antecedents identified that can either increase, or decrease, bullying and its impacts should it occur (Helena et al., 2013). At the organisational level, Dollard and her colleagues (e.g., Dollard & Bakker, 2010; Hall, Dollard, & Coward, 2010) have examined psychosocial safety climate (PSC) as an organisational mechanism to prevent any harm caused by the work environment, job characteristics and interpersonal relationships among organisational members (e.g., Dollard, Tuckey, & Dormann, 2012; Law et al., 2011). PSC concerns the commitment of managers to ensure employees feel psychologically safe. It is one factor that likely affects the prevalence of bullying (Law et al., 2011). PSC is related to lessened impacts of job and other demands in high emotional labour occupations (Loh et al., 2018; Zadow et al., 2017).

At the leadership level, many public sector workplaces are badly led and managed by ineffective leadership, which increases the prevalence of bullying, and also blunts the effectiveness of responses to it (de Waal, 2010; Plimmer et al., 2017). Poor quality of leadership has also been found to cause higher rates of bullying, through damage to the social community at work (Hoel et al., 2010; Francioli et al., 2018). For instance, laissez faire leadership, in which bosses do not manage fairness, or intervene in conflict in an apt manner, seems particularly enabling for bullies (Skogstad et al., 2011; Nguyen et al., 2017). In contrast, constructive leadership was found to reduce the reported rates

of bullying, but not reduce the impacts when it did occur (Helena et al., 2013). Furthermore, many studies of leadership and bullying relationships have been concerned with individual level perceptions of leadership and the likelihood of being bullied, and so risk common source biases. This problem also occurs with studies of PSC where this organisational phenomenon is only measured at the individual level. While many studies have examined the role of personal, job and supervisory characteristics related to bullying, few studies have examined the role of top management attention to the psychological safety of employees as a factor in workplace bullying.

In line with previous arguments, our study contributes to our understanding of how complex and hierarchical relationships, including individual and organisational level constructs, can increase or decrease workplace bullying in high emotional labour occupations. Specifically, we extend the PSC literature by treating PSC as an organisational measure and showing how organisational PSC negatively relates to bullying behaviours, and positively relates to the job satisfaction of high emotional labour workers. We also improve understanding of how different types of leadership relate to workplace bullying. Drawing from social learning theory, leader-member exchange theory and PSC literature, our study will test the hypothesised relationships in Figure 1.

 Insert Figure 1 about here

HYPOTHESIS DEVELOPMENT

The Influences of Constructive and Laissez-faire Leadership

Much of the leadership research assumes monolithic styles of leadership across both organisations and within people, at times proscribing leaders or groups of leaders with special powers of charisma or transformation. In practice, leadership behaviours can vary greatly between different leaders in the same organisation, and leaders can idiosyncratically meld different styles of leadership day to day, depending on changing circumstances, mood or other factors. This suggests styles need to be broad in order to respond to the range of tasks, personal and other demands, and work circumstances. In this study, constructive leadership, which consists of task, employee and change-centred behaviours is

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used as an overarching frame of positive leadership (Skogstad et al., 2015). Constructive leaders are both transactional and transformational in their behaviours (Ekvall & Arvonen, 1991). Transactional in that they do what they can to achieve desirable organisational outcomes, providing structure and clarity, whilst being sensitive to employees' need-fulfilment (Bass, 1985). Transformational in that they are change-focused, aware of the need to motivate and inspire subordinates to achieve change, development and progress (Burns, 1978).

Social learning theory explains that individuals not only behave and learn through their personal volition and self-influence, but also learn what workplace behaviors are acceptable, through social interactions with others, and by observing their attitudes, behaviors, and the consequences they experience (Brown et al., 2005). Those with constructive leadership behaviors tend to create good working conditions, ensure the provision of adequate resources for employees to overcome difficulties without the experience with stress or pressure (Lee & Jensen, 2014; Van Dierendonck, 2011). The provision of guidance, structure and task clarity from constructive leaders allows for the consistency between tasks, goals and organisational strategy, and thus reduces the scope for role conflicts (Ekvall & Arvonen, 1991). In addition, a consideration for subordinates may be seen through enhancing fairness perceptions, encouraging and responding to employee 'voice' and giving recognition for good work (Ekvall & Arvonen, 1991; Lee & Jensen, 2014). Drawing from social learning theory, constructive leaders are seen to be credible, supportive, and attractive role models for employees to learn from, because employees are likely to perceive the workplace as supportive, fair and respectful.

Leader-member exchange (LMX) theory illustrates relationships between managers and employees on a continuum from low-quality exchanges to high-quality exchanges (Bernerth & Walker, 2009; Walumbwa et al., 2011). Low-quality exchanges are formed by poor information exchange, close supervision, and lack of trust and respect. By contrast, manager-employee relationship with high quality exchanges are characterized by growing levels of respect, trust and obligation. There is evidence showing the associations between individuals' experiences of the effect of high-quality exchanges and the reduction of role conflicts (Tordera et al., 2008), work demands and

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exhaustion (Halbesleben, 2006) and burnout (Thomas & Lankau, 2009). Constructive leaders are central in the development and encouragement of a supportive work environment, which enhances employee engagement (Van Dierendonck, 2011). The consideration of constructive leaders given to subordinates also emphasises employees' motivation and wellbeing, and likely enhances the quality of leader member exchange and perceived support (Skogstad et al., 2015). Constructive leadership likely increases job satisfaction too through the support and exchange it offers with subordinates (de Waal, 2010; Skogstad et al., 2014). The active management of change also provides more certainty about the future, and so reduces a bullying risk factor and increases satisfaction (Baillien & De Witte, 2009). Job satisfaction is about the pleasurable emotion and the state of fulfilled wants (Warr & Inceoglu, 2012). Therefore, drawing from social learning theory and LMX theory, the prevalence of constructive leadership is argued to reduce the incidence of bullying and increase job satisfaction.

Hypothesis 1: Constructive leadership will be negatively related to workplace bullying

Hypothesis 2: Constructive leadership will be positively related to job satisfaction

In contrast to the active management embedded in constructive leadership, laissez-faire leaders abdicate responsibilities or duties assigned to them ((Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007)). Laissez-faire leadership is related to both workplace bullying and low job satisfaction. Specifically, laissez-faire leaders abdicate their duties and accountabilities when problems occur, and this in turn means that employee voices are not heard, demands are not met, and hence employees' are dissatisfied. Laissez-faire leaders protect their self-interest, and do not consider their employees' interests, hence their employees are insecure and anxious (Hoel & Salin, 2003; Kelloway et al., 2005; Leymann, 1990). Laissez faire, or a general lack of adequate leadership, where employees are excluded or systematically ignored in decision making may be interpreted as bullying in itself (Bass & Avolio, 1990; Skogstad et al., 2007).

Laissez-faire leadership concerns an inability or disinterest in managing fairness perceptions, not making decisions and leaving problems until the last minute rather than planning ahead (Skogstad et al., 2014; Skogstad et al., 2007). The poor resource provision and support for subordinates that stem

from this ‘leadership’ can exacerbate work stressors, and in turn cause dissatisfaction and increase aggression (Hoel et al., 2010; Salin, 2003). When managers show a lack of consideration towards the needs of subordinates and do not encourage clear communication, there is no energy for bridging and integrating “warring factions” within groups (Hogg, 2015, p. 177). For subordinates, there may be a reluctance to raise allegations related to negative workplace behaviours and if raised, they may not be adequately addressed (Hoel et al., 2010). Leaving such problems untreated allows for conflict escalation, heightening the risk of adverse consequences and harm to the individuals involved (Hoel & Salin, 2003). Laissez-faire management means role and task ambiguities are more likely, both of which are known work stressors and antecedents of bullying (Hauge et al., 2011; Denise Salin, 2003; Skogstad et al., 2014). In a social learning process, bullies can learn from laissez-faire leaders that bullying, and an unsafe and unfair work environment is accepted. Managers who avoid intervening in bullying among subordinates convey a message that bullying is acceptable (Skogstad et al., 2007). Using an LMX lens, laissez-faire leaders have limited ability to intervene appropriately and to solve interpersonal conflicts that provoke peer-bullying (Hoel et al., 2010). Laissez-faire leadership may therefore be a root cause of workplace posttraumatic stress and anxiety, low self-esteem and job dissatisfaction (Bond et al., 2010).

Hypothesis 3: Laissez-faire leadership will be positively related to bullying

Hypothesis 4: Laissez-faire leadership will be negatively related to job satisfaction

Bullying and Job Satisfaction

Job and work environment characteristics influence employees’ perceptions and feelings, which in turn influence job satisfaction. Individuals’ emotional experiences at work, including consequences of bullying, ‘spill over’ to fear, anxiety, low self-esteem and depression, that in turn influence feelings about their jobs (Devonish, 2013; Nicholson & Griffin, 2015; Judge et al., 2017; Rodríguez-Muñoz et al., 2009). In contrast, work environment characteristics such as perceived job security and supportive relationships increases job satisfaction (Warr & Inceoglu, 2012).

Bullying creates unsafe work environments, and prolonged bullying victims exhibit higher risk of traumatic stress (Bond et al., 2010), depression, anxiety and bad temper (Mayhew & McCarthy, 2005). Victims of bullying are more likely to reduce their trust in management and tend to engage in social avoidance behaviours (Bergbom et al., 2015; Estes & Wang, 2008; Soylu & Sheehy-Skeffington, 2015). These relational factors work to influence an individual's emotion towards work or, more specifically, their 'overall evaluation with respect to their work environment' (Alegre et al., 2016, p. 1391). Bullying poses a number of obstacles to job satisfaction and has also been directly associated with high levels of job dissatisfaction and disengagement due to a decrease of work motivation (Loh et al., 2010; Lutgen-Sanvik, 2008). We thus expect it to be the case in this study that:

Hypothesis 5: Workplace bullying will be negatively related to job satisfaction

The Impacts of Psychosocial Safety Climate (PSC)

As well as the constructive or laissez-faire behaviours of immediate bosses, organisations are also run by the more general managerial climate that includes the managerial priorities of senior managers. PSC theory addresses top management's priorities, concerns, commitment and support to protect psychological health and safety of employees (Bond et al., 2010; Dollard & Bakker, 2010). A psychologically safe organisational climate ensures employees are provided with adequate resources and support in order to effectively cope with the effects of negative treatment in the workplace (Nguyen et al., 2017). A strong PSC of an organisation is characterized by a shared belief from top to bottom levels that the protection of, and support for, employees' psychological safety and wellbeing is the senior management's responsibility (Bond et al., 2010). This belief is fulfilled by managers enacting policies, practices and procedures that work to protect psychological health and safety (Dollard et al., 2012). These top manager behaviours would likely influence the behaviours of line managers through, social learning, the use of managerial tools, and LMX. A high PSC organisation would better ensure the safety of employees through modelling and communicating appropriate behaviours, managing effective procedures and processes to reward and develop good behaviours, address poor behaviours, and ensuring a rich LMX between managers and employees. In contrast an

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organisation with poor PSC may well model inappropriate or poor behaviours, fail to value or reward positive behaviours, tolerate harmful procedures and processes, and fail to intervene when issues were escalated above line managers. Thus a high PSC would not value or encourage constructive leadership, and would likely turn a blind eye, or even model, laissez faire leadership.

H6: PSC will be positively related to constructive leadership.

H7: PSC will be negatively related to laissez faire leadership.

PSC is conceived as a property of the organisation and this construct can usually be aggregated from individual perceptions to the organisational level (Law et al., 2011). For emotional labour occupations, empirical studies (e.g., Loh et al., 2018; Zadow et al., 2017) show that PSC plays an important role in reducing emotional exhaustion and work injuries. PSC is a resource passageway for these types of workers, by providing a less stressed environment in which emotional labour workers are compensated for their resources, and resource use is optimised (Loh et al., 2018; Zadow et al., 2017). A recent study by Kwan, Tuckey and Dollard (2016) helps us to understand the processes by which PSC can reduce the negative effects of bullying. In contexts with a strong PSC, employees tended to voice bullying occurrences, which led to bullying being resolved quickly (Kwan et al., 2016). When PSC was not implemented, it was found that employees had limited coping options available, leaving cases unresolved and providing the conditions for escalation and the development of harmful effects, one of which could be decreased job satisfaction (Kwan et al., 2016). When employees feel supported by a psychosocial safety climate, they are equipped with the resources and support to manage, and in turn reduce, the negative effects of bullying, making it possible for them to still hold positive attitudes towards their working conditions. In line with previous findings, we expect that:

Hypothesis 8: PSC will be negatively related to workplace bullying

Hypothesis 9: PSC will be positively related to job satisfaction

METHOD

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This study utilized on a dataset collected from the public sector in New Zealand, a country with a strong history of dynamic public sector reforms that were heavily influenced by new public management. New Zealand public service reforms tend to be ‘hard’ and there are pervasive problems of low management skill (Plimmer et al., 2017).

Data collection

This study is part of a larger study conducted in February 2016 with the support of New Zealand’s main public sector union, the Public Service Association. This resulted in 14,125 usable responses (25% response rate). In the present study as the focus is on staff working in high emotional labour occupations (N=1,231 from 46 organisations/agencies). Emotional labour occupations, include nursing, dental and oral health workers, caregivers, health care assistants, food and accommodation workers, customer service employees, call centre workers, security guards, child care workers, and allied health workers as we were interested in understanding on the quality of leadership and managerial practices influence workplace bullying. Most participants are women [71.5%] and of European origin [68.9%] (see Table 1). The median age of participants is 50 years (mean=48.9 years), 46.9% have a university degree, and 15% have supervisor or management responsibilities. The attitudes of participants in this sample are likely representative of public servants generally. Other large N research has found non-significant or inconclusive differences between union and non-union members in job attitudes (Pyman et al., 2006, Petrescu and Simmons, 2008).

Measures

We used previously validated scales in this study. The following items were measured using a seven-point Likert scale.

Constructive leadership. A six-item measure from Ekvall and Arvonen (1991) was used to measure constructive leadership. Respondents indicated how often their immediate manager: ‘pushes for growth and improvement’ (sample item).

Laissez-faire leadership. An eight-item measure of laissez-faire leadership was used from Bass and Avolio (1990). A sample item included ‘Avoids getting involved when important issues arise’.

PSC. ‘Psychological Safety Climate’ was measured using the 12-item psychosocial safety climate measure from Hall, Dollard, and Coward (2010). Sample item included ‘Senior management acts decisively when a concern of an employees’ psychological status is raised’.

Workplace bullying. The nine-item short form negative acts measure by Notelaers and Einarsen (2008) measured bullying in the workplace, with a five-item scale used of frequency, that ranged from never, to daily (sample item: Someone withholding necessary information so that your work gets complicated).

Job satisfaction. Three items from Langford (2007) measured job satisfaction (sample item: My work gives me a feeling of personal accomplishment).

Data Analysis Procedures

In this cross-level model PSC was operationalised at the organisation-level (level 2), while the two types of leadership behaviours, workplace bullying, and job satisfaction were operationalised at the individual level (level 1).

Aggregation Procedures

As the individual level data were nested within organisation, prior to aggregating the data for HLM analysis, we computed the ICC(1) and ICC(2) mean r_{wgj} (James et al., 1984) for within-group interrater agreement for each organisation/agency. The intra-class coefficient ICC(1) is a measure of between-group variance relative to within-group variance. The mean r_{wgj} values, the F values > 1 , and the ICC(I) values justify aggregating the psychosocial safety climate measure to the organisational level. 0.76). Bliese (2000) notes there has not been any standard for determining the value needed for aggregation based on $r(WG)$ and ICC, an r_{wg} equal to or greater than 0.70 and ICC(I) values exceeding 0.05 is considered sufficient. In the current study, r_{wg} for the measures satisfied this value

(constructive leadership: 0.75, laissez-faire leadership: 0.76, PSC: 0.91, workplace bullying: 0.98, and job satisfaction: 0.81) and for PSC, the ICC were both greater than the 0.05 cut-off (ICC(1) and ICC(2) were 0.06 and 0.62 respectively). The results confirmed strong levels of agreement within groups.

Analysis Strategy

As the data collected from individuals were nested within each organisation, we used a two-level hierarchical linear modeling (HLM) strategy to test hypotheses (Raudenbush, Bryk, Cheong, & Congdon, 2005). In the multi-level modelling analysis, the variables were mean centred (that is, grand mean-centered approach) as mean-centering can help reduce multi-collinearity (Hofmann & Gavin, 1998).

FINDINGS

Table 1, depicts the means standard deviations and correlation matrix. Based on the 7-point Likert scales used in this study (the midpoint was 4), results show that these public servants did a diverse range of work, on average sometimes experienced constructive leadership, occasionally experienced laissez faire leadership, and did not rate the psychosocial safety climate of their organisations as high. They were however satisfied, despite some workers experiencing bullying behaviours. The correlation matrix shows that although constructive and laissez faire leadership are strongly negatively correlated, there is also some overlap between the constructs, supporting our case that leaders can have idiosyncratic mixes of leadership styles and do not always fit tidily into categories. Results also show that constructive leadership is highly correlated with psychosocial safety climate, and strongly negatively correlated with laissez-faire leadership.

 Insert Table 1 about here

All but two hypotheses were supported (see Figure 2). More specifically, H1 and H2 were supported as constructive leadership had a negative association with workplace bullying ($\beta = -0.13, p$

< 0.01) and a positive association with job satisfaction ($\beta = 0.32, p < 0.001$). On the other hand, laissez-faire leadership had a positive association with workplace bullying ($\beta = 0.19, p < 0.001$) (supporting H3), and a negative association with job satisfaction ($\beta = -0.24, p < 0.001$) (supporting H4). Hypothesis 5 was also supported: Workplace bullying had a negative association with job satisfaction ($\beta = -0.64, p < 0.001$). H6 and H7 were not supported: Organisational level PSC had an insignificant level relationship to both constructive and laissez faire leadership. H8 and 9 were supported however: PSC had a negative association with workplace bullying ($\beta = -0.16, p < 0.01$). Finally, supporting H9, organisational level PSC had a positive association with job satisfaction ($\beta = 0.26, p < 0.05$). Goodness of fit for level 1 variables are: CMIN/df = 2.033, CFI = 0.985, TLI = 0.982, RMSEA = 0.029, SRMR = 0.0327.

 Insert Figure 2 about here

DISCUSSION

This study found that organisational level psychosocial safety climate provides added “protection” to workers beyond that provided by constructive leadership, and that it likely reduces the prevalence of bullying despite laissez faire leadership. PSC also relates to higher job satisfaction. Organisations in which top managers are concerned about the psychosocial safety of employees experience less bullying even when the quality of line management is quite poor or variable, as it often is. This study provides empirical evidence of the importance of top management attention to psychological safety in order to reduce workplace bullying. PSC includes top management attention to quickly correct problems, to minimise stress prevention through involvement and commitment, and to value psychological health as much as productivity (Hall, 2010). This paper makes two important contributions. They concern both the importance, and limitations, of PSC

The first contribution is that while other studies have identified that PSC is important, this is the first study to our knowledge that has analysed it as an organisational level phenomenon, rather than only as

an individual level perception (Nguyen, Teo, Grover, & Nguyen, 2017). The cross level analysis in this study confirms that organisational level PSC matters, compared to individual level perceptions of PSC.

Bullying is at times framed as the behaviour of individual errant managers. This paper builds on other research that it is an organisational level phenomenon that is influenced by the priorities and behaviours of top managers, as it is they who ideally shape the working environment, set the tone, model behaviours, determine the exchange between leaders and employees and provide the procedures and processes to prevent, address and remediate bullying when it does occur (Hoel & Beale, 2006; Hutchinson, 2012).

The second contribution concerns the limitations of PSC. The insignificant relationship between PSC and leadership styles points to limitations “in what it can do”. Increasing the prevalence of constructive leadership, and decreasing the presence of laissez faire leadership, likely requires more specific actions than PSC, which is more concerned with the avoidance of harm than the promotion of wellbeing. PSC does not directly address, for instance, the need to develop and reward good leaders and deal with bad leadership. Instead they are practices that can only be inferred from the construct. These findings are consistent with others that have found that guidance on how to address workplace bullying beyond formal complaint handling processes is often not clear, and that it neglects the role of basic HR practices such as effective performance management and training (Plimmer, Proctor-Thomson, Donnelly, & Sim, 2017).

One practical implication of this study is that top managers can reduce workplace bullying through explicit valuing and concern for the wider psychosocial safety of their workers. Arguably this study places the onus to address bullying on organisations where it belongs: at the top. Doing so is likely beneficial for job satisfaction as well. The study also shows the importance of fostering constructive leadership behaviours in line managers, and of thwarting laissez faire leadership.

A limitation of this study is that it is not longitudinal, making causal inference difficult. Further, the measure of PSC is short and does not include the range of top management beliefs, priorities, values

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and behaviours likely to represent PSC. Further research could explore differences in the types of organisation, and the emotional labour done by employees as factors possibly influencing results. Moderation effects could also be studied. Overall, though, this study of government organisations shows that organisational level PSC matters in regard to bullying and job satisfying.

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Figure 1: Hypothesised model

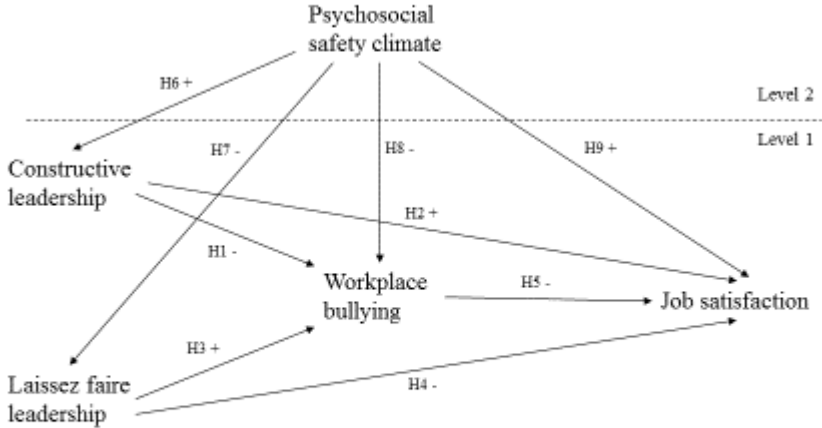
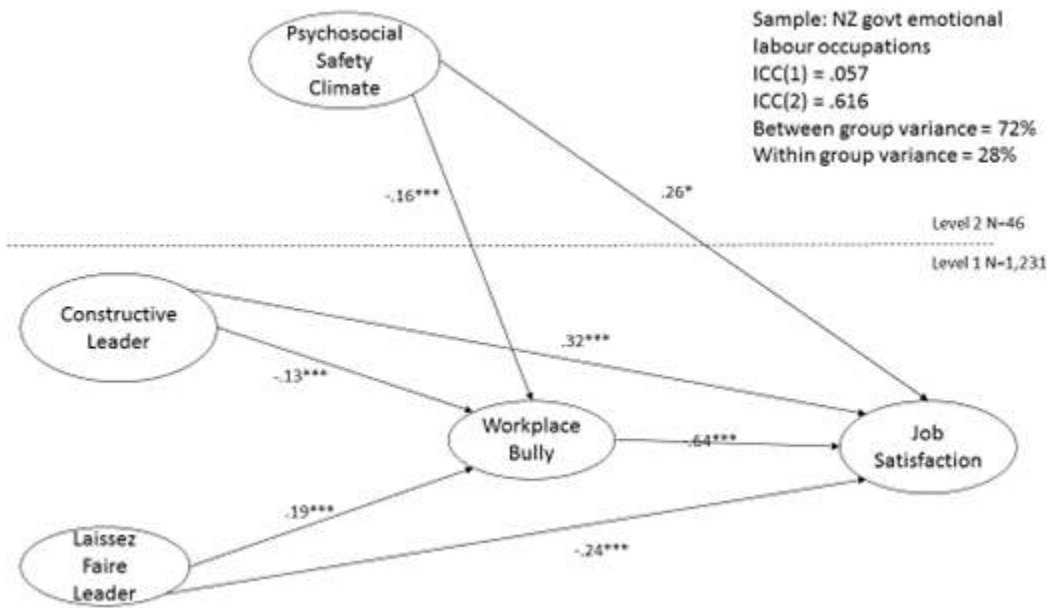


Table 1. Descriptive Statistics and Intercorrelations at The Individual Level

	M	SD	1	2	3	4	5	6
1. Job types	5.44	3.57	1.00					
2. Constructive Leadership	4.28	1.50	0.05	1.00				
3. Laissez Faire Leadership	2.99	1.37	-0.09**	-0.69***	1.00			
4. Workplace Bullying	1.45	0.58	-0.04	-0.33***	0.41***	1.00		
5. PSC	3.82	1.44	0.08**	0.57***	-0.48***	-0.34***	1.00	
6. Job satisfaction	5.24	1.27	0.04	0.42***	-0.32***	-0.30***	0.44***	1.00

N=1,231, *p < 0.05, **p < 0.01, ***p < 0.001

Figure 2: Results of Hierarchical Modelling Linear





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