



CHANGING MANAGEMENT VALUES AND PRACTICES FOR A SUSTAINABLE FUTURE

36TH ANZAM CONFERENCE
5 - 7 DECEMBER 2023
WELLINGTON, NEW ZEALAND

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ANZAM
AUSTRALIAN & NEW ZEALAND
ACADEMY OF MANAGEMENT



VICTORIA UNIVERSITY OF
WELLINGTON
TE HERENGA WAKA
NEW ZEALAND

26TH ANZAM CONFERENCE 2023

36th ANZAM CONFERENCE CO-CHAIRS 2023

Prof Urs Daellenbach – Te Herenga Waka-Victoria University of Wellington

A/Prof Vipul Jain – Te Herenga Waka-Victoria University of Wellington

STREAM CHAIRS ANZAM CONFERENCE 2023

| Stream | Abbr | Chairs |
|--|-------|---|
| 1. Human Resource Management | HRM | Dr Justine Ferrer – Deakin University |
| | | Dr Diep Nguyen – Northumbria University |
| 2. Organisational Behaviour | OB | Dr David Cheng – Australian National University |
| | | A/Prof Joe Jiang – Flinders University |
| 3. Sustainability and Social Issues | SSI | Dr Mehran Nejati – Edith Cowan University |
| 4. Gender, Diversity and Indigeneity | GDI | Prof Jarrod Haar – Massey University |
| | | Prof Maree Roche – University of Auckland |
| 5. Entrepreneurship and SMEs | ESME | Dr Tanya Jurado – Massey University |
| | | Dr Stephanie Macht – CQUniversity |
| 6. Leadership, Governance and Strategy | LGS | Dr Yulong Liu (David) – Massey |
| | | Prof Fuming Jiang – RMIT |
| 7. Teaching and Learning | T&L | Beth Tootell – Massey University |
| | | Dr Laura Rook – University of Wollongong |
| 8. Business Processes, Innovation and Supply Chain | BPISC | A/Prof Arun Elias – Victoria University of Wellington |
| | | A/Prof Matthew Pepper – University of Wollongong |
| 9. Health Management and Organisation | HMO | A/Prof Ann Dadich – Western Sydney University |
| | | A/Prof Stephanie Best – University of Melbourne |
| 10. Public Sector, NGOs and Not-for-Profit | PSNFP | Dr Matthew Xerri – Griffith University |
| | | Dr Geoff Plimmer – Victoria University of Wellington |

CONFERENCE ORGANISERS

Caitlin Waddell – Conference Solutions

Greg Vickers – Conference Solutions

TUESDAY 5 DECEMBER - DAY 1

| | | | | | | | | | | | | | |
|---|------------------------|--|---|--|--|---|--|--|---|--|--|---|--------------------|
| Registration open (Te Papa Tongarewa - Level 2 outside Soundings Theatre; Level 3 Outer Oceania room during conference) | | | | | | | | | | | | 8.30 AM | |
| Session 1 | 9.00 AM | Welcome (Mihī whakatau) - (Soundings Theatre, Level 2) | | | | | | | | | | 9.00 AM | |
| | 9.10 AM | Welcome to the 36th ANZAM Conference by Prof. Jane Bryson, Dean - Wellington School of Business and Government, Victoria University of Wellington | | | | | | | | | | 9.10 AM | |
| | 9.20 AM | Welcome by Prof. Kevin Lowe, ANZAM President | | | | | | | | | | 9.20 AM | |
| | 9.30 - 10.20 AM | Keynote address 1 - Daphne Te Rito Luke (MNZM, MMMGT, MINSTD) - "Unlocking Sustainable Success – 25 years of Māori business in Te Upoko o Te Ika a Māui" - (Soundings Theatre, Level 2, over-flow livestream Icon Room) | | | | | | | | | | 9.30 - 10.20 AM | |
| 10.20 - 10.40 AM | | | | | | | | | | | | | |
| Morning Tea @ Oceania Outer Area | | | | | | | | | | | | | |
| Session 2 | Session start 10.40 AM | Oceania Inner North SSI: Christian Schott A systems analysis of solid waste in New Zealand: Using multiple methodologies to improve problem framing (Warren Fitzgerald, Vicki Mabin, Bob Covano and Vidal Jari) | Oceania Inner South SSI: Ahmed Hafsa Navigating Leadership Styles in Sustainable Construction Projects: A Systematic Literature Review (Fatima Al-Zal and Roksana Tumpa) | Soundings Theatre OB: Richa Guleti An integrated intervention study to improve wellbeing (John Molnau and Adam Fraser) | Ringmarne 1 OB: Ataus Samad Detail Matters: Examining the Impact of Review Concreteness on Online Review Helpfulness (Shihua Fu, Feifei Yang, and Miles M. Yang) | Ringmarne 2 HRM: Stefan Jooss The Role of Perceived Career Growth in the Relationship between Talent Management Practices Usage and Employee Outcomes (Amro Aljbour, Muhammad Ali and Erica French) | Ringmarne 3 GDI: Ella Henry A Link between Gender Equality and Performance in Project Organisations (Marzena Baker, Muhammad Ali and Erica French) | Angus 1 Workshop Developing a Māori Economic Development Strategy - Reflections on Open Strategy and Co-design (Stephen Cummings, Jesse Pirini and Rebecca Bednarek) | Angus 2 ESME: Farveh Farifar Women Entrepreneurs - "Doing business" and "Doing gender" through intertwined ABCDE approach (Kapoti Mukherjee and Naveed Akhtar) | Korero Red Couches BPSC: Imran Ali Circumnavigating sanctions through supply chain workarounds: Friendshoring and strategic choices in logistics infrastructures (Anton Klorin and Sergey Sanovskikh) | Icon Room Workshop The benefits and burdens of service and leadership roles in mid-career: honouring your purpose, crafting your profile (Lisa Callagher, Bill Harley, Paul Hibbert and Tine Kober) | Session start 10.40 AM | |
| | | Creating sustainable value through Consciousness-based decision making (Indrajeet Perera, Renu Joshi, Joseph Koh and Rohana Elluwakewe) | The relationship between legitimacy and sustainability in businesses: A systematic literature review (Sidi Stephens, Sathien Azoussah and Wee Chan Au) | Hybrid work design profiles: Antecedents and wellbeing outcomes (Caroline Knight, Donna O'Hara, Julie Lee and Sharon Parker) | Integrating Work-Family Conflict with Ambivalence in Hierarchical Relationships: A Conceptual Model (Aina Hader and R K Dittini Padmasri) | I Tell You I Like It! Experimental Investigation of Employer Branding Techniques to attract Talents (Niger Sultan) | Gendered Displays: Managers' Use of Negative Emotion to Influence Employee Behaviour (Belinda Rao, Carol Kulk, Sanjewa Perera) | What is your true entrepreneurial identity? The Conundrum of Femininity and Identity in female entrepreneurs (Vanita Yadav, Monica Adiga, Jemal Usini and Nicky Morrison) | Integrated inbound and implant logistics for the movement of containers via heterogeneous material handling resources for operational tracking and transparency (Priyam Bajaj, Chandrasekhar Rajendran, Renu Kulkarni and Anand Kumar) | | | | |
| | | Development of a sustainable business model with net-zero value proposition: A qualitative analysis of Carbon Disclosure Project data (Muhammad Salman Araf, Henry Lau, Dilupa Nandimala and Hiral Hurryr) | Transitioning to circular economy: A review of policies (Swati Awasth, Merve Cevcan and Zhiming Chang) | Organizational culture, performance expectations and wellbeing (Roy Smalle and Sheng Mooney) | Internal and external networking behaviours of middle managers: Insights into the roles of gender, education, political skills and mentoring (Saraja Waniyasekara, Muhammad Ali and Erica French) | Flexible talent management approach: guidelines through signaling theory (Sanjewa Perera, Carol Kulk and Sukhbir Sandhu) | Rally the troops first: Startup action on gender equality (Sanjewa Perera, Carol Kulk and Sukhbir Sandhu) | Senior Women Entrepreneurs in Popular Media: Insights from Netflix's Longest-Running Series (Bronwyn Eager and Naomi Birthistle) | Customer-centric perspectives in the hospitality sector using service blueprinting and force field analysis approach (Ran Roy) | | | | |
| | | Integrative Conceptual Framework for Understanding the Drivers of Certification in use of Solar Panels (Rishika Chhilar, Sukhbir Sandhu, Peter Majewski, Leanne Smith) | Business research methodology: Revitalising research in Fiji (Ajakpa Melissa, Denise Ruweli and Telesio Kalavrete) | Psychological Strain & Burnout in Today's Multitasking Work Environment: What Organisations and Managers Can Do! (Wongpiu Yu and Andrew Yu) | Optimal Distinctiveness and Multimodal Identity Claims (Andrew Argue and Thijis Velasco) | Current estimated potential: A peculiar caveat to the talent management literature? (Qion Yi Lee, Keith Townsend and Adrian Wilkinson) | Tuakiri takahi, takuru iho! The prevalence and work-related outcomes of mono Māori versus dual Māori/Pākehā identities in Aotearoa workplaces (Jarrod Reed and Ben Walker) | Effects of CSR and Gender Diversity on Financial Performance of Family Businesses (Subba Yarram, Sujana Adapa) | Developing optimal nurse schedule for improving healthcare operations in the emergency department of tertiary care Indian hospital (Shubhangi Patel, Vipul Jain and Yi Mei) | | | | |
| Session end 12.20 PM | | Revisiting Adam Smith's open system and the moral sentiments at work in his micro-foundation (Mark Pritchard and Jane Zhao) | Business Leaders' signalling prosocial behaviours related to work health and safety: An exploratory study (Leigh-ann O'neil, Tim Bentley, Peter-Jan Beemer, Eimear Franken, Nicola Green, Shannon O'Neill and Lee) | Will workplace exercise improve the well-being of security guards? A field experiment intervention examining the implementation of SDT and ID-R models to promote workplace exercise (Cho Yui Wong and Amy Y Qiu) | Reading the Signs: A semiotic perspective on metaphors in strategy (David Sills) | Using Anonymous Application Procedures to Address Discrimination in Recruitment and Selection – A Rapid Systematic Review (Victor Spio Merson, Melissa Wheeler, Lindsey Arthur and Melanie McGrath) | | Disaster management in SMEs: What do we know from the literature? (Tul McKeown, Miria Lazari, Sean Way, Marjorie Jerrard) | Service blueprint for enhancing older people's well-being by the adoption of frontline social robot in the aged care industry sector (Mingliang Wu, Maria Scerri, Manoj Chowdhury) | | Session end 12.20 PM | | |
| | | Lunch @ Oceania Outer Area | | | | | | | | | | NSW + ACT Regional Networking (includes lunch) | 12.20 - 1.30 PM |
| Session 3 | 1.30 - 3.10 PM | Workshop | | | | | | | | | | 1.30 - 3.10 PM | |
| | | Wellbeing At Work SIG Launch and Symposium (Rebecca Mitchell, Brenden Boyle, Jarrod Reed, Ashlee Truth, Anya Johnson, Helena Nguyen, Tim Bentley, Michelle Tuckey and Helen De Cieri) | Early Career Academic Challenges and Strategies to Support Wellbeing (Todd Bridgman, Melissa Bryant, Marissa Edwards, Stuart Middleton, Aska Ghofoor and Elizabeth Nichols) | Editors Panel: Insights, Lessons Learnt plus Interactive Discussions (organised by Catherine Collins) | PRME - ecological sustainability and social responsibility agendas in management education (Joanne Leary, Emma Watson, Brad Jackson and Danny Soetanto) | Key Lessons from science-based open innovation: An eight-year journey on engagement and impact (Elin Oerlemans, Katharina Ruckstuhl, Jarrod Reed, David Brougham, Paula O'Kane, Jesse Pirini, Sara Walton and David Allaghour) | Integrating sustainable development and decolonisation into business education, do we agree on what we are talking about? (Teresa Rose, Nathalie Lachance, Eduardo Ordóñez-Ponce, Ruth McPhail, Kelly Lindsay and Craig Hall) | From climate literacy to action: using threshold concepts to reimagine responsible management education for a climate-changed world (Melissa Edwards, Franz Wohlgemuth, Fara Armat, Sukhbir Sandhu, Robert Hales and Tim Williams) | From Participation to Partnership: Effective research partnerships with disability-based employee resource groups (ERGs) (Jasmine Williams, Maria Hameed Khan and Duncan Chew) | Leading for the Future: Vision(s) of business and management education (Hefsa Ahmed and Justine Ferrer) | Examining best practices in measurement scale quality & demonstrating a straightforward solution - measures - using participants' data (Gordon Cheung and Helena Cooper-Thomas) | | |
| 3.10 - 3.30 PM | | | | | | | | | | | | | |
| Session 4 | Session start 3.30 PM | SSI: Vanita Yadav Born-Green-Globes: A case analysis to develop a research agenda (Sara Walton, Dana Ott and Joseph Cooper) | SSI: Mohammad Saliman Araf Impact of CSR, Green Practices and Organizational Politics on Sustainable Business Performance: Moderating Role of Employee Pro-Environmental Behavior (Rizwan-Bashir, Muhammad Ali, Marzena Baker and Muhammad Ali) | OB: Neal Ashkanasy A Longitudinal Study of newcomers' journey/moon-hangover-hangover relief effect on job satisfaction: A moderating role of focus of control (Jooyeon Son and Chiko Ok) | OB: John Molnau Fostering Employee Thriving through Proactive Career Support (Zhongmin Wang, Zhou Jie and Hongmin Yan, Xiaowen Hu) | HRM: Yvonne Brunetto "I have learned just how much I depend on other people": the impact of Covid-19 on workplace relationships (Ann Parkinson) | GDI: Sujana Adapa Strength, hope, care": Action research on employment pathways for indigenous communities of Djaang (Geelong) (Jo Ingrid, Mitch Browne, Andrew Creed, Alfred) | UGS: Jørgen Sandberg A Qualitative Study on the Leadership Behaviours of Joyful Leaders (Katie McIntyre, Rory Mulcahy and Meredith Lawley) | T&L: Angela Paladino Does it matter? External stakeholder perceptions towards business program accreditation (Katherine Attree and Aileen Neher) | HMO: Naomi Birthistle Applying the Bourgeois Model in an Australian Context: the role of self-managed teams (Roshin Cameron and Benjamin Archer) | Session start 3.30 PM | | |
| | | Conceptualising the sustainability integration through the lens of strategic orientation: A multiple theory approach (Hegru Achiche Chandrajewenth) | 216 Measuring circular economy advancements in the automotive industry using machine learning (Melissa Gurbert and Abbey Kumar Singh) | Abusive supervision: Building on existing knowledge to chart new research directions (Catherine Frost, Andrei Lux and Peter Galvin) | Mediating Role of Resilience in the Impact of Mindfulness on Emotional, Social and Psychological well-being as the Indices of Mental Health (Nishi Sinha and Pankaj Kumar) | AI-Driven Strategic Human Resource Management: Changing the HRM Game or Creating a New HRM Game? (Gerson Francis Tuzson, Dinithi Padmasri, Liang-Chi Huang and Rachel Hoellgrang) | Access to meaningful work experience for young people with intellectual disability: A preliminary analysis of challenges and opportunities (Alyssa Chalm, Susan Mayson, Hannah Meacham) | Exploring the Leadership Galaxy: Understanding the Cohesive Dynamics in Distributed Leadership (Ataus Samad, Rubina Ahmed and Ezz Alamed) | Fostering equity students' experience and success through a lens of universal design for learning (Hossein Mohammadi, Chen Zheng and Saadla Shabnam) | Exploring the impact of employee engagement and patient safety (Grace Scott, Anne Hagdalen and Robyn Taylor) | | | |
| | | A Scientometric Analysis of Literature on Workplace Psychosocial Hazards (Subhi Othaid and Muhammad Mahmood) | Measuring ESG impact: A new framework for agribusiness (Priyambada Joshi, Ayon Chakraborty and Harprender Sandhu) | The influence of leaders' passion at work on employees: A methodology and analysis plan (Yvelina Serrano and Denise Appen) | Perceived Collective Efficacy Amongst Short Duration Teams (Kiran Gupta, Shalaja Kerve and Chandan Singhvi) | Determinants and outcome of employee green behaviors (Anuradha Mukherji, Jaydine Bhattacharjee and Anupama Prashar) | "To be or not to be?": Exploring the contentious landscape of women leadership at the nexus of religion and culture (Anuradha Mukherji, Jaydine Bhattacharjee and Anupama Prashar) | Leading an age-diverse workforce: Evaluation of the leadership development intervention based on the Include, Individualise, Integrate framework (Eve Zellmer, Francesca Jangenean, Leah Zosak, Anuradha Mukherji, Jaydine Bhattacharjee and Anupama Prashar) | Generative AI is here: Time for Transnational Higher Education to step up and embrace the opportunity (Eve Zellmer, Francesca Jangenean, Leah Zosak, Anuradha Mukherji, Jaydine Bhattacharjee and Anupama Prashar) | Reducing Clinician's Administrative Workload by Means of Speech Recognition (Anuradha Mukherji, Jaydine Bhattacharjee and Anupama Prashar) | | HOSON / IM Group Meeting (by invitation only) | |
| | | Conceptual Change in Business Organizations: A Systematic Review (Elizabeth Nichols, Jean-Pierre Imbragioni, Lauri-Matti Paltanen and Tina Orvola) | From the Classroom to the Community: The Impact of Responsible Management Education on Student Satisfaction and University Reputation (Farid Ahmadul Nazzari, Arjun Inque and Shefali Ratnam) | Too Many Explanations? New Well-Being Perceptions of Leader Use of Positive Emotion in Email by Leader Gender (Mary Hausfeld and Michelle Waldbauer) | Perceived organisational support and organizational time demands as organizational predictors of work passion - INTERACTIVE (Jennifer Ann Lajom, Leanne Taitelmeier, Hedyah Shamsing, Patrick Raymond James Garcia and Peter Lemuel Cuevas) | Job crafting strategies to retain a whole workforce during a pandemic (Hannah Meacham, Justine Ferrer, Peter Holland) | Equality for Women in U.S. Healthcare Management Through the lens of intersectionality (Corry Adair, Diana Rajendran and Anne Barber) | Fostering inclusion while taking bread: Enabling all your temporal radicals in the manufacturing industry (Chris Griffiths, Peter McElhee and Ray K. Smolton) | Implications of Artificial Intelligence for Student Learning in Business Schools (Rocha Gulati, Christian Hoyer, Leslie Hall) | Taking Care of Patients and Hospital Staff (Anya Johnson, Joseph Corjani, Aleksandra Lukyte, Helena Nguyen) | | | |
| Session end 5.10 PM | 5.10 pm | End of Day 1 | | | | | | | | | | Session end 5.10 PM | |
| | | End of Day 1 | | | | | | | | | | | |
| 5.30 PM to 7.00 PM | | | | | | | | | | | | HOSON / IM Networking event (by invitation only, Dragonfly, 70 Courtenay Pl.) | 5.30 PM to 7.00 PM |

WEDNESDAY 6 DECEMBER - DAY 2

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
|---|---|---|---|---|---|--|---|--|--|---|--------------------------|---|
| | Oceania Inner North | Oceania Inner South | Soundings Theatre | Ringmarie 1 | Ringmarie 2 | Ringmarie 3 | Angus 1 | Angus 2 | Kororo Red Couches | Icon Room | | |
| Session start 9.00 AM | SSI: Indu Peiris Ethic of Care for Refugee Support: Evidence from New Zealand (Nadereera Ramababu, Hubert P. de Vries and Zhiyan Bashurati) | SSI: Ram Roy How do individual actors strategically created shared value in a business-to-business field? A case study from Australian social procurement (Natalya Turkina, Joana Keranen and Kevin Angus)§ | OR: Rebecca Dong Are Workaholics Efficient? Examining a Moderated Mediation Model of Psychosocial Safety Climate and Psychological Capital (Candice Whay, Yu-Hsuan Wang and Chien-Chung Kao) | OR: David Cheng Are different-source belongingness resources complementary?: Investigating interactive effects on new employee adjustment (Helena Cooper-Thomas, Jenny Chen and Linda Treibeth) | HRM: Justine Ferrer "HR is different up here": An exploratory study of HR in tropical northern Australia (Leigh-ann Onnes)§ | OR: Ingrid Wahine Maori entrepreneurs: The cultural, social, and financial challenges when experiencing business growth (Tui MacDonald, Brad Jackson and Jason Mika) | Mixed: Bindu Gupta Technological crowding and exploratory innovation: The effects of a firm's technological superiority BPSIC (Chia-chi Chang and Phuong Dung Thi Nguyen) | Quiet Room | ESME: Subba Reddy Yarram Development and Content Validation of the Family Business Self-Efficacy Scale (FBSE) (Sushama Singh, Patrick Raymond, James M.Garcia, Laraine R. Tolentino and Francesco Chirico) | Workshop Building on research in the classroom: Developing your impact as a management educator through scholarly journal publication (Stuart Middleton, Paul Hibbert, Todd Bridgman and Marissa Edwards) | Session start 9.00 AM | |
| | Multinationals and Community Development. Assessing the Construction of Just Relationships (Eduardo Ordóñez-Ponce) | Organisational climate mitigation trajectories in New Zealand (Pi-Toulu Nikula) | Exploring psychological capital in remote work: A qualitative approach (Vineet Arora and Amit Shukla) | Job search barriers perceived by people who care for an elderly or disabled family member (Hugh Bambridge, Lukas Hofstätter and Sarah Judd-Lam) | Are Older Colleagues More Trustable? The Interactive Effect of Employee Relational Age and Voice Behaviour on Coworker Trust and Task Performance (Chad Chiu, Sanjewa Perera and Valerie Cairnes) | Exploring the transformative potential of Indigenous standpoint theory in the decolonisation of business education (Samantha Cooms, Gaele Watson and Sharlene Leroy-Dyer)§ | Incumbent responses to moral market emergence SSI (Jonathan Baker) | | Inorganic Growth Strategies in Private Family Firms: A Behavioral Agency View (Gianni Spolverotto, Mathieu Luyssart, Miguel Meulman, Wouter De Maesseneire) | | | |
| | The Influence of Collectivism, Guanxi and Mianzi in the Enactment of Responsible Leadership in Confucian Asia (Carolyn Kah, Nik Teck Siong Chong and Kevin Chuen-Kong Cheung)§ | Organizational Resilience as a Strategic Sustainability Approach: A Case Study of An Indigenous Agricultural Company in New Zealand (Gerson Francis Tucson, Jordan Clark and Daniel Tisch) | Are innovative subordinates typically the favorites of supervisors? Supervisory adaptive responses to employee innovation (Shenghui Wang, Ming Yi and Irene De Pater) | From observed customer mistreatment to creative service performance: the mediating role of identity threat emotion and the moderating role of job crafting (Kiaowen Hu, Hongmin Yan, Sran Zhan and Fangfang Zhang) | In Times of Crisis, Does it Matter if Work is Decent? Validating and Assessing Decent Work in Ghana during the Covid-19 Pandemic (Albert Amankwaa, Irene de Pater, Isaac Kasi and Desmond Ayentim) | Skilled migrants negotiating employment in the Australian professional labour market: The impact of cultural distance (Thi Tuyet Tran, Roslyn Cameron, Nutawuth Muenjohn and Alan Montague) | Development and Validation of the Workplace Friendship Questionnaire: Using Pilemer and Rothbard's Theoretical Framework HRM (Chieh Wang, Sen-Kai Yang and Cheng-Hsien Li) | | The practices of family businesses and their management values designed to create a sustainable future for all (Naomi Birthistle) | | | |
| | Friends with benefits: Interconnections between environmental sustainability and gender equality (Sukhbir Sandhu, Carol Kulk, Sanjewa Perera) | Too expensive, too hard, too many: Sustainability certification in the Australian fashion industry (Josephine Alice McKenzie, Sukhbir Sandhu and Carol Kulk) | Using Creativity and Digital Nativity to Predict General and IT Innovativeness (Adijana Bunjak, Matej Cerne, Jasine Philip, Peter Trkman) | Too Drained to "Smile and Serve"! An Ego Depletion Perspective to Displaced Aggression (Neha Belamkonda and Rahul Shree) | Multiple jobholding: An Overview of the Literature (Anipa Rehman and Denise Jensen) | Yoorrook and self-determination: a focus on truth-telling (Kevin Moore, Pauline Stanton, Sheo Fan, Mark Jones and Mark Rose) | Work-family Border Busting: The Case for Zipping Working HRM (Candice Harris) | | Understanding the Dynamics of Psychological Ownership and Community Embeddedness in Family Businesses: A Case Study Barker's of Geraldine (Hafsa Ahmed and Anthony Brian) | | | |
| Session end 10.40 AM | | Assessing Sustainability Integration in Project Management Curricula across Australian Universities (Fatima Afzal and Meilin Huang) | Breakthrough of Organizational Defense from the Conservation of Resources Theory (Guyang Tian, Yang Yang, Xuochang, Chunye Ma and Yezhuang Tian) | Mistreatment in the Moment: The Role of Perpetrator Status in Employee Perpetrator-Directed Outcomes of Customer Mistreatment Events (Miaojia Huang, Rajiv Amarnani, March To and Gillian Yip)§ | Work readiness skill requirements for early career project management professionals: Ascertainning different stakeholder perspectives (Jessica Borg and Christina Scott-Young) | Mana Wahine Treaty Claims and Redress: implications for organizations and business (Ella Henry) | | Work Passion on Work-Family Outcomes of Entrepreneurs in India and Germany: The Moderating Roles of Activity Orientation and Individualism-Collectivism (Sreelekshmi Chandran and Jayalakshmi V) | | Session end 10.40 AM | | |
| 10.40 - 11.00 AM | | | | | | | | | | | | |
| 6 | Key Note Address 2 - Professor Paula Jarzabkowski (U. Queensland, City U. London) - "Disaster Insurance Reimagined: Transforming financial systems for climate adaption" (Soundings Theatre, Level 2, over-flow livestream Icon Room) | | | | | | | | | | 6 | |
| 12.00-1.10 PM | | | | | | | | | | | | |
| Lunch @ Oceania Outer Area | | | | | | | | | | | | |
| 7 | ANZAM Awards Presentations and ANZAM Annual General Meeting (Soundings Theatre) | | | | | | | | | | 1.10 - 2.50 PM | 7 |
| 2.50 - 3.10 PM | | | | | | | | | | | | |
| Afternoon Tea @ Oceania Outer Area | | | | | | | | | | | | |
| Session start 3.10 PM | SSI: Sara Walton Actress New Zealand's Textile & Fashion Industry: Small Business Entrepreneur Perspectives on the Values Shift Required to Achieve Sustainability (Ellie Sheehy, Lynnae Sheridan and Elizabeth Nichols) | ESME: Neha Sharma Challenges of Being a Social Enterprise: When Being a Business for Good Means Being a Good Business (Julia-Anne Maier, Carol Kulk, Sanjewa Perera) | OR: Urs Daellenbach Does a Bureaucratic Climate have a Double Edge Effect? Testing Effects on Workplace Behaviours in New Zealand (Jarrod Haer, David Braugham, Salman Rashid, Urs Daellenbach, Sally Davenport and Shirley Leitch) | OR: Andre Lux Chameleons and Job Satisfaction: The Mediating Influence of Ingratiation and Leader Member Exchange (Preeti Rawat, Shiji Lyndon, Ajinkya Navare, Stuti Bhatt and Vashali Masak) | HRM: Catherine Collins A systematic literature review of employee engagement in remote working environment (Neeru Choudhary and Shilpa Jain) | GGP: Paula O' Kane Gender and Ethnicity of Owner managers and Conflicts in Malaysian Family Businesses INTERACTIVE (Sujana Adapa and Subba Yarram) | LEGS: Eva Zellmer Conflicting Institutional Logics and Innovation: CEO's Private Firm Experience in State-Owned Enterprises (Mengyuan Zhu, Wen Li, Yaowen Shan and Kritika Randhawa) | BPSIC: Amrita Sohal A project-level perspective on open innovation for project management: A systematic review INTERACTIVE (Mehwish Malik)§ | T&L: Todd Bridgman Double-Loop Learning: Constructive Peer-Feedback to Enhance Teamwork Experience and Skill (Ju Li Ng and Kevin Lowe)§ | PSPM: Geoff Plimmer Regarding the Symbiotic Relationship between NGOs and News Media Organisations in Disaster Management and Messaging INTERACTIVE (Jasmine Philip and Jessie Philp) | Session start 3.10 PM | |
| | Corporate Boards at the Interface of Corporate Governance and Corporate Social Responsibility: A Field in Flux (Rosemary Sainey) | Evaluating the beneficial application of strategy tools for micro and small business owners and managers (Kerry Anne Toyer, Noel Tracey and Wayne Graham) | Compensating for an Uneven Lead: The Interactive Effect of Team Proactivity and Differentiated Transformational Leadership (Hai-Viet Nguyen, Chad Chiu and Hao-Chieh Lin) | How do leaders earn respect? A Repertory Grid Technique (RGT) Study (Chi Kwan Warren Chiu, Hao Kong, Yi Edo Liao and Doreen, Y. P Tse) | Human resources management and expatriation: Why and how work engagement matters (Marion van Bakel, Merete Stronge Naesgaard and Senjina Michalova) | Risks of Representation: Disability and Gender in Leadership in a Public Sector in Australia INTERACTIVE (Jasmine Williams, Maria Homed Khan and Duncan Chew) | Critical discourse analysis of corporate governance anomalies, financial irregularities, and fraud characteristics: The study of a private sector commercial bank in an emerging economy (Md Kazi Islam) | Exploring User Sharing Behaviours on Market-Based Platforms with Regression Tree Analysis INTERACTIVE (Yingnan Shi and Chao Ma) | Examining the Challenges of Peer Review: A Systematic Review (Angela Polidino, Laura Cutrona) | The emergence of social enterprise: Wander with a mission - A grand tour of social enterprise by City Wanderer INTERACTIVE (Sen-kai Yang, Shan Kuei Teng) | | |
| | Doing Good While Saving Money? The Formation of Initial Reputation of a New Social Venture (Caroline Walther, Antonieta Petkova and Jurgen Williams) | The influence of work-group inclusion and work control on work-life interface: A study of New Zealand SME employees (Kazunori Kobayashi, Wayne Macpherson, Jennifer Scott, Beth Tostell, Stephen Kelly) | Learning from external and internal familiarity in temporary teams: The role of goal orientation (Noel Faghri) | Leader Mental: A Systematic Review (Zita Chan, Irene E. De Pater, Gareth S. K. Ting, Amy Wei Tian, and Tim Bentley) | Why engage? Interactionist perspective within independent professionals' context (Hadas Wittenberg, Gabriel Ewerje, Darryl Forsyth and Nazim Taslan) | Second-generation Asian Australian Leaders' Perspective on The Bamboo Ceiling in Australian Workplaces INTERACTIVE (Cynthia Tang, Sen Senejaya and Diana Rajendran) | Interactive Imprinting: The Influence of Great Leap Forward and Great Famine on CEO Innovation Orientation (Quinn Ye, Helen Hu, Dean Xu and Kwanghui Lim)§ | Fresh produce supply chain coordination with option contract under uncertainty: analyzing decision strategies of supplier and buyer INTERACTIVE (Vijay Dyaneshwar Niture and Abhishek Sharma)§ | Exploration of Business Academics Identity within SoTL-focused Communities through Peer Review Practices (Lima Jogaku, Martina Costello) | The use of AI in Selection Interviews INTERACTIVE (Steven Liu, John Lai, Zhijing Zhu and Carolyn Ngawi) | | |
| | Drivers and Outcomes of Green Marketing Strategy in the Context of Developing Country: The Mediating and Moderating Roles of Competitive Advantage and Strategic Proactivity (Girma Demessie and Amit Shukla) | Exploring Rural Entrepreneurship in Developed and Developing Economies: A Systematic Literature Review (Janvi Patel and Anubhav Sinha) | Team circadian asynchrony and the misalignment of creative temporal spaces in creative teamwork (Stefan Voik, Yan Pan, Yufan Shang and Christopher Barnes) | Leading with Care: Empathetic Leadership for Hybrid Work (Zeena Alasmara', Blooma John and Niki Panteli) | Exploring the relationship between Perceived Opportunities for Competency Development, Subjective Career Success and Organizational Citizenship Behaviours: A social exchange perspective (Tseow Hui Hui, Wee Chan Au and Pervaiz Ahmed) | The Comparative Study of the Effect of Service Climate Management in Thailand and Vietnam INTERACTIVE (Parinapas Suwanmont, Subchat Untachai, Sarawut Piewdang and Supat Rattaprasun) | Is more really better? A social indispensability account of female independent director turnover (Annan Li and Yaping Gong)§ | Assets and processes in knowledge-intensive precincts: critical attributes that drive innovative activities INTERACTIVE (Kevin Chan) | Teaching Critically and Reflectively: using Students' Family Lens to Teach Business and Management Concepts (Ankit Agarwal) | Implications of capabilities spillovers in vertical linkages for heterogeneity in firm capabilities (Gaurav G B, Prateek Ray and Sai Yavavaram) | | |
| Good apples in business barrels: CEO's tenure, corporate social responsibility and the moderating roles of CEO's business background and corporate governance training (Dung Thi Phuong Nguyen and Jung-Ching Lin) | When a video is worth more than a million words: the effects of media richness on information processing in entrepreneurial opportunity evaluation (Antoine Gilbert-Saad, Jenny Gibb and Marta Senciac)§ | Recovery and recidivism: The aftermath of unethical pro-organizational behavior (Hongmin Yan, Tyler Okamoto and David Sokol) | Leading with Intellectual Humility (Ken Farnes)§ | The role of 'idealism' in employee burnout: An empirical study of Australia and New Zealand workers (Lynnae Sheridan and Joseph Cooper) | Logic mobilization in digital space: A hermeneutic account of interactional praxis INTERACTIVE (Mohammad Zunaidi, Umar Qureshi and Babita Bhatt) | Interfirm Networks, Knowledge Transfer, and Firm Performance: The Role of Organizational Unlearning (Carolyn Ngowi, Steven Lai and Salih Zeki Ozdemir) | The Role of Blockchain as a Trust Signal in emerging relationships: a case of organic food supply chains INTERACTIVE (Kongmanas Vayavrabhas, Sherash Kurnia, Zahra Seyyedghorban and Daniel Samson)§ | Time well served in developing reflective practitioners? A scholarship of teaching and learning based enquiry into the delivery of personal development teaching for senior leader apprentices (Elizabeth Houldsworth and Emma Wotton)§ | When industries lose their shine: Can ambivalence erode stakeholder support? (Mark Pritchard) | Session end 4.50 PM | | |
| End of Day 2 | | | | | | | | | | | | |
| 6.30 - 10.45 PM | | | | | | | | | | | | |
| Conference Dinner (Harbourside Function Centre) for those who have pre-purchased tickets | | | | | | | | | | | | |
| 6.30 - 10.45 PM | | | | | | | | | | | | |

THURSDAY 7 DECEMBER - DAY 3

| | Oceania Inner North | Oceania Inner South | Soundings Theatre | Ringmarine 1 | Ringmarine 2 | Ringmarine 3 | Angus 1 | Angus 2 | Kororo Red Couches | | |
|---|------------------------|--|---|--|--|---|--|--|---|---|------------------------|
| | Quiet Room | Workshop | OB: Ben Walker | HRM: Nigir Sultana | GDE: Ken Farnes | ESME: Nedwera Ranabahu | UGS: Uma Jagulu | HMO: Victoria Lister | PSNPP: Neeru Choudhury | | |
| Session 9 | Session start 9:00 AM | Generating impactful research through problematisation: Strategies, techniques, and illustrations (Jorgen Sandberg and Alina Holder) | Does Peers' Unethical behavior influence knowledge hiding: Mediating and moderating mechanism (Bhinda Gupta, Manjari Srivastava and Sumi Jha) | Green HRM practices in the Hospitality and Tourism industry: Antecedents, Outcomes and Future Outlook (Abdul-Razak Suleman, Mehran Najat, Asadeh Shafaei and Janice Redmond) | Hiring talent or recruiting privilege: A demand side perspective on recruitment (Samantha Kilmarin, Ruth McPhail and Amie Shaw) | Navigating the Complexities and Paradoxes of Organisational Growth: A Study of Australian SMEs (Hanako Frawley, Mark Edwards, Richard Gruner and Christine Woods) | Values and practices of sustainable higher education management: Responsible Leadership, Teaching Satisfaction, and their implications for University Reputation and Performance (Aman Haque, Shamul Islam and Gazi Farid Hassan) | Adapting to new technologies in multidisciplinary healthcare teamwork: A model of multi-level adaptation during organisational change (Natalya Desai, Mark Griffin, Marylene Gagne, Geoffrey Hay) | Antecedents of Emergency Services Street Level Bureaucracy: Public Value (Ben Farr-Wharton, Yvonne Brunetto, Aggie Hernandez Grande, Matthew Kerri and Fleur Shorrock) | | Session start 9:00 AM |
| | | | Manipulating Authentic Leadership with Vignettes for Experimental Research: Recommendations for Designing Causally Defined Studies (Andrii Lux and Ling Abbott) II | Indigenous networking: enhancing social, cultural and spiritual capital for sustainable futures (Daysha Tounanaga's, Ella Henry, Jason Mika, Tania Wolfgramm and Nimbus Staniland) | Indigenous philosophy in business: Inclusion as a driver to environmental sustainability (Samantha Cooms and Gaela Watson) | Entrepreneurial Marketing Activities and Firm Performance Among US Wine Producers: The Moderating Role of Competitive Intensity (David Crick, Ali Mahdi, James Crick, Wadid Lamine and Martine Spence) | Why do key decision-makers fail to foresee extreme 'black swan' events? A case study of the Pike River Mine disaster, New Zealand (Richard Logan, Bob Cavan, Bronwyn Howell and Ian Yeoman) | Artificial intelligence-based medical diagnosis support systems: critical factors in the acceptance from physician's perspective (Muhammad Faraz Jaz, Muhammad Adnan Zahid, Chudhery Sarah Saffar, Mohsin Rashid and Guilherme Luc Tortorella) | Comparing the impact of leadership and psychological capacities on middle manager response to austerity-driven organisational change across two Australian Public Sector Organisations (Yvonne Brunetto and Julia Ashton-Sayers) | | |
| | | | Cognitive Hardiness in the Workplace: A Systematic Review and Call for Future Research (Sherrica Senewratne, Sen Senayaya, Asanka Gunasekara and Alexander Newman) | Positive externality generation: promoting green behaviour workplace green HRM at work (Natalya Podgoradchenko, Fiona Edgar, Safyan Majid, Adeel Akmal) II | The importance of corporate culture and climate in creating inclusive workplaces for people with disabilities (Paul Rutledge, Lynsae Sherwood, Robert Gordon and Melanie Rendell) | Pathway to Commercial Success for Australian Biopharmaceutical SMEs - A Stakeholder Perspective (Shah Riyad, Anirak Sahal, Paul Kafadelis) | Driving Digital Inclusion Action Utilizing Equity and Equality Objectives to Create More Opportunities for Teaching and Learning in Higher Education (Gerardine Hardie, Maria Fernando and Ian Turbill) | Data-driven healthcare supply chain transformation: A case study of Victoria's largest public health service (Alka Nand, Tayla Wilmet, Anirak Sahal and Neil Sigmoney) | Does PsyCap lead to empowered police officers that can cope with workplace stress and maintain their well-being (Matthew Kerri, Yvonne Brunetto, Chiara Saccon, Parash Workshade) | | |
| | | | Organizational Citizenship, organizational justice, organizational trust, and the impact on operational effectiveness (Ricardo Santa, Pilar Osoiza, Edgardo Cayon, Diego Morante and Santiago Santa) | "Casting a Global Net": Contemporary Approaches to Global Staffing (Sofyan Joas, David Collins and Michael Dickmann) | The role of Leadership gender diversity and pay equity practices in enhancing employee productivity: the context of industry gender pay gap (Muhammad Ali, Marenzo Baker, Miri Grabarski and Aliqas Geraad) | Unravelling the Pathways to Improved Export Performance in Entrepreneurial SMEs in Emerging Markets: An Ambidexterity Perspective (Shanika Perera, Parashu Sinha and Antoine Gilbert-Saad) | Shaping Platform Work: Clients in Gig Work Relations (Maria Hamed Khan, Penny Williams, Janine Williams and Robyn Mayes) | Learning from a COVID Response Team to enhance and guide the development of multidisciplinary health partnerships (Bridget Farrell, Robyn Taylor and Josephine Chow) | Leadership that creates value for the public (Geoff Finner, Rebecca Taylor, Maria Sousa, Evan Bernson, Trang Thu Nguyen) II | | |
| | Session end 10:40 AM | | | Employees' perspectives of Onboarding in a Hybrid Work Environment (Mama Kromah, Kemi Ayokun, Ken Tam and Dhaival Vyasa) | Working in Two Worlds: The Influence Of First Peoples Enterprise identity (Mark Jones, Pauline Stanton and Mark Rose) | Valuing the opera in entrepreneurial opera-work: Rethinking the definition of arts entrepreneurship (Malinda Groves) | Shedding Light on the Organisational Growth Puzzle: A Systematic Review and Integrative Framework (Hanako Frawley, Richard Gruner, Christine Sao and Mark Edwards) | Models of aged care: A scoping review (Ann Dadiach, Angela Lan, Suhasshi Sharmagagan, Sarah Childs, Jennifer Alford) | People as the foundation: Nonprofit leaders' perspectives of organisational capacity building (Auelie Marysian) | | Session end 10:40 AM |
| 10:40 - 11:00 AM | | | | | | | | | | | |
| | Workshop | Workshop | OB: Hugh Bainbridge | OB: Shilpa Jain | BPSC: Matthew Pepper | HRM: Rebekah Schulz | MIXED: Arun Elias | BPISC: Vipul Jain | GDE: Diane Ruwiliu | | |
| Session 10 | Session start 11:00 AM | Advances in Mixed Methods Research Designs and MAR Notation Systems (Roslyn Cameron and Anneke Fitzgerald) | The HealthTech Nexus: What does technology mean for the future of healthcare? (Ann Dadiach, Eric Ford, Timothy Huerta and Lester Levy) | Uncovering the phenomenon of paired legitimacy threat and repair during a large-scale change (Rahul Chandra Sheel and Shivn Tikoo) II | Does Team Promote Voice Always Promote Team Innovation? The Dispersion Matters! (Ruxue Zhang and Anran Li) | Complexities Affecting Reverse Logistics Adoption: A Systems Approach (Aloap Elias and Arun Elias) | Rise of the machine: AI, is this the death of HR? (Wahed Waheeduzzaman, Mahen Jayawardena, Michael Callaghan, Justine Ferrer and Puvaneswari P Arumugam) | The Influence of Management Values and Practices in the Construction of Sustainable Futures and a Circular Economy (ESME (Judy Matthews) | Enhancing supply chain sustainability performance through the S&OP process: A Theoretical Framework (Luelen Oliveira) | A study of hostility, sexual harassment, intimidation, and conflict: on-site versus off-site women leaders' lived experiences in the Australian construction industry (Anna Regina Gullotta, Christine M., Scott-Young and Ken Farnes) | Session start 11:00 AM |
| | | | Unleashing Synergy: Exploring the Mediating Roles of Team Empowerment and Collective Engagement in Task Interdependence and Team Performance (Kiran Gupta, Chaudhry Singhvi, and Shaloka Karari) II | Employee e-voice on social media: A Glassdoor case study (Jewel Tai, Sanghoon Kim and Helena Nguy) | Mango mechanization: readiness, impact on the value chain and way forward from the lens of the Australian growers (Saumindra Bhattacharya, Imran Ali and Kerry Walsh) | The dynamics between managerial success and employees' motivation to improve: a multi-level model (Wangxi Xu, Gerard Beeren, Shaun Pichler, Andrew Yu) | Enhancing impact potential of a diversity and inclusion capability maturity model through empirical testing and validity confirmation (GDI (Judy Lundy and Uma Jagulu) | Industry 4.0 Readiness and Supply Chain Performance: Evidence from Sri Lankan Manufacturing Sector (Samanthi Weerabahu, Premaratne Samaranyake, Dilupa Nakandala and Hiral Hurryree) | "Empowering Women in the Workplace: The Influence of Human Resource Policies on Women's Leadership Aspirations (Nazatulaziah Zaini, Dana Ott and Paula O'Kane) II | | |
| | | | An Organizational Aesthetics Approach to Fun in the Workplace (Jesse Olsen and Ketia Kato) | Factors Affecting Employees' Willingness to Speak Up: Exploring the Moderated Mediation Model of Voice Solicitation and Leader Identification (Yu-Hsuan Wang, Fu-Chen Kuo and Ru-Ting Ke) | Thriving in Turmoil: Leadership Approaches to Foster Logistics Innovation amidst Geopolitical Disruption (INTERACTIVE (Imran Ali) | Thriving by autonomy: A multi-methods study of employee motivation to improve (Andrew Creed, P. G. S. Amila Jayaratne, Ambika Zutshi and Ananya Bhattacharya) | Not just a "nice to have": Team compassionate care behaviours and patient safety outcomes (HMO (Helena Nguyen, Karyn Wang, William de Montemas, Shanta Dey and Anya Johnson) | Mitigating the Impact of COVID-19 Restrictions on Supply Chains: Resilience Strategies and Countermeasures (Muhammad Umar and Robert Radics) | Do women in upper echelons bring about more gender diversity? Testing trickle-down effects (Tatiana Tokunaga and Fuhe Jung) II | | |
| | | | Can Anger Steer Positive Outcomes in a Negotiation? Using EASI Theory to understand its Impact (INTERACTIVE (Sweta Singh) | Tell us how it is: Unravelling the dynamics of academic voice and silence (Victoria Lister, Jennifer Kossel, Elie Messner and Anneke Fitzgerald) II | From Decision-maker to Game-changer: How do Supply Chain Executives Influence Fostering Supply Chain Resilience? (INTERACTIVE (Ethan Nikooskar and Prajit Deb) | The Fallacy of Transparency in Supply Chain Management (INTERACTIVE (Hossein Tahernejad, Zahra Seyedghorbani and Matthew Mount) | Prioritizing Enablers for Design Thinking in Healthcare Sector: An Imperative for Successful Implementation (HMO (Dyoti Jinagal Karlopiya and Rajat Agrawal) | The role of dynamic and operational capabilities in sustaining organisational resilience: Conditional effects of supply chain complexity (Mesbahuddin Chowdhury, Girish Prayag, Xin Jia and Marzi Hassan Chowdhury) | Women at the Crossroads: Barriers and Facilitators to their Leader Identity Development (Carol Gill and Isabel Metz) II | | |
| | Session end 12:40 PM | | The mediating roles of employee proactivity, proficiency and adaptivity on work engagement and organisational commitment (INTERACTIVE (Buddhika Mudanayake, Ramudu Bhannugoon) | What is Quiet Quitting? A Thematic Analysis of News Media (Jenna Compton) | How to build more resilient supply chains: an institutional framework (INTERACTIVE (David Harold, Lukasz Marzantowicz, Jennifer Scott and Stephen Kelly) | Where to engage? A geological exploration of the state of employee engagement in the Australian Public Service from 2012-2022 (Jayne Bye, Louise Ingersall and James Wang) | Research Agenda of Psychological Safety and Psychosocial Safety Climate in Workplace Safety: A Bibliometric Analysis and Systematic Review (HMO (Xiaomei Li, Rebecca Dong, Heerman Roxas and Rihul Pu) | Omnichannel Retailing: Analyzing the challenges and possible remedies (Neha Sharma and Niraksh Dutta) | Bridging Worlds: Examining the Interplay between Offline Interactions and the Online Social Capital of Female Entrepreneurs (Hina Fatima, Uma Jagulu, Jaleen Sharafqa and Tom Borrett) | | Session end 12:40 PM |
| 12:40 - 1:40 PM | | | | | | | | | | | |
| | Workshop | OB: Remy Smolian | OB: Helena Cooper-Thomas | Mixed: Aman Haque | Mixed: Tai McKeown | SSI: Mehran Nagai Alibabshah | T&I: Fatima Afzal | ESME: Michael Callaghan | Workshop | | |
| Session 11 | Session start 1:40 PM | From the land of the long white cloud to the land of the long weekend: Findings from the Unleaver 4 Day Work Week Trial (Bronwen Johns, Rowena Ditzel and Camerone Heath) | Relationship Creation in Navigating Political Environments: The Role of Job Crafting (Amy Yamei Wang and Eko Y Liaw) | Polychronicity Fit (Misfit) and Daily Turnover Intentions: The Mediating Roles of Work Overload and Underload (Byeel Woqas Shah, Lary Lu Xing and Denise Mary Jepsen) | Co-creation through the lens of place: temporal and scalar orientations (PSNPP (Elmi Vivier) | Use of experiential education techniques when teaching entrepreneurship in universities (T&I - INTERACTIVE (Jibon Wijewera, Nedwera Ranabahu and Billy O'Steen) II | Diverse circular economies: The transformative power of the Māori economy (Diane Ruwili, Mawera Karaiti and Gavin Walsh) | From compliance to collaboration: critically reflecting on the process of embedding an Indigenous Graduate Attribute in an undergraduate business program (Katherine Altree, Annette Gangford, Rosemary Sainy, Christopher Bajada and Danielle Mantoni) | Indigenous Issues Special Interest Group symposium (Mark Jones, Jarrod Hoar, Ella Henry, Teresa Ross, Diane Ruwili, Jason Mika) | | Session start 1:40 PM |
| | | | Do Political Skills Matter for Creativity Recognition? Exploring the Mediating and Moderating Mechanisms (Claire Yuanyan Wang and Yingqi Wang) | Why is Generation Z motivated at work? A qualitative exploration (Ravikiran Duvvada) | The Impact of Dark Triad Personality Traits on the Climate Change Attitudes of the Executive Managers (SSI (Sweta Singh) | Student engagement in online programmes: Some experimental insights (T&I - INTERACTIVE (Hanuka Bathula and Patricia Hubbard) | From Agents to Agency: Sustainability Leadership is Everybody's Work (INTERACTIVE (Tim Williams and Melissa Edwards) | The role of supervisor compassion on PhD students' wellbeing: The mediating role of psychological capital (Seung Jung Yang, Aesola Lutz Dela Cruz, Anrita Gautam and Syed Woqas Shah) | The Effects of Communicating a Broad Set of SDGs on Enterprises' Financial Performance (INTERACTIVE (Evelize Culp Mair, Amanda Williamson and Stuart Dillon) | | |
| | | | Ideal-Self-Actualization: A Dynamic, Prospective Model of one of Psychology's Genuinely Good (but Troublesome) Ideas (Ryan Meschen) | Work Social Support and Women's Careers: A Review of Popular Measures (Farzana Asraf, Denise Jepsen and Raymond Trau) | How Does Environmentally Advanced Level of Collaboration Portfolio Influence Eco-innovation Outcomes of Small and Medium-sized Enterprises? (SSI (Wein-hang Chen) | What do team routines in creative teams look like? (OB - INTERACTIVE (Cassandra Liang, Linh Bui and Guhyun Park) | How do social movements use 'insiders' to influence corporate governance? (INTERACTIVE (Alice Kietner and Martin Boersma) | A review of graduate work readiness literature: Definitions, methodologies and theories (Jessica Borg and Christina Scott-Young) | The impact of entrepreneurial ecosystem factors on SMEs' financial performance: A Multi-group analysis by business location (INTERACTIVE (Sumeetha Weerasesara and Ramudu Bhannugoon) | | |
| | | | Within-Person Relationships Between Servant Leadership and Employee Innovative Performance: The Cross-level Moderating Role of Employee Accountability (Linh Bui and Guhyun Park) | Working for Others or Self? The Effects of Perceived Overqualification on Entrepreneurial Outcomes (Chao Ma and Xue Zhang) II | Future-making through pragmatist language: An illustrative case study of Bjørke Ingels Group (UGS - INTERACTIVE (Nico Klemmer, Silvia Sansu and Stefano Magistretti) | | | The Role of Compassion in Guiding Muslim Entrepreneurs' Opportunity Recognition (INTERACTIVE (Farhana Sidek, Rosmah Mat Isa and Hamzah Abdul Hamid) | | | |
| | Session end 3:00 PM | | | | | | | | | | Session end 3:00 PM |
| 3:00 - 5:00 PM | | | | | | | | | | | |
| Closing Drinks (QT Hotel - 90 Cable Street) | | | | | | | | | | | |
| End of Conference | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | 5:00 PM |

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|----------------------------|--|--|
| 2 | Industry 4.0 Readiness and Supply Chain Performance: Evidence from Sri Lankan Manufacturing Sector | Samanthi Weerabahu, Premaratne Samaranayake, Dilupa Nakandala and Hilal Hurriyet |
| 19 | Assets and processes in knowledge-intensive precincts: Critical attributes that drive innovative activities | Kevin Chan |
| 37 | The Role of Perceived Career Growth in the Relationship between Talent Management Practices Usage and Employee Outcomes | Amro Aljbouir, Muhammad Ali and Erica French |
| 40 | Regarding the Symbiotic Relationship between NGOs and News Media Organisations in Disaster Management and Messaging | Jasmine Philip and Jestine Philip |
| 46 | “HR is different up here”: An exploratory study of HR in tropical northern Australia | Leigh-ann Onnis |
| 49 | Does it matter? External stakeholder perceptions towards business program accreditation | Katherine Attree and Alain Neher |
| 52 | Does a Bureaucratic Climate have a Double Edge Effect? Testing Effects on Workplace Behaviours in New Zealand | Jarrood Haar, David Brougham, Salman Rashid, Urs Daellenbach, Sally Davenport and Shirley Leitch |
| 60 | Breakthrough of Organizational Defense from the Conservation of Resources Theory | Guyang Tian, Yang Yang, XueZhang, Chunye Ma and Yezhuang Tian |
| 64 | Implications of capabilities spillovers in vertical linkages for heterogeneity in firm capabilities | Gaurav G B, Prateek Raj and Sai Yayavaram |
| 66 | Learning from a COVID Response Team to enhance and guide the development of multidisciplinary health partnerships. | Bridget Farrell, Robyn Taylor and Josephine Chow |
| 68 | Hiring talent or recruiting privilege. A demand side perspective of graduate recruitment | Samantha Kilmartin, Ruth McPhail and Amie Shaw |
| 76 | Unveiling the Truth: Women Leaders in Gendered Organisational Dynamics | Farveh Farivar and Mary Anthony |
| 79 | An Organizational Aesthetics Approach to Fun in the Workplace | Jesse Olsen and Keita Kato |
| 80 | Quiet Quitting: Can it be Measured and What are the Antecedents? | Jarrood Haar, Azka Ghafoor and David Brougham |
| 81 | Tuakiri takitahi, takirua rānei? The prevalence and work-related outcomes of mono Māori versus dual Māori/Pākehā identities in Aotearoa workplaces | Jarrood Haar and Ben Walker |
| 102 | Omnichannel Retailing: Analyzing the challenges and possible remedies | Neha Sharma and Nirakush Dutta |
| 124 | Leading with Intellectual Humility | Ken Farnes |
| 125 | The practices of family businesses and their management values designed to create a sustainable future for all | Naomi Birdthistle |
| 132 | Too Many Exclamation Marks? Never!!! Perceptions of Leader Use of Positive Emotion in Email by Leader Gender | Mary Hausfeld and Michèle Wallishauser |

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| 137 | Measuring ESG impacts: A new framework for agribusiness | Priyambada Joshi, Ayon Chakraborty and Harpinder Sandhu |
| 139 | Will workplace exercise improve the well-being of security guards? A field experiment intervention examining the implementation of SDT and JD-R models to promote workplace exercise | Cho Yuk Wong and Amy Y Ou |
| 180 | Ideal-Self-Actualisation: A Dynamic, Prospective Model of One of Psychology's Genuinely Good (But Troublesome) Ideas | Ryan Meachen |
| 182 | Inorganic Growth Strategies in Private Family Firms: A Behavioral Agency View | Gianni Spolverato, Mathieu Luypaert, Miguel Meuleman, Wouter De Maeseneire |
| 190 | Determinants and outcome of employee green behaviors | Anuradha Mukherji, Jyotsna Bhatnagar and Anupama Prashar |
| 191 | Exploring User Sharing Behaviours on Market-Based Platforms with Regression Tree Analysis | Yingnan Shi and Chao Ma |
| 206 | Teaching Critically and Reflectively: using Students' Family Lens to Teach Business and Management Concepts | Ankit Agarwal |
| 208 | Why engage? Interactionist perspective within independent professionals' context | Hadas Wittenberg, Gabriel Eweje, Darryl Forsyth and Nazim Taskin |
| 215 | Critical discourse analysis of corporate governance anomalies, financial irregularities, and fraud characteristics: The study of a private sector commercial bank in an Emerging Economy | Md Kazi Islam |
| 223 | A study of hostility, sexual harassment, intimidation, and conflict: onsite versus offsite women leaders' lived experiences in the Australian construction industry | Anna Regina Galluzzo, Christina M., Scott-Young and Ken Farnes |
| 239 | Prioritizing Enablers for Design Thinking in Healthcare Sector: An Imperative for Successful Implementation | Jyoti Jinagal Karloopia and Rajat Agrawal |
| 245 | Enhancing business supply chain sustainability performance through the S&OP process: A Theoretical Framework | Uelen Oliveira |
| 258 | Models of aged care: A scoping review | Ann Dadich, Angela Lan, Suhasini Shanmugarajan, Sarah Childs and Jennifer Alford |
| 263 | Student engagement in online programmes: Some experiential insights | Hanoku Bathula and Patricia Hubbard |
| 266 | Exploring the Leadership Galaxy: Understanding the Cohesive Dynamics in Distributed Leadership | Ataus Samad, Rubina Ahmed and Ezaz Ahmed |
| 269 | Born-Green-Global: A case analysis to develop a research agenda | Sara Walton, Dana Ott and Joseph Cooper |
| 270 | Empowering Women in the Workplace: The Influence of Human Resource Policies on Women's Leadership Aspirations | Nazatulaziah Zainal, Dana Ott and Paula O'Kane |
| 273 | Friends with benefits: Interconnections between environmental sustainability and gender equality | Sukhbir Sandhu, Carol Kulik and Sanjeewa Perera |
| 276 | Developing optimal nurse schedule for improving healthcare operations in the emergency department of tertiary care Indian hospital | Shubhangi Patil, Vipul Jain and Yi Mei |

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| 284 | Understanding the Dynamics of Psychological Ownership and Community Embeddedness in Family Businesses: A Case Study Barker's of Geraldine | Hafsa Ahmed and Anthony Brien |
| 285 | Generative AI is here: Time for Transnational Higher Education to step up and embrace the opportunity | Erin Roehrer |
| 292 | Use of experiential education techniques when teaching entrepreneurship in universities | Udari Wijeweera, Nadeera Ranabahu and Billy O'Steen |
| 293 | Leading with Care: Empathetic Leadership for Hybrid Work | Zeena Alsamarra'i, Blooma John and Niki Panteli |
| 298 | Organizational Citizenship, organizational justice, organizational trust, and the Impact on Operational effectiveness | Ricardo Santa, Pilar Osorio, Edgardo Cayon, Diego Morante and Santiago Santa |
| 316 | Managing the paradox of environmental sustainability through traditional philosophies: Insights from traditional Chinese and Māori knowledge | Xiaoliang Niu, Jason Mika and Paresha Sinha |
| 324 | From compliance to collaboration: critically reflecting on the process of embedding an Indigenous Graduate Attribute in an undergraduate business program. | Katherine Attree, Annette Gainsford, Rosemary Sainty, Christopher Bajada and Danielle Manton |
| 327 | Indigenous networking: enhancing social, cultural and spiritual capital for sustainable futures | Daysha Tonumaipae'a, Ella Henry, Jason Mika, Tania Wolfgramm and Nimbus Staniland |
| 337 | Wāhine Māori entrepreneurs: The cultural, social, and financial challenges when experiencing business growth | Tui MacDonald, Brad Jackson and Jason Mika |
| 340 | Challenges of Being a Social Enterprise: When Being a Business for Good Means Being a Good Business | Julia-Anna Maier, Carol Kulik and Sanjeewa Perera |
| 342 | Do Political Skills Matter for Creativity Recognition? Exploring the Mediating and Moderating Mechanisms | Claire Yuanyuan Wang and Yinggui Wang |
| 366 | Mana Wahine Treaty Claims and Redress: implications for organisations and business | Ella Henry |
| 367 | Fresh Produce Supply Chain Coordination with Option Contract under Uncertainty: Analyzing the Decision Strategies of Supplier and Buyer | Vijay Dnyaneshwar Niture and Abhishek Sharma |
| 395 | Gendered Displays: Managers' Use of Negative Emotion to Influence Employee Behaviour | Belinda Rae, Carol Kulik, Sanjeewa Perera |
| 397 | Conceptualising the sustainability integration through the lens of strategic orientation: A multiple theory approach | Hapu Achchige Chandima Jeewanthi |
| 400 | Work readiness skill requirements for early career project management professionals: Ascertaining different stakeholder perspectives | Jessica Borg and Christina Scott-Young |
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Stream 8: **Business Processes, Innovation and Supply Chain**

Industry 4.0 Readiness and Supply Chain Performance: Evidence from Sri Lankan Manufacturing Sector

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Industry 4.0 Readiness and Supply Chain Performance: Evidence from Sri Lankan Manufacturing Sector

ABSTRACT: *This study investigates the relationship between industry 4.0 readiness (I4R) and digital supply chain performance (SCP) while considering the role of supply chain agility (SCA) as a mediator in this relationship. The study was conducted using survey data from 97 Sri Lankan manufacturing sector supply chain practitioners. Partial least squares structural equation modeling was used to analyse the data. The proposed research model conceptualised I4R as a multi-dimensional construct including seven dimensions. The findings revealed that I4R positively impacts SCP and SCA mediates the relationship between I4R and SCP. The study's main contribution is uncovering the mediation effect of SCA on the I4R and SCP relationship. This research would assist the practitioners and policymakers to comprehend the impact of I4R and SCA to improve SCP in the competitive dynamic environment.*

Keywords: Industry 4.0 readiness, supply chain performance, supply chain agility, manufacturing sector

INTRODUCTION

Industry 4.0 (I4), also indicated to as the fourth industrial revolution, is recognised as the convergence of numerous emerging concepts and advanced technologies. The implementation of digital technologies of Industry 4.0 is primarily aimed at gaining competitive advantages in domestic and global markets (Zekhnini, Cherrafi, Bouhaddou, Benghabrit, & Garza-Reyes, 2020). Measuring how the manufacturing sector is adopting I4 and the readiness of I4 are challenging, given that there is no universally accepted model for I4R assessment (Akdil, Ustundag, & Cevikcan, 2018; Sony & Naik, 2019). The application of I4 technologies is expected to bring about significant performance improvement in SC (Fatorachian & Kazemi, 2021). The digital transformation of the supply chain or Digital Supply Chain (DSC) is defined as using digital technologies to integrate, connect, and enhance business operations concerning suppliers and customers. Although DSC has several advantages, the adoption of I4 technologies is not an straightforward and inexpensive task (Zekhnini et al., 2020). Thus, effective supply chain performance (SCP) measurements are required to examine the process and quantify gains from DSC.

On the other hand, supply chain agility (SCA) is defined as a firm's ability to successfully collaborate with channel partners to react to marketplace changes in a speedy manner (Swafford, Ghosh, & Murthy, 2006). According to (Fatorachian & Kazemi, 2021), firms need SCA to create exceptional

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business value by coping with disruption risk and improving SCP. However, some potential antecedents of SCA in the I4 context have not been completely explored, including the mediation role of SCA in a relationship between I4 readiness and SCP. This study endeavors to fill the research gap by empirically examining the relationship between I4R and SCP and the mediation role of SCA.

THEORETICAL FRAMEWORK

Digital Supply Chain Performance

The DSC is involved with the advancement of the supply chain (SCs) as a result of I4 technologies such as cyber-physical systems (CPS), robotics and the Internet of Things (IoT)(Zekhnini et al., 2020). The DSC entails a combination of digital devices, processes, approaches and strategies to facilitate interactions between the value chain actors(Zekhnini et al., 2020). The DSC increases material flow visibility alongside the value chain and lessens bullwhip effects (Ageron, Bentahar, & Gunasekaran, 2020). As discussed by (Fatorachian & Kazemi, 2021), the application of I4 technologies is expected to bring about significant performance improvement in SC.

Performance measurement in the DSC is vibrant, and purpose the of a performance measurement system includes recognizing success, improve understanding of processes and bottlenecks, and facilitating open and transparent communication and collaboration with customer satisfaction (Gunasekaran & Kobu, 2007). Therefore, performance measurement in the DSC era remains an open area of research (Balfaqih, Nopiah, Saibani, & Al-Nory, 2016). Measuring the right things at the right time in DSC is key to the organisation maintaining a competitive advantage. Supply chain performance is grouped based on several dimensions: qualitative or quantitative; quality, cost, delivery, flexibility, strategic, operational, tactical; cost and non-cost, and the supply chain process using the SCOR model (Balfaqih et al., 2016; Sánchez & Pérez, 2005). It is necessary to implement performance measurement for the whole SC rather than considering once or some parts or key processes of SCs (Balfaqih et al., 2016).

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Industry 4.0 readiness

The term I4 is defined as the transformation of organisations to the digital form to face the challenges concerning disruptive technologies such as cyber-physical systems, cloud computing, or the IoT (Schumacher, Erol, & Sihn, 2016). The initial step of digital transformation is assessing whether an organisation is ready to deploy I4 (Blome, Schoenherr, & Rexhausen, 2013; Dubey, Gunasekaran, & Childe, 2019; Mrugalska & Ahmed, 2021). Readiness assessment models are assessment tools that could determine the level of preparedness, attitude and resource in the entire system (Schumacher et al., 2016). Various I4R assessment models were developed to assess the organisation's level of readiness by academics and practitioners (Blome et al., 2013; Dubey et al., 2019; Mrugalska & Ahmed, 2021).

Schumacher et al. (2016) developed a maturity model considering nine dimensions for assessing I4R. A recent study by Blome et al. (2013) proposed a self-diagnostic tool which can be used to assess a firm's readiness to transition to an I4 setting with respect to eight significant determinants. Most of these I4R assessments revealed an industry-specific focus, and there is no universally accepted model for I4R assessment (Akdil et al., 2018; Sony & Naik, 2019). Based on the synthesis of the previous models, there are commonly used dimensions, including I4 technologies, culture, human resources, strategy/leadership, smart product and smart process, ICT, corporate standards, and governance (Ramanathan & Samaranayake, 2021; Schumacher et al., 2016; Sony & Naik, 2019).

Emerging technologies of I4 could ensure the greater performance of the processes of supply chain activities. The implementation of I4 improves SCP by enhancing the precision of the forecasting, increasing planning and development of vendor performance, and customer services (Schumacher et al., 2016; Sony & Naik, 2019). Moreover, Dalenogare, Benitez, Ayala, and Frank (2018) stated that I4 promotes effectiveness of resource utilization and quicker reaction to market dynamics, thus improves overall SCP. With increasing dependence on I4 technologies, businesses will obtain their competitive edge by offering low-cost innovative goods and services and increasing flexibility and quality (Tortorella & Fettermann, 2018). Given the above concern, the following hypothesis is proposed:

Hypothesis 1 (H1). I4R has a positive impact on SCP.

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The mediating role of supply chain agility

SCA is defined as a firm's ability to efficiently collaborate with channel partners to react to market shifts in a speedy manner (Swafford et al., 2006). SCA could act as an operational capability vital to enhancing firm performance (Blome et al., 2013). In particular, SCA allows the organisation to coordinate with channel partners, which persuades the company to combine and deploy resources with channel partners to boost the effectiveness of product and service delivery. SCA creates value within the supply chain through cost efficiency (Hsu et al., 2022), allowing better resource allocation and cost leveraging, ultimately leading to increased performance (Blome et al., 2013; Dubey et al., 2019).

Enhancing SCA with I4 enablers and technologies helps reduce SC's ripple effects (Mrugalska & Ahmed, 2021). By adopting I4 technologies, firms can significantly enhance their agility (Mrugalska & Ahmed, 2021). According to Raji, Shevtshenko, Rossi, and Strozzi (2021), I4 technologies facilitate the implementation of lean and agile practices and ultimately impact performance. Thus, this study examines the direct effect of I4R on SCP whilst considering the mediation role of SCA. The research model is shown in Figure 1.

Hypothesis 2 (H2). I4R has a positive impact on SCA.

Hypothesis 3 (H3). SCA is positively related to SCP.

Hypothesis 4 (H4). SCA mediates the relationship between I4R and SCP.

Insert Figure 1 about here

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METHODOLOGY

A cross-sectional quantitative research design was used to examine this study's hypotheses empirically. Survey data was collected from the Sri Lankan manufacturing sector to investigate the relationships among I4R, SCA and SCP. The annual survey of industries reported that the manufacturing sub-sector is the largest industrial sub-sector in Sri Lanka, its share in the total industrial establishments was 83.9% (Statistics, 2019). It is evident that the Sri Lankan manufacturing sector, such as apparel, has the potential and the strength to adopt the concepts like smart factories and implement I4 technologies (Jayatilake & Withanaarachchi, 2016). The data from the Sri Lankan manufacturing sector was collected through an online anonymous survey questionnaire published on LinkedIn. The questionnaire contained multiple-choice questions to administer demographic data and used a seven-point Likert scale to measure the constructs. After the initial screening, the study taken 97 survey responses from the Sri Lankan manufacturing sector supply chain professionals. Decision on the mode of measurement for the construct was based on an intensive literature review. I4R is a second-order formative construct comprising seven variables: I4 technologies, culture, human capital, strategy/leadership, production system integration, ICT infrastructure, corporate standards, and governance (Schumacher et al., 2016; Stentoft, Aadsbøll Wickstrøm, Philipsen, & Haug, 2021). SCA is presented as a reflective construct measured by three measurement items adopted from (Dubey et al., 2019). SCP is presented as a reflective construct measured by eleven indicators adapted from (Gunasekaran & Kobu, 2007).

The hypotheses were tested using PLS-SEM, through SmartPLS software (version 3.2.8) (Ringle, Wende, & Becker, 2015). PLS-SEM can be used for theory development and theory testing (Hair, Hult, Ringle, & Sarstedt, 2016). As this study tested for mediation, which involved both aspects. Moreover, the measurement model was evaluated before testing the structural model by following the guideline suggested by (Hair et al., 2016).

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RESULTS

The proposed research model, based on a comprehensive review of literature emphasise the relationship between I4R and SCP while considering the mediating role of SCA. Furthermore, the research conceptualized I4R as a multi-dimensional constructs which includes seven dimensions across broader areas of organisational, process, people and technology aspects. These dimensions include I4 technologies, culture, human capital, strategy/leadership, production system integration, ICT infrastructure, corporate standards and governance. Next, preliminary analysis and statistical analysis were conducted to empirically test the proposed research model.

A preliminary analysis was conducted to ensure the data met the minimum quality criteria before model evaluation. Skewness and kurtosis analyses were conducted to test the normality of the data (Hair et al., 2016). It was observed that not every data were normally distributed. However, as PLS-SEM is a nonparametric statical procedure, it does not need data to be normally distributed (Hair et al., 2016). Second, measurement model quality tests and assessments were carried out. Third, the hypotheses testing was carried out using structural model assessment.

Assessing the measurement model

In this step, the reflective measures' internal consistency, convergent validity, and discriminant validity were assessed. For all datasets, Cronbach's alpha was within range of 0.5 to 0.9 (Hair et al., 2016). The composite reliability of the entire constructs was above the required threshold of 0.7. Assess the convergent validity of the reflective constructs, this study used the outer loadings and the average variance extract (AVE) as guided by (Hair et al., 2016). The outer loadings of the indicators for the data set were within the permitted range from 0.6 to 0.9. The AVE values for all reflective constructs of the data set were above 0.5, showing the convergent validity (Table 1).

Following the previous studies, the discriminant validity of the constructs was evaluated using the Fornell-Lacker criterion and HTMT (Hair et al., 2016; Ringle et al., 2015). In the Fornell-Lacker criterion assessment, results showed that the square root of the AVE of each construct was greater than

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the construct's highest correlation with other constructs. All the constructs' HTMT values have been lower than the upper threshold of 0.9, indicating discriminant validity of all the constructs.

Three techniques were used to evaluate the formative measurement model. First, redundancy analysis for the I4R construct was conducted and this analysis yields a path coefficient of 0.722, which is above the recommended threshold of 0.70, thus providing support for the formative construct convergent validity. Second, the collinearity of indicators was reviewed to determine whether each indicator's variance inflation factor (VIF) value is less than the threshold value of 5 (Hair et al., 2016). The Variance Inflation Factor (VIF) for I4R ranged from 1.36 to 3.82, lower than the threshold of 5. Second, the significance of each indicator's outer weight and outer loadings were analysed using bootstrapping of subsamples. The outer weights were significant except for culture, strategy and leadership and human capital. Although the three indicator's outer weights were not significant, the equivalent item loadings were fairly high-level and significant. Therefore, the items were preserved (Sarstedt, Hair Jr, Cheah, Becker, & Ringle, 2019).

Insert Table 1 about here

Assessing the structural model

The result of the structural model assessment presented solutions to the study's research questions by testing the hypotheses. The model's explanatory power (coefficient of determination R²) of mediating variable, SCA, is 0.553, and for the dependent variable, SCP, is 0.649. These values were adequate and revealed sufficient variance for the predictor variables (Hair et al., 2016; Sarstedt et al., 2019).

As indicated in Table 2, the hypotheses relationship (H1 to H3) results in the structural model provided the t-values, p-values, path coefficient, and 95% CIs, implying that all the relationships in the model were positive and significant. Thus, the results support the hypothesized positive relationship between I4R, SCA and SCP (H1 to H3).

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| Insert Table 2 about here |
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Mediation analysis was performed to assess the mediating role of SCA in the relationship between I4R and SCP. The results (see Table 3) revealed a significant indirect effect of I4R on SCP through SCA (H4: $\beta=0.402$, $t=5.088$, $p<.001$). The total effect of I4R on SCP was significant ($\beta=0.720$, $t=15.655$, $p<.001$), with the inclusion of the mediator, the impact of I4R on SCP was still significant ($\beta=0.316$, $t=3.782$, $p<.001$). This shows a complementary partial mediating role of SCA in the relationship between I4R and SCP. Hence, H4 was supported.

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| Insert Table 3 about here |
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DISCUSSION

These findings shed significant light on the literature concerning I4R and SCP in the manufacturing sector supply chains. I4R stimulates creativity and innovation (Dalenogare et al., 2018) by creating a collaborative platform for the organisation to share knowledge, generate insights using vast amount of data (Dubey et al., 2019), and build innovative business models (Ageron et al., 2020) with supply chain partners. Thus, I4 is disrupting all conventional business models and accelerating the need for redesign and digitalisation activities in the manufacturing sector. As a result, emerging DSC entails the combination of digital devices, processes, approaches and strategies to facilitate interactions between the value chain actors (Weerabahu, Samaranayake, Nakandala, & Hurriyet, 2021). To achieve significant SCP in DSC, the organisation needs to develop basic capabilities, taking into account the digitalisation to use these technologies and their integration with employees, customers and providers across the supply chain(Queiroz, Pereira, Telles, & Machado, 2019).

To persist in the erratic business environment, businesses should manage with agility and be agile within the SC connection. SCA relies on customer satisfaction, cost minimisation, quality enhancement, delivery speed, lead-time reduction, and new product and service improvement (Mrugalska & Ahmed, 2021). The study’s findings confirm that SCA is the competitive capability of an organisation, which is

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influenced by the SCP and SC competence. Moreover, by adopting I4 technologies, firms can significantly enhance their agility (Mrugalska & Ahmed, 2021). As the main contribution, this study investigates the mediating effect of SCA to transform I4R in greater SCP. Firms with a high degree of I4R may be capable to transform their traditional processes, strategies and operations to capture innovative consumer needs and foresee rival's move and new business opportunities.

This study also suggests numerous managerial implications. First, this study suggests that managers must act intimately with their SC partners to achieve SCA when transforming traditional SC into DSC. As firms are at different levels of readiness in I4 adoption, managers must improve their I4R to improve organisational capabilities such as SCA and SCP. As in the context of the manufacturing sector, succeeding in I4R may not ascertain the exceptional SCP of the firm until enhancing the SCA.

CONCLUSION

This research has investigated the mediator effect of SCA in the relationship between I4R and SCP in the manufacturing sector in an emerging country perspective. The empirical evidence contributes to the broader literature on DSC because it provokes the need to leverage I4R and SCA to improve SCP. The paper discussed practical implications of I4R to improve SCP and the theoretical implications but they should be considered in relation to research limitations. First, this cross-sectional survey study can only suggest the relationship between constructs, however a longitudinal study is needed to confirm causation. The study sample size is limited to the Sri Lankan context, and future studies could use a large sample size and global representation of the SC considering other countries. Future research could also integrate new variables in studying the relationship between I4R and SCP, SCA and SCP or the mediator effect.

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TABLES AND FIGURES

Figure 1: Research Model

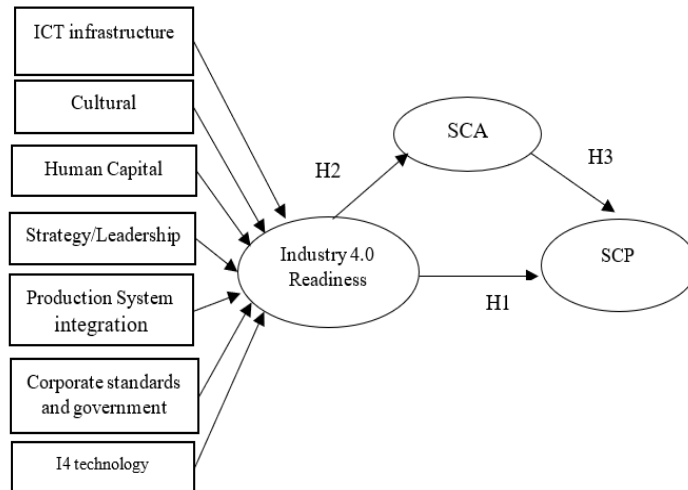


Table 1: Convergent validity and internal consistency of the construct

| Construct | AVE | Cronbach's alpha | Composite reliability |
|----------------------|-------|------------------|-----------------------|
| Corporate standard. | 0.628 | 0.804 | 0.871 |
| Culture | 0.675 | 0.838 | 0.892 |
| Human capital | 0.752 | 0.834 | 0.901 |
| I4 Tech. | 0.630 | 0.941 | 0.959 |
| ICT infra. | 0.872 | 0.854 | 0.949 |
| Production system | 0.583 | 0.763 | 0.932 |
| Strategy and leader. | 0.701 | 0.857 | 0.903 |
| SCA | 0.776 | 0.856 | 0.912 |
| SCP | 0.608 | 0.935 | 0.944 |

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Table 2: Path coefficient, t-value, p-values and 95% cis for the direct effect

| Direct Effect | Path Coefficients | 95% CI | t value | p-value |
|---------------|-------------------|---------------|---------|---------|
| I4R->SCP | 0.316 | [0.150,0.477] | 3.782 | 0.000 |
| I4R->SCA | 0.744 | [0.624,0.819] | 15.337 | 0.000 |
| SCA->SCP | 0.543 | [0.333,0.702] | 5.903 | 0.000 |

Table 3: Mediation analysis results

| | Path Coefficients | t value | p-value |
|--------------------------------|-------------------|---------|---------|
| Total Effect (I4 ->SCP) | 0.720 | 15.655 | 0.000 |
| Direct Effect (I4 ->SCP) | 0.316 | 3.782 | 0.000 |
| Indirect Effect (I4->SCA->SCP) | 0.402 | 5.088 | 0.000 |

Research Stream 3. Sustainability and Social Issues

Wisdom as a meta-approach to resolve sustainability-related stakeholder conflicts¹

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Wisdom as a meta-approach to resolve sustainability-related stakeholder conflicts

ABSTRACT:

This study aims to offer ways to manage sustainability-related stakeholder conflicts by critically reviewing stakeholder theory and conflict management theory using wisdom meta-principles. We raise a case of conflict between a large pulp producer company with Batak Toba Indigenous community to answer our research question by using content analysis method. Our findings show the perspective misalignment between Indigenous people perspectives of sustainability and what a modern company claims of their sustainability narrative and practice. This study then proposes three crucial elements in the stakeholder theory and conflict management theory to resolve such conflicts: sensitivity to power imbalance and justice, reflexivity, and commitment to upholding environmental ethics.

Keywords: sustainability, wisdom, stakeholder conflicts, stakeholder theory, conflict management theory

INTRODUCTION

Ecological disasters are haunting the survival of human and non-human living forms that require immediate actions to tackle them. World Meteorological Organisation estimates that the global temperature will pass the critical threshold of 1.5 °C in the next five years and 2.7 °C by the end of this century (World Meteorological Organisation, 2023). Consequently, at least two billion people will live in overheated zones, which endanger health, work productivity, water security, and air quality (Lenton et al., 2023). With regard to biodiversity loss issue, The Living Planet Report 2022 reveals an average 68% drop in mammal, bird, fish, reptile, and amphibian populations since 1970 (WWF, 2022). The high rate of deforestation exacerbates the damaged natural ecosystem in which around ten million hectares of forest are deforested yearly (FAO, 2020). Biodiversity loss will eventually lead to resource scarcity and threaten the well-being of humans and non-human living forms (Banerjee, 2014). Because of their super-complex nature and catastrophic risks, researchers categorise sustainability issues as wicked problems (Intezari & Pauleen, 2019; Levin et al., 2012). Resolving them is extremely challenging due to the ethical dilemmas-laden and conflicts among multiple stakeholders (Alexander et al., 2022; Dentoni et al., 2018; Intezari & Pauleen, 2019).

More specifically, some credible reports on environmental issues have indicated that nature protection and preservation in Indonesia is problematic. First, the United Nations (UN) has labelled

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Indonesia's achievement of the three ecological sustainability development goals (SDGs) (SDG 13: climate action; 14: life below water; 15: life on land) as 'major challenges remaining and stagnating' since 2019 in the Sustainable Development Goals (SDGs) reports (Sachs et al., 2019, 2020, 2021, 2022). Second, The Environmental Performance Index (EPI) 2022 reports that Indonesia's ranking on environmental sustainability is low, with a score of 28.20 or 164th out of 180 countries (Wolf et al., 2022). Many Indigenous communities in Indonesia accuse the government and mining and palm industries of being the leading causes of environmental damage because of their extractive and non-participatory economic development approach (FWI, 2019; Ghoffar et al., 2020; Savitri et al., 2019). As the UN has placed the SDG 17– partnerships for the goals—as the key and glue to achieving the other 16 goals (Stibbe & Prescott, 2020), the ongoing stakeholder conflicts in Indonesia may thwart the desired level of carbon emission and SDGs indicators by 2030.

Scholars increasingly agree that managing sustainability-related stakeholder conflicts requires wisdom. Wisdom refers to decision-making capacity (Intezari and Pauleen, 2018) that manifests itself in ethical social practice (Rooney et al., 2010) to deal with social and ecological complex problems (Grossmann and Brienza, 2018). Wisdom attracted renewed attention in contemporary studies in the 1970s, first gerontologists (Clayton, 1975, 1982), then psychologists (Ardelt, 2003; Baltes & Kunzmann, 2004; Glück & Weststrate, 2022; Grossmann et al., 2020; Sternberg, 1998; Webster, 2003), to find wiser ways to tackle life adversities and social conflicts. Other fields, including organisation, management, education, and leadership, also started looking at the concept because partial, computational, detached, and elitist approaches are insufficient to deal with extreme unpredictable environments, unethical business practices, and conflict of interest among organisational actors (Bierly et al., 2000; Intezari, 2015; Intezari & Pauleen, 2014, 2018; Maxwell, 2012; McKenna et al., 2009; Rooney et al., 2010; Spiller et al., 2011). The wisdom-based framework then offers better ways—i.e., a balanced-integrated, reflexive, and ethical-practical approach—in managing stakeholders conflicts over sustainability issues to achieve common good (Intezari, 2015, 2016; Rooney et al., 2010; Spiller et al., 2011).

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We analyse the ongoing stakeholder conflicts between a pulp company with Batak Toba Indigenous community in North Sumatera Province, Indonesia, and attempt to provide recommendation to resolve it using wisdom meta-principles. Batak Toba Indigenous people have long alleged that the Toba Pulp Lestari (TPL), a big pulp producer in the area, acquired their customary land for business expansion purposes without their consent (Colchester, 2020; KOMNAS, 2016). At least 11 conflict cases have occurred and caused around 15.955 Batak Toba people to lose their livelihood sources with a loss estimation of IDR 132 billion per year (BAKUMSU, 2021). We then ask the following research question: How should sustainability-related stakeholder conflict be managed?

This paper proceeds as follows. First, the theoretical background of the study is discussed. This is followed by the research design and findings. Finally, this paper concludes with discussion and conclusions in sections 4 and 5.

THEORETICAL BACKGROUND

This section will outline relevant theories and concepts in the discourse of sustainability-related stakeholder conflict management. First, we will explain the basic idea of sustainability and the urgency of multi-stakeholder partnerships. Second, we will critically review stakeholder theory and conflict management theory using wisdom meta-principles as an analytical lens.

The concept of sustainability

The sustainability concept has become a reference for researchers in various disciplines, organisational actors, and policy-makers, along with the increasing awareness of the need to incorporate social, environmental, and economic perspectives in an integrated manner to deal with wicked environmental problems (Alexander et al., 2022; Dentoni et al., 2018; Ruggerio, 2021). The World Commission on Environment and Development played a significant role in operationalising the concept of sustainability into sustainable development (Gladwin et al., 1995) by defining it as “development which meets the needs of the present without compromising the ability of future generations to meet their own needs” (1987: 8). The United Nations then set 17 SDGs that should achieved by 2030, which are improvements to the Millennium Development Goals (MDGs) that lack impact accountability frameworks (UN, 2016). The 17 SDGs stand on five main pillars: people, prosperity, planet, peace, and

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partnerships. Among the five pillars, multi-stakeholder partnerships—explicitly established in SDG 17— are considered as glue to other pillars because humans and institutions act as the agencies that carry out all efforts to achieve ecological sustainability (Dentoni et al., 2018; Stibbe & Prescott, 2020).

The efforts to implement the partnerships pillar, however, still face complex challenges as conflicts among stakeholders occur in many regions of the world. For example, Indigenous people and non-governmental organisations (NGOs) in India criticise and resist an aluminium production company that has obtained an operating permit from the government because it displaces the Indigenous people from their ancestral lands (Pless et al., 2022). Conflicts related to land and forest use unsustainable practices occur in Brazil, Ethiopia, Indonesia, and Peru because the multi-stakeholder platforms and forums do not inclusively engage with Indigenous people (Larson et al., 2022). Researchers then offer the principles of responsible leadership (i.e., ethical decision-making, visionary, citizenship, and relationality) to resolve sustainability-related stakeholder conflicts (Pless et al., 2022). Such principles resonate with the wisdom approach in sustainability (Intezari, 2015) that will be elaborated in the subsequent discussion.

Wisdom as a meta-approach to stakeholder theory and conflict management theory

Stakeholder theory

The underlying notion of stakeholder theory is that companies should create value for the various parties they are interdependent with, not just for shareholders. This theory relates to the idea of strategic management, which is an evolution of business policy and strategic planning concept (Freeman, 1985; Freeman et al., 2020) and has been widely applied in various disciplines, including sustainability and business ethics (Kortetmäki et al., 2023; Parmar et al., 2010). Freeman (1985, p. 25) defines stakeholder as “any group or individual who can affect or is affected by the achievement of the firm’s objectives”. Examples of stakeholders include government, local community, employees, customers, suppliers, and other relevant groups who can support or resist the firm. A company therefore is the centre of gravity of interests because it will formulate and execute strategies to monitor and control the interests of its stakeholders to achieve various performance goals (Donaldson & Preston, 1995).

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According to this theory, managers consider two main attributes in identifying and selecting which stakeholders need to be taken into account the most among the company's many stakeholders: power and interest (Ackermann & Eden, 2011). A stakeholder is considered to have power to the extent that it has access to three bases: coercive power (coercive physical resources), utilitarian power (material or financial resources), and normative or social power (symbolic resources such as pride, prestige, networks, etc.) (Mitchell et al., 1997). Meanwhile, a stakeholder has an interest if it has a stake or special attention to the company's goals (Ackermann & Eden, 2011). The power-interest interaction then produces four types of stakeholders: players (high power, high interest), subjects (low power, low interest), context setters (high power, low interest), and crowd (low power, low interest) (Ackermann & Eden, 2011). The emphasis on stakeholder power, however, leads to ethical implications because not all stakeholders have equal access to sources of power (Tomlinson, 2005). Power inequality can lead to domination and resistance among stakeholders, which ultimately fuels conflict (Colvin et al., 2020; Flyvbjerg, 2001).

Conflict management theory

Conflict management theory involves diagnosing the roots of conflict at the interpersonal, intragroup, and inter-organisational levels and establishing strategies or styles for dealing with conflicts (Rahim, 2002, 2023). Conflict refers to the process of social interaction manifested in incompatibility, disagreement, or dissonance of needs, interests, preferences, attitudes, values, skills, and goals between social entities (i.e., individuals, groups, organisations, etc.) (Rahim, 2002, p. 207). Rahim (2002) further divides conflict-handling strategies in five ways: integrating (high concern for self, high concern for others), obliging (low concern for self, high concern for others), compromising (intermediate in concern for self and others), dominating (high concern for others, low concern for others), and avoiding (low concern for self, low concern for others). An organisation would choose one of these handling styles after considering the conflict situations at hand, such as the level of complexity and urgency of the issue and the level of involvement of other parties.

Conflicting parties can use three cooperative styles to solve complex issues: integrating, obliging, or compromising style (Rahim, 2002, 2023). The integrating style involves the synthesis of ideas,

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exchange of resources, and commitment between different parties to formulate and implement alternative solutions to a problem. The obliging style emphasises on the commonalities of interests between parties and the willingness of one party to give in to meet the concerns of the other party because preserving mutual relationships is considered essential. The compromising style is appropriate when the conflicting parties who are equally powerful lower each other's ego and interest level to negotiate and find temporary solutions to avoid deadlock. What the three handling styles have in common is the willingness to recognise the diversity of perspectives and a need to balance and integrate the parties' interests in solving problems.

Wisdom as meta-approach

Scholars in psychology and management have long developed and tested the wisdom concept crystallised in several fundamental principles. First, wisdom promotes balance and integration. Balance is the proportional placement of different elements (i.e., interests, perspectives, and approaches) to reduce bias in making decisions, while integration refers to the process of bringing these elements together in a holistic, dialectical, and participatory manner to produce a shared consensus (Brienza et al., 2018; Intezari & Pauleen, 2018; Sternberg, 1998; Yang, 2008). Second, wisdom advocates reflexivity. Reflexivity opens up to scrutiny of what we take for granted—beliefs, values, assumptions, practices, power, and social structures—with an appreciation of the impacts of one's actions on others (Brienza et al., 2018; Flyvbjerg, 2001; Fook & Gardner, 2007; Grossmann et al., 2016; Intezari & Pauleen, 2018). Third, wisdom manifests in ethical committed practices (*praxis*) and creates virtuous impacts. Ethics is a standard for judging and doing what is morally right and wrong to create a common good (Glück & Sternberg, 2022; Intezari, 2016; Rooney et al., 2010). These wisdom principles can serve as a meta-approach to evaluating organisational and management theories and practices, including stakeholder conflict management.

We then raise some concerns about the assumptions of stakeholder theory and conflict management theory in the context of sustainability using the three meta-principles of wisdom. Firstly, stakeholder theory assumes that the type of stakeholders who matter in influencing sustainability policies are those who have strong power. For instance, the government and large corporations would categorise

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marginalised Indigenous people as low-power secondary stakeholders whose voices are insignificant even though they have interest to preserve lands and forests sustainably. Based on the principles of balance and integration, however, such a practice lacks wisdom because the company does not involve the Indigenous people in an equal and participatory manner. As a result, conflicts of interest and injustice arise due to unequal power relations that favour certain parties at the expense of others. The integrating, obliging, or compromising style that is considered a wise way of managing such stakeholder conflicts will actually work effectively if justice, dialogue, and meaningful and equal participation are the predictors (Jentoft, 2017; Rahim et al., 2000; Richter & Dow, 2017; Whiteman, 2009). Thus, we argue that it is essential to incorporate such predictors in stakeholder theory and conflict management theory to balance the power inequality among stakeholders and mitigate the marginalisation of the least powerful parties.

Secondly, conflict management theory suggests that it is essential to balance between high concern for self and high concern for others to reach a consensus by applying the cooperative conflict handling styles (i.e., integrating, obliging, or compromising). A prerequisite for successful cooperative conflict-handling styles, however, is that the conflicting parties are open to new knowledge or perspectives and are willing to change their minds (Rahim, 2002). Stakeholders then need to apply reflexivity to scrutinise and clarify for themselves and others: what their true interests, beliefs, and values are; what they do and do not support; and what can or cannot be negotiated (Bondy & Charles, 2020; Jentoft, 2017). Disclosing hidden interests and agendas among stakeholders to foster mutual trust is critical to successful conflict management concerning sustainability (Høvring et al., 2018).

Third, we would like to clarify the role of ethics in stakeholder theory and conflict management theory. As an essential element of wisdom, ethics and morality can act as a code to distinguish between right and wrong or good and bad in mediating the interests, values, and actions of conflicting parties for the benefit of the greater good (Glück & Sternberg, 2022; Høvring et al., 2018). For example, governments should uphold public ethics by opening up the widest possible space for meaningful dialogue and participation in the SDGs planning and implementation process, including involving and affirming less powerful stakeholders. Corporations should think that they have ethical obligations

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towards society and evaluate their economic obligations that damage nature. In summary, based on the meta-principles of wisdom, I argue that the integration of stakeholder theory and conflict management theory to resolve stakeholder conflicts regarding sustainability should consider the following elements: (1) sensitivity to power imbalances and justice, (2) reflexivity mechanism among conflicting stakeholders, and (3) commitment to upholding ethics.

RESEARCH DESIGN

This study is part of a bigger project investigating the management of sustainability-related stakeholder conflict by asking the following research question: “how should sustainability-related stakeholder conflicts be managed?”. To address the research question, we applied content analysis which is defined as “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (Krippendorff, 2019, p.24). Social scientists widely use content analysis to interpret historical documents, newspapers, speeches, interview transcripts, diplomatic messages, official reports, and social media texts (Jayarathna et al., 2022; Krippendorff, 2019; Weber, 1990). In the context of sustainability, Banerjee (2011) also used the same method to analyse the conflict between Indigenous people in India and multi-national corporations by analysing newspapers that raised the issue. We therefore examined publicly available official reports about the sustainability practices of a major corporation in Indonesia—Toba Pulp Lestari (TPL)—and documentary video and documents about the voices of the Batak Toba Indigenous community regarding the ongoing conflicts with the company.

Data analysis: We selected several relevant official sources for two reasons. Firstly, we identify that the company website and sustainability reports contain complete and official claims about the company's sustainability practices. Second, we find that a video documentary produced by credible media in Indonesia shows sufficient data of the Indigenous peoples' perspective on the conflict. We also cross-check the data from the video to other sources, such as magazines and newspapers. Table 1 summarise the sources we selected. We then compared them carefully by reading the text documents line by line and watching the visual content (i.e., the documentary). We wrote notes while reading and or watching the materials to group the relevant quotations or narratives of the company and Batak Toba

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Indigenous community and constantly comparing them. This helped us improve our understanding and interpretation analysis of the data. We then provided the narrative comparison of the two conflicting views in the next section.

[insert Table 1 here]

FINDINGS

This section outlines our findings of how the Batak Toba indigenous people reject the TPL's sustainability claims. The findings are presented under two headings, each representing one of the antithetical viewpoints of the conflicting parties regarding TPL's practice of sustainability. Due to limited space in this paper, we have put more raw data in the appendix.

TPL's sustainability claims

As the government has required companies in Indonesia since 2017 to make sustainability reports (MajalahCSR, 2021), the TPL has also done so. The TPL underlined that its mission aligns with the SDGs. The company claims to be highly humanist and ecological by respecting the rights of indigenous peoples, initiating entrepreneurship empowerment through Corporate Social Responsibility (CSR) programs, and preserving biodiversity. The statement below, which has been put on the company's website, is an example of what the company presents about their sustainability mission:

“This sustainability policy includes forest protection and conservation by supporting diversity and carbon conservation initiatives and supporting local communities with CSR programs proactively, especially developing village entrepreneurship and agricultural systems and respecting the rights of Indigenous communities.” - (Source: “Keberlanjutan,” n.d.).

TPL positions itself as a companion of the local community. The company's 2021 sustainability report, for instance, describes transparency as a core principle in communicating with local communities as one of the stakeholders. The CEO of TPL proclaimed that:

“We firmly believe that building a thriving business and seeking positive impact will create long-term value for all stakeholders...We have a long-term commitment to promote education to empower the community...Communication between Toba Pulp Lestari and local communities is transparent” - (Source: TPL, 2021, p. 11).

At first glance, these narratives indicate that TPL's commitment to sustainability is unquestionable. Moreover, TPL's annual sustainability report also contains multiple quotes from employees and suppliers who agree that this company has implemented sustainable management by fulfilling workers' rights and succeeded in changing society with its community development programs.

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This perspective, however, does not seem to be aligned with how the Indigenous community sees the company's practice.

Batak Toba people's perspective on the company's claims

Based on the analysis of the available data, we find that Batak Toba Indigenous people reject the TPL's sustainability claims. For example, a Batak Toba Indigenous youth, testified that her parents had to risk their lives to fight against the TPL to protect the destruction of forest. She even referred to the TPL as oppressor.

“As a teenager, I grew up watching my parents in my village fight against TPL. They marched, protested, all the while conserving the forest. I feel like this company is oppressing us” - Agustina Pandiangan, an Indigenous youth

The leaders of the Batak Toba Indigenous people further highlight that the company do not involve them and seek their consent to acquire customary land for business expansion. As a result, the Indigenous leaders reject the company's presence and voice their aspirations to the government and the company. However, the protesters get violent when voicing their aspirations several years ago. Police imprisoned them for 'undermining security stability' and 'hindering investment'. An Indigenous leader describes the situation as follows.

“There was pushing and throwing wood and stones during the protest against Toba Pulp Lestari. Let it be to the last drop of blood; we are ready to die defending our customary land”-Jusman Simanjuntak, an Indigenous Leader)

Batak Toba Indigenous people insist on maintaining their customary land and forest because they consider land and forest as their ancestral heritage and source of livelihoods. They accuse that TPL has destroyed their ancestral graves and severe their spiritual and historical connections with their ancestors. They also blame the TPL for destroying their livelihoods because the company uses massive eucalyptus chemicals. They consider that TPL as a powerful company has marginalised them and provides no hope for the future. Another Indigenous leader testifies to the situation.

“This used to be our ancestral village. But now everything is gone since TPL arrived. Vanished, destroyed, and nothing left. We have exhausted ourselves searching for our ancestors' graves. How will we locate them if cannot see them? We have been here for 15 generations.”-Tomu Pasaribu, an Indigenous leader.

Overall, the above conflicting narratives show that value-clashes between the company and the Batak Toba Indigenous people has made it increasingly difficult to achieve ecological sustainability. The

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Indigenous people label the TPL as an oppressor because they witness that the company has damaged their source of livelihood and spiritual connection to nature. The TPL, on the other hand, claims that it has initiated many sustainability programmes. We will then provide recommendation on how to solve this issue in the next section.

DISCUSSION

We have highlighted differences in values and perspectives that have led to conflict between a pulp producer, the TPL, and the Batak Toba Indigenous community in Indonesia. Drawing upon the wisdom meta-approach to stakeholder theory and conflict management theory as explained in the theoretical background section, we offer three theoretical arguments of how to resolve the conflict. First, stakeholder theory assumes that corporate goals and interests are the centre of gravity of the interplay dynamics of power and interests between stakeholders. The TPL will then only exclusively listen to certain stakeholders who have strong power and interest in achieving anthropocentric goals—treating humans as top value and lending credence to the idea that humans can and must dominate nature—that has led to the volatile ecological situations (Banerjee, 2021; Eckersley, 1992). However, based on the principle of balance and a just, holistic and participatory integration, the TPL should also listen to and consider seriously the voices of the Batak Toba Indigenous people. The government can act as wise mediator and affirm the least powerful stakeholder by upholding social justice. The company and the Indigenous people can use integrating conflict management style by integrating ecology and economy obligations. They can deliberate in a participatory manner to find alternative ways to do business without damaging the nature.

Second, we argue that disclosing hidden interests and agendas among stakeholders to foster mutual trust is critical to successful conflict management concerning sustainability. The TPL and the Indigenous communities need to apply reflexivity to scrutinise for themselves and others: what their true interests, beliefs, and values are; what they do and do not support; and what can or cannot be negotiated (Høvring et al., 2018). Government can facilitate such critical reflection through a participatory deliberation that brings together TPL's board of directors with Batak Toba Indigenous leaders. In particular, TPL should also realise that power imbalances are vital to address because the company has more power than Indigenous people due to its enormous capital (financial, political, etc.). To be a wise organisation, TPL

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should also have critical reflexivity towards its power and should not oppress other powerless stakeholders.

Lastly, ethics plays crucial role as a code in mediating the interests, values, and actions of conflicting parties to determine what is morally right and wrong or good and bad for a greater good. We argue that TPL and Indigenous communities should adhere to environmental ethics to resolve sustainability issues. Environmental ethics scholars outline that nature has intrinsic rights to live and blossom, and benefits the biodiversity of life, not only human interests (Devall, 1980; Mies & Shiva, 2014; Smith, 2018). The TPL then should leave its egocentric economic duties that damage nature and become an ecocentric organisation. Put another way, inspired by the Māori Indigenous wisdom, we also highlight that a business organisation and its stakeholders should co-exist in a web of interconnected and reciprocal relationships and have responsibility to steward nature holistically.

CONCLUSIONS AND FUTURE RESEARCH AGENDA

This study has discussed why and how sustainability-related stakeholder conflicts should be managed. We raise and analyse a case that has received national media attention: the conflict between Indonesia's major pulp producers —the Toba Pulp Lestari—with Batak Toba Indigenous wisdom di North Sumatera, Indonesia, using a content analysis method. As a theoretical contribution, we integrate stakeholder theory and conflict management theory by using wisdom-meta principles as the analytical lens. We argue that the use of these theories in the context of the sustainability-related stakeholder conflict resolution can incorporate sensitivity to power imbalance and social justice, applying reflexivity to clarify the hidden agenda among the conflicting parties, and commit to upholding environmental ethics. In addition, we suggest that future researchers can examine the practices of managing sustainability-related stakeholder conflicts that have been implemented in various countries to develop an integrated theoretical framework that may be useful for policy-makers to achieve the desired targets of the SDGs by 2030.

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Appendix. Raw data of the analysed contents

| Sources | Sample of Direct Quotes |
|--|---|
| | Toba Pulp Lestari |
| Company profile in its official website | <p>A. “Missions: (1) Generate sustainable growth; (2) Cost effective producer; (3) Maximising profits for stakeholders and contributing to the socio-economic development of the surrounding and regional communities; (4) Creating value through modern technology, industry knowledge and human resources.”</p> <p>B. “Toba Pulp Lestari believes that responsible forest management in relation to potential environmental risks contributes positively to business and benefits employees, customers, shareholders and other stakeholders. The Company also believes that adequate environmental policies and implementation of sustainable forest management strategies are included.”</p> <p>C. “Committed to implementing ecosystem representation landscape conservation, biodiversity protection, and management of protected flora and fauna.”</p> <p>D. “Committed to improving environmental performance on an ongoing basis through the implementation of adequate measures in preventing and minimising air, water and soil pollution and waste water pollutant loads and is also committed to having trained, skilled and highly motivated workers.”</p> |
| Recent sustainability report (published in 2021) | <p>A. “Our sustainability core values as responsible pulp producer are: (1) Sustainable Wood; (2) Forest Conservation and Protection; (3) Peat Land Management; (4) Sustainable Reduction of the Carbon Footprint; (5) Community Development; (6) Respect the Rights of Indigenous People and Rural Communities; (7) Cleaner Production (8) Responsible Practices in Workplace; (9) Legal Compliance and Certification; (10) Good Corporate Governance, Verification, and Transparency” —One of the report statements (p. 31).</p> <p>B. “We firmly believe that building a thriving business and seeking positive impact will create long-term value for all stakeholders...We have a long-</p> |

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| Sources | Sample of Direct Quotes |
|--------------------------|---|
| | <p>term commitment to promote education to empower the community...Communication between Toba Pulp Lestari and local communities is transparent. We encourage communities to walk together on our growth journey, but we also understand that we are responsible for looking after them...Going into 2022, we also want to emphasise that we are doing our part in fighting climate change and using our resources to promote sustainable development” —The CEO of TPL (p. 11)</p> <p>C. “TPL is committed to implementing the CSR program for social and community development. Therefore, since 2007, TPL commits to allocate 1% of its net sales to support the program. On top of that, good relationship between TPL and the surrounding community has been manifested in collaborative programs. The CSR program consists of five areas as follows: education and culture, job creation and skill development, health, social investment, and environmental preservation” —One of the report statements (p. 35).</p> <p>D. “By upholding TPL's ethical standards high levels and ensure the business is run with integrity, to also comply with all statutory and regulatory requirements applicable, we have created a policy anti-bribery that applies to all employees, suppliers, and stakeholders in order continue to comply with all laws and regulatory requirements that apply to prevent incidents of corruption, bribery or extortion” —One of the report statements (p. 35).</p> <p>A. “TPL continues to be committed to avoiding, cause or contribute to adverse impact on human rights and to the best of our ability, prevent detrimental impact on human rights. We also promised to be responsible respect the tenure rights of indigenous people and their customs” —One of the report statements (p. 35).</p> |
| | <p>Batak Toba Indigenous people</p> <p>A. “As a teenager, I grew up watching my parents in my village fight against TPL. They marched, protested, all the while conserving the forest. I feel like this company is oppressing us” —Agustina Pandiangan, a Young Indigenous Batak Toba (min. 24:54 - 25:18).</p> <p>B. “There was pushing and throwing wood and stones during the protest against TPL. Let it be to the last drop of blood; we are ready to die defending our customary land” —Jusman Simanjuntak, a Batak Toba-Natumingka Indigenous Community Leader (min. 25:50 - 26:52).</p> <p>C. “In 2009, we began fighting against TPL. They [TPL] did not consult nor inform the community before entering our land but instead bribed people with the promise of a million rupiahs per hectare of land. In 2011, the community and TPL clashed. The Polices's Mobile Brigade arrived in huge numbers in our village. They tore down our homes and trampled on the elderly” —Pastor Haposan Sinambela, a Batak Toba-Pandumaan Indigenous Activist and Leader (min. 32:26 - 26:52).</p> <p>D. “This used to be our ancestral village. But now everything is gone since TPL arrived. Vanished, destroyed, and nothing left. We have exhausted ourselves searching for our ancestors' graves. How will we locate them if cannot see them? We have been here for 15 generations. We cannot longer find our ancestors' graves because of TPL” —Tomu Pasaribu, a Batak Toba-Natinggir Indigenous Community Leader (min. 41:57 - 43:10).</p> <p>E. “As indigenous Batak people, we have traditions or ancestral legacies that we have inherited. This includes customary lands passed down from our ancestors. This is the way our ancestors administered the village for Batak people. Natural borders for indigenous Batak people include certain trees, rivers, tributaries, and mountains. There were no boundary disputes between indigenous communities. In fact, conflicts started after TPL encroached on</p> |
| Video documentary (2019) | |

Research Stream 3. Sustainability and Social Issues

| Sources | Sample of Direct Quotes |
|--------------------------------------|---|
| | <p>the customary lands” —Roganda Simanjuntak, Chairman of AMAN Tano Batak (min. 43:33 - 26:52).</p> <p>F. “Nothing is more important to us than the lives of our children. Since TPL came, this is the condition of our rice fields. We cannot longer harvest. Who can we cry to? Life is hard in Tornaui. It hurts to see our rice field like this. It’s miserable to live here right now” —Grace Naibaho, a Toba-Tornaui Indigenous People (min. 54:06 - 54:50).</p> <p>G. “They have [TPL] destroyed this area with their heavy equipments. What’s worst is that they apply fertilizers, pesticides, and toxic chemicals to the plants above the water sources. When it rains it seeps into our water reservoir. We beg the government to solve this problem because we have not had water for almost two weeks” —Parasian Siagian, a Toba-Matio Batak Indigenous People (min. 1:02:18 - 1:22:48).</p> |
| AMAN’s report (published in 2022) | <p>A. “Land surrender [to TPL in 1987] was done by manipulating customary law. On behalf of the community, the village head and sub-district head received “peace money” of 650 thousand rupiah for 51.36 hectares of land. PT. TPL also forged the signatures of residents who could not read and write. One of them was experienced by Wilson Sianipar, who could not read and write, whose signature was forged in the land handover letter” — One of the report statements (p. 23).</p> <p>B. “According to Jakob, an indigenous youth of the Ompu Ronggur community, left from their village area to Napa’s customary land which had been taken over by a pulp company, TPL. They brought machetes, a tripe machine, blankets and food for three days. Arriving at Napa’s customary land, these eight young men cleared the weeds that were as tall as adults. The following day, while finishing the clearing, they also worked on making the framework and painting the planks. By noon, the signboard was up. The Youth Indigenous Front flag and the AMAN flag fluttered guarding the signpost which was painted in the red colour, the symbol of blood—a symbol of the struggle” — One of the report statements (p. 160).</p> |
| KSPPM’s bulletin (published in 2019) | <p>A. “The presence of Toba Pulp Lestari is well known to have hurt the community. Previously covered with frankincense trees, the people’s land turned into eucalyptus plants. The place where Bayon grows (a Batak Toba term for a grass-type plant that can be made into floor mats) is now starting to be polluted by pesticides from eucalyptus...An irony when industrialisation, which is said to be intended for the people’s welfare, is slowly killing the craft of Bayon mats, which has always been the pillar of people’s lives.” —Fransiska Sinaga, a KSPPM activist (p. 5)</p> <p>B. “Buyung Lumban Gaol (an Indigenous leader of Sipituhuta village) said that the struggle to gain recognition of this customary forest not a new struggle. They experienced various sorrows even to some members of the community been in prison and some members of the community were on the police wanted list and hiding in the forest because of the actions of the authorities that traumatised some people.”—KSPPM News (p. 8)</p> |

Research Stream 3. Sustainability and Social Issues

Table 1. Selected sources presenting the conflicting views of sustainability between the TPL and Batak Toba people

| Sources | Description | Relevance for the study |
|---|--|--|
| Company profile | The company profile of TPL outlines the history of its establishment, vision and mission, legal permits and organisational structure, presented in the following official website link: https://www.tobapulp.com/tentang-kami . | It is essential to check TPL's explicit mission or commitment statements on sustainability as a sign that the company prioritises sustainability issues in its business strategy. |
| Sustainability reports | TPL has published annual sustainability reports from 2018-2021. The recent report (2021) is downloaded from the company's official website for further analysis (the link: https://www.tobapulp.com/keberlanjutan/#laporan). It contains detailed information on TPL's sustainability practices and performance on social, economic and environmental aspects and stakeholder management. | The detailed claims of sustainability practices presented in this report are relevant to be compared further with the reality in the field. |
| Video documentary | The video was produced by WatchDoc Documentary in 2019 highlighting the Batak Toba people's history of struggle to defend their area. It can be accessed on the following YouTube link: https://www.youtube.com/watch?v=wT-Hzg2NywK . WatchDoc Documentary is one of the prominent journalistic media in Indonesia that focuses on covering ecology and human rights issues. This media won the Magsaysay Award in 2021, one of the leading awards in Asia for media or people who consistently advocate for human and natural rights (Maharani, 2021). | The voices of activists and leaders of the Toba Batak Indigenous people regarding TPL's behaviour presented in this documentary video are vital material for comparison with the company's claims of sustainability initiatives. |
| Non-governmental organisations (NGOs) reports and bulletins | Two prominent organisations that consistently advocate for the Batak Toba Indigenous people are the <i>Aliansi Masyarakat Adat Nusantara or AMAN</i> (Indigenous Peoples Alliance of the Archipelago) and <i>Kelompok Studi dan Pengembangan Prakarsa Masyarakat or KSPPM</i> (Community Initiative Study and Development Group) AMAN's report on their 20-year struggle published in 2022 can be downloaded at this link: https://aman.or.id/organization-document/aman-dua-dekade-memperjuangkan-hak,-memperjuangkan-kemajemukan . The latter organisation published a bimonthly bulletin in 2019 containing advocacy stories for the Batak Toba | These documents were used to triangulate the documentary video sources mentioned above. |

Research Stream 3. Sustainability and Social Issues

| Sources | Description | Relevance for the study |
|---------|--|-------------------------|
| | people which can be found at this link: https://ksppm.org/?cat=133 . | |

Stream 8: Business Processes, Innovation and Supply Chain

**Assets and processes in knowledge-intensive precincts:
Critical attributes that drive innovative activities**

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Stream 8: Business Processes, Innovation and Supply Chain

Assets and processes in knowledge intensive precincts: Critical attributes that drive innovative activities

Abstract:

It has been established from previous research that the spatial locations of businesses within defined boundaries, such as precincts, hubs, or clusters, are vital in facilitating innovation and entrepreneurial activities. Past literature has identified that knowledge creation (KC), knowledge spillover (KS) and knowledge absorptive capacity (AC), are crucial theories in the design of enabling factors for innovation and entrepreneurship. However, limited knowledge exists on how these theories combine and interact to generate innovation and entrepreneurship in spatial locations such as knowledge intensive precincts.

This research paper explores the literature on knowledge-intensive precincts with respect to promoting innovation and entrepreneurial activities. It examines how knowledge creation (KC), knowledge spillover (KS) and knowledge absorptive capacity (AC) are employed in knowledge-intensive precincts for these precincts to provide a conducive environment by integrating their unique precinct attributes.

This paper contributes to a deeper understanding of the mechanisms and processes involved in generating innovation and entrepreneurship activities in knowledge-intensive precincts, and the implications of these findings for economic and social development policies.

Key words: *innovation, entrepreneurship, knowledge-intensive precincts, knowledge clusters, precinct attributes, precinct environments*

INTRODUCTION

Knowledge is one of the most important factors driving industrial innovations and economic performance. Knowledge-based dynamic capabilities are drivers of innovation performance in an innovation ecosystem (Robertson, Caruana & Ferreira 2021) and knowledge resources that particularly come from scientific research is key for developing technologies (Wang, L & Li 2019). In the knowledge-based economy, as pointed out by Audretsch, D and Link (2019), the competitive advantage of innovation agents has “shifted away from the traditional factor of physical capital toward knowledge” (Audretsch and Link 2019, p. 146). Robertson et. al. further analysed and concluded that the four constructs, or drivers, of innovation are knowledge creation, knowledge diffusion or knowledge spillover, knowledge absorption and knowledge impact, of which the biggest driver among them is knowledge creation (Robertson, Caruana & Ferreira 2021). To foster innovation activities, great efforts have been made to capture the underlying mechanism of knowledge production (Acs, Anselin & Varga 2002; Audretsch, David B. & Feldman 1996; Zucker et al. 2007). There are streams of literature that document the relationships between geographic areas and their abilities to promote the mechanism of knowledge production (Bikard & Marx 2020; Soetanto & van Geenhuizen 2007; Yigitcanlar, Velibeyoglu & Martinez-Fernandez 2008), and, there are a limited, but growing number of studies, that have investigated and claimed that one of the greatest features of successful precincts are their ability to support knowledge mechanisms (Esmailpoorabi et al. 2018; Trachuk & Linder 2019). However, no conclusive studies have been conducted to identify what particular precinct attributes support specific components of the knowledge mechanisms across the variety of theoretical stances, i.e., knowledge creation (KC), knowledge spillover (KS) and knowledge absorptive capacity (AC) in knowledge intensive environments.

THE KNOWLEDGE TRINITY: HOW KNOWLEDGE IS CREATED, TRANSFERRED AND CAPTURED

Knowledge Creation (KC)

The theory of knowledge creation explains how knowledge held by individual employees in firms, universities and/or research organisations can be simultaneously enlarged and enriched through the spiral, interactive amplification of tacit and explicit knowledge held by these individual employees, universities and/or research organisations. Organisations play a critical role in mobilising tacit knowledge held by their individual employees and provide the forum for a "spiral of knowledge" creation through socialisation, combination, externalisation, and internalisation (Nonaka 1994). The theory of organisational knowledge creation also discusses the nature of information and knowledge. It draws a distinction between "tacit" and "explicit" knowledge. This distinction represents what could be described as the epistemological dimension to organisational knowledge creation. It embraces a continual dialogue between explicit and tacit knowledge which drives the creation of new ideas and concepts (Nonaka 1994). Interaction among individuals within firms and research organisations typically plays a critical role in developing new ideas. Communities of interaction contribute to the amplification and development of new knowledge. While these communities might span departmental or indeed organisational boundaries, they define a further dimension to organisational knowledge creation, which is associated with the extent of social interaction between individuals that share and develop knowledge. This is referred to as the "ontological" dimension of knowledge creation (Nonaka 1994).

Knowledge and the ability to sense the market are important for innovation to occur (Ardyan 2016). Expanding on what had been established in earlier knowledge literature, Quintane et al. (2011) emphasise that knowledge creation process, in addition to knowledge management, fosters innovation. The argument that knowledge creation is the precursor for both knowledge management and innovation is also supported by Grimsdottir and Edvardsson (2018), and growing number of studies have shown that knowledge management strategies could play a significant role in enhancing innovation. Grimsdottir and Edvardsson (2018) conduct their research on two companies. Results from one company show that new knowledge originates from new business ideas and problems that need to be solved. New solutions are generated through collaborative learning, i.e., when employees are experimenting and sharing knowledge through brainstorming and discussing ideas. Results from

the other company demonstrate that knowledge gathering by employees takes place largely through training and education. The findings also show that most learning takes place when employees have the opportunity to disseminate their own ideas and to learn from others the new knowledge gathered through experiments and tests (Grimsdottir & Edvardsson 2018).

External knowledge acquisition such as customer co-creation and partner sourcing is important for organisational innovation, however, Goyal, Ahuja and Kankanhalli (2020) suggest that organisations would benefit more from valuing partner sourcing than from customer co-creation. Engagement in stakeholder co-creation projects, in which one firm engages with multiple stakeholders during the innovation process creates challenges (Kazadi, Lievens & Mahr 2016). This is due to a diverse group of stakeholders leads to potential divergent goals and interests. Therefore (Kazadi, Lievens & Mahr 2016) demonstrate the critical impact on partner selection in co-creation and a firm needs to choose stakeholders that can work with each other.

Knowledge Spillovers (KS)

Under the Knowledge Spillover Theory of Entrepreneurship (KSTE), entrepreneurial behaviour is considered a response to profitable opportunities from knowledge spillovers. Having access to knowledge spillovers is the key reason why new entrepreneurial firms are started (Acs, Audretsch & Lehmann 2013). Knowledge spillover entrepreneurship is driven by taking advantage of entrepreneurial opportunities that knowledge spillovers create. KSTE explains that individual agents and high impact entrepreneurs capture new knowledge endowment from knowledge spillovers. It also suggests a strong relationship between knowledge spillovers and entrepreneurial activities, which both have influence on the growth rates of regions and countries (Acs, Audretsch & Lehmann 2013). Entrepreneurs, who utilise knowledge spillover are unique from other entrepreneurs by means of using the spillover from the knowledge incubator, commercialising this knowledge by founding new firms, entering the marketplace, and converting the new knowledge into economic knowledge (Acs, Audretsch & Lehmann 2013).

One of the most cited earlier studies on knowledge spillover is that of Jaffe, A (1986), who suggests that technological proximity accentuates knowledge spillovers, drawing from their findings that knowledge intensive firms increase their research productivity and achieve higher returns to R&D. Studies have since examined the role that geographic and technological distance play in determining knowledge spillover intensity (Adams & Jaffe 1996; Audretsch, David B. & Feldman 1996), and the effects of geographical distance between firms on their innovative outputs and growth (Breschi & Lissoni 2001).

The knowledge stock and economic growth relationship, as was also proven by Jaffe, A (1986), is of the premise that the total relevant activity of other firms influencing innovation of a particular firm can be represented as a weighted sum of R&D investments. Investments in R&D shape innovation in start-ups, some of which are entrepreneurial firms (Audretsch, D & Link 2019). A compelling body of entrepreneurship research has found that investments in knowledge from other firms and public organisations are critical in enhancing a firm's performance (Audretsch, D & Link 2019; Audretsch, David B. & Belitski 2020; Audretsch, David Bruce, Belitski & Caiazza 2021). While not all knowledge spillover can be fully exploited through regular knowledge flow (Shu et al. 2014), entrepreneurial firms also engage in other forms of active collaboration with external partners (Baker, Grinstein & Harmancioglu 2016; Van Beers & Zand 2014). Firms also go through the process of investing in their own R&D in order to increase absorptive capacity (Denicolai, Ramirez & Tidd 2016; Roper, Love & Bonner 2017) and learn new skills (Khalil & Belitski 2020).

Knowledge Absorptive Capacity (AC)

Cohen and Levinthal (1990) provide a foundational definition of AC as the collective ability of an established firm 'to recognize the value of new information, assimilate it, and apply it to commercial ends.' Absorptive capacity and innovation performance are positively affected by creating a solid and extensive network with enterprises' stakeholders. According to Scuotto, Del Giudice and Carayannis (2017), enterprises are actively cooperating with the external environment in order to achieve global innovation performances that can enhance their value creation and

productivity, and also, besides selling products to consumers, enterprises tend to cooperate with consumers to generate innovations. Ferreras-Méndez et al. (2015) describe the openness to external knowledge sources as ‘open innovation’, where the knowledge required in innovation processes are obtained from a wide range of external actors and sources. The authors investigated the role of multidimensional learning processes of absorptive capacity in the context of firms openness and confirmed an earlier study by Laursen and Salter (2006) that the depth of openness may improve firms’ innovativeness and profitability when learning processes of absorptive capacity are in place. Ferreras-Méndez et al. (2015) also suggest that absorptive capacity acts as a full mediator in the relationship between the depth of external knowledge search and the innovation and firms’ business performance. Absorptive capacity allows firms to assimilate valuable knowledge present in external sources and to successfully apply it to generate innovation and increase performance.

The impact of absorptive capacity on innovation capability is further tested by Wang, K et al. (2021) by looking into the relationship between knowledge absorptive capacity and knowledge spillovers. Wang, K et al. (2021) indicate that knowledge, which is partially exclusive and non-competitive, is one of the decisive factors in the development of innovation. Innovation occurs through the accumulation of knowledge through independent learning, training, and imitation, etc. The nature of knowledge means spillover effect, and its efficiency is closely related to the absorptive capacity of the receiving subject. Therefore, while knowledge spillovers promote innovation output, absorptive capacity has a positive on innovation capability through knowledge spillover.

INTERSECTION OF KNOWLEDGE MECHANISMS: CO-EXISTENCE IN KNOWLEDGE INTENSIVE PRECINCTS

Knowledge is a resource, a specific asset capable of generating vast external effects (spillovers), or externalities, expressed in the accumulation of knowledge and the continuous production of new knowledge based on acquired competencies, skills, and experience (Corredoira & Rosenkopf 2010).

Insert Figure 1 about here

The creation, the accumulation and absorption of knowledge are not isolated in practice, despite being robustly distinctive in theory. Figure 1 above shows the three theoretical knowledge systems, and how they co-exist, are inter-related, inter-dependent on each other and are influenced by spatial context, such as precincts.

Knowledge spillover phenomenon occurs when knowledge created by one economic entity (whether an individual or an entire organization) becomes available to other entities over time (Cerchione & Esposito 2017). Qian and Acs (2013) argue that knowledge spillover entrepreneurship depends not only on new knowledge (knowledge creation) but more importantly on understanding new knowledge, recognising its value, and commercialising it by creating new firms. New knowledge from knowledge spillover is exploited by entrepreneurs to create new firms or enterprises (Acs, Audretsch & Lehmann 2013).

The creation of new firms through spinouts, is dependent on the process of knowledge creation, however, new firm spin-offs rely on established firms' absorptive capacities as means to knowledge capture. The transferability of knowledge through knowledge capture, also known as the absorptive capacity, is based on the dichotomy of tacit knowledge and explicit knowledge. Absorptive capacity can only happen when knowledge exists (created) or is spilled over (captured) from other firms or organisations within and beyond the precincts.

As the intersection of knowledge creation by knowledge intensive organisations, the absorptive capacity of knowledge for established businesses and the knowledge spill-over that subsequently provides opportunities for entrepreneurial firms, when functioning simultaneously, are influenced by the assets and processes of a precinct, the following section of this paper discusses the

importance of knowledge intensive precincts, and how the three knowledge mechanisms are activated through their assets and processes attributes.

THE IMPORTANCE OF KNOWLEDGE INTENSIVE PRECINCTS: VEHICLE FOR INNOVATION AND ENTREPRENEURIAL ACTIVITIES

This section discusses in greater details the importance of physical geographic areas with respect to how they trigger knowledge mechanisms which in turn stimulates innovative and entrepreneurial activities. The terms ‘precinct’, ‘hub’, ‘district’ and ‘cluster’ are used (in certain contexts, interchangeably) to describe these physical environments where geographic concentrations of interconnected companies and organisations in a particular field are located. Even though ‘district’, ‘hub’, or ‘cluster’, are more commonly used internationally, in Australia the term ‘precinct’ is more widely used, and henceforth this paper refers to these physical geographic areas as ‘precincts.’ Until recently, little has been researched to identify specific precinct attributes that stimulate (separately and jointly) knowledge mechanisms in precincts.

Knowledge intensive precincts are urban areas that leverage and share resources with the aim of producing and then sharing knowledge among individuals (knowledge workers) and firms within the precinct to increase wealth in the community by encouraging innovation, creativity, and competitiveness of its associated businesses, and knowledge base institutions (IGI Global). The Department of Industry, Science, Energy and Resources of the Australian Government, also defines an innovation precinct as “a group of industry, research and education activity in a geographic area.” (Australian Government - Department of Industry 2021). Innovation precincts exist in a variety of forms, from an agglomeration of innovative activity around a significant research-intensive hospital or university, to a single building that hosts a density of startups, entrepreneurs and investors,” (NSW Innovation and Productivity Council 2018). Past literature has established that Innovation precincts are more likely to succeed when businesses, agencies, and governments work together to build on local strengths (Australian Government - Department of Industry 2021). World Bank, in its research on scale economies and agglomeration, discovered the importance of proximity for entrepreneurs and

workers in advanced industrial and service-oriented production to share knowledge and new ideas (World Bank 2009). Precincts are geographic concentrations of interconnected companies and institutions in a particular field. Precincts encompass an array of linked industries and other entities important to competition. They include, for example, suppliers of specialized inputs such as components, machinery, and services, and providers of specialized infrastructure. Precincts also often extend downstream to channels and customers and laterally to manufacturers of complementary products and to companies in industries related by skills, technologies, or common inputs. Many precincts include governmental and other institutions—such as universities, standards-setting agencies, think tanks, vocational training providers, and trade associations—that provide specialized training, education, information, research, and technical support (Porter 1998). New ideas, new businesses and new jobs can be developed when innovating businesses that locate close to one another are able to build collaborative relationships (Katz & Wagner 2014). Sonn et al (2008) reported that firms in the biotechnology industry in the US and Canada, are eight times more innovative when located together (Sonn & Storper 2008).

Strong interface among innovators and entrepreneurs are also found in knowledge-intensive precincts. The interface among scientific discoveries, new venture start-ups and commercialisation is also explained by Dutta and Hora (2017) when examining the impact of alliance partnerships for an entrepreneurial firm in biotechnology industry, namely its upstream and downstream alliances. The upstream alliance involves a research partner such as a university providing new knowledge through R&D, and the downstream alliance involves working with a pharmaceutical partner for the purpose of commercialising a product. Commercialisation is an attempt to profit from innovation by incorporating new technologies into products, processes, and services, and selling them in the marketplace (Laubach & Gelijns 1995). Commercialisation of entrepreneurial inventions can be increased through the enabling of technology transfer between firms in the market for ideas. Intellectual property (IP) law, especially that on patents, provides such facilitation (Arora 1995; Arora, Fosfuri & Gambardella 2001; Gans, Hsu & Stern 2002).

Given that knowledge-intensive precincts provide many benefits to the advancement of innovation and entrepreneurial activities, it is important to understand what elements within the knowledge intensive precincts, and where concentrations of interconnected companies and institutions in a particular field, trigger such activities. In other words, what are the critical attributes that are activated by the knowledge mechanisms that support innovative and entrepreneurial activities.

This paper further examines how precincts foster innovation and entrepreneurial activities by looking at the critical precinct attributes that enable or activate the knowledge mechanisms that drive these activities.

PRECINCT ATTRIBUTES: ASSETS AND PROCESSES THAT ACTIVATE KNOWLEDGE MECHANISMS

As established earlier, the features and attributes of precincts facilitate collaborations and attract talents, increase connectivity, and foster commercial growth. Appropriate precinct settings could also affect competition by increasing the productivity of companies; driving the direction and pace of innovation, which underpins future productivity growth; and stimulating the formation of new businesses, which expands and strengthens the cluster or precinct itself (Porter 1998).

From the above discussion and from existing literature, this paper identifies salient precinct attributes that jointly affect the components of knowledge mechanisms, i.e., knowledge creation, knowledge spillover and absorptive capacity of actors, and that activate the innovation and entrepreneurial activities. Given that these attributes have the roles in connecting, providing the hard infrastructure as well as enabling critical processes, this paper groups these attributes into two interactive components namely the assets and processes, and summarised as follows:

Assets

The most obvious attributes of knowledge-intensive precincts are the physical or tangible assets that every precinct display, which include the people that work in the precincts, their general

infrastructure and the concentration of companies or institutions that are located within. All of these attributes hold features of proximities, such as geographic proximity – the physical distance between inventors, organisational proximity, inventors sharing the same organisational context such as the same firm, university or research centre, and social proximity – external networks that are highly dependent on previous social connections (Boschma 2005; Crescenzi, Nathan & Rodríguez-Pose 2016).

Skilled Human Capital: Human capital is an important attribute in a knowledge intensive precinct. A skilled workforce has been categorised as an economic asset by Katz and Wagner (2014). The number of employees with higher education qualifications was established by Caloghirou, Kastelli and Tsakanikas (2004) and Wang, K et al. (2021) as a proxy indicator for knowledge absorptive capacity relating to firms’ research and development (R&D) activities (Belitski, Caiazza & Rodionova 2020; Denicolai, Ramirez & Tidd 2016; Roper, Love & Bonner 2017).

General Precinct Infrastructure: The infrastructure, including public transportation, digital infrastructure, shared work and lab spaces, specialised research infrastructure, and community spaces are what Katz and Wagner (2014) describe to be the physical assets of successful precincts. Public transportation and community spaces are often overlooked as means to promote greater “face-time” with colleagues to produce better research (Ruder 2011). Infrastructure that include good amenities, a form of economic assets, are able to attract innovative businesses and skilled workers (Katz & Wagner 2014). A *good* infrastructure provides accessibility, connectivity, (Jaffe, AB, Trajtenberg & Henderson 1993). Underpinning geographic localisation, good infrastructure also encourages colocation and collaboration that are critical to knowledge spillovers (Jaffe, A 1986) and the creation of tacit knowledge, known as economic knowledge (Audretsch, David B. & Feldman 1996).

Concentration of related and supporting industries: There are numerous theories of economic growth. Studies into the difference between concentration of related industries and supporting industries and their roles in generating growth through technological spillovers have been

highly debated. The Marshall-Arrow-Romer (MAR), a model put forward by Marshall (1890), Arrow (1962), and Romer (1986), and later formalized by Glaeser et al. (1992) claims that knowledge is predominantly industry-specific. Knowledge spillovers among firms occur within the same industry and can only be supported by regional concentrations of a particular industry. However, Jacobs (1969) argues that these interactions between people in cities help them get ideas and innovate. Jacob's theory is supported by a number of various studies (Ferrerias-Méndez et al. 2015; Lane, Koka & Pathak 2006; Scuotto, Del Giudice & Carayannis 2017) including Katz and Wagner (2014) who argue that the upstream and downstream interfaces among the existing firms, and a diversity of complementary industries, research organisations and education institutions are what form the economic assets that are found in successful precincts. Given that both sides of the arguments from the contrasting theoretical viewpoints are reasonable and sound, this paper considers the *high* concentration of both related and supporting industries to be an important attribute of knowledge intensive precincts.

Processes

In addition to the physical assets that are found in knowledge-intensive precincts, this paper identifies the less tangible attributes of precincts—such as the processes or activities that are exploratory, transformative, and exploitative—are equally as important to activate the above discussed precinct assets to promote innovative and entrepreneurial outputs.

Skills enhancement: Hu (2021) suggests that an improvement in the human capital strengthens the relationship between technological innovation and the spillovers. Hence, the knowledge spillovers and the developed human capital are more likely to affect the total technological innovation. This paper emphasises the importance of skilled human capital in knowledge-intensive precincts in promoting innovation (Wang, K et al. 2021). The presence of skilled human capital can be preserved if precincts are able to promote and facilitate the process of attracting, retaining, and enhancing skills. As such, this paper considers skills enhancement to be an important precinct attribute that drives innovative and entrepreneurial outputs.

Access to market knowledge: It is important to note that through the interactive process and collaboration, external knowledge that support firms' innovation can be acquired (Baker, Grinstein & Harmancioglu 2016; Roper, Love & Bonner 2017; Van Beers & Zand 2014). Precincts that enable the process of strengthening community connectedness, such as establishing social capital and local communities of practice are essential in fostering access to market knowledge. These networking assets, as described by Katz and Wagner (2014), need to be in place in order for this process of acquiring market knowledge to take place in any successful precincts. Precincts that facilitate strong interactions with external environments are crucial in instigating knowledge spillover effects (Scuotto, Del Giudice & Carayannis 2017; Trachuk & Linder 2019). The interface process between upstream and downstream firms from complementary industries that form the economic assets as described by Katz and Wagner (2014) are also important to gather market knowledge that are critical in triggering the knowledge absorptive capacity mechanism.

Exchange of industry information: One important process attribute in knowledge intensive precincts is their ability to provide agents in the precincts with ease to communicate with other agents in the same field within the same precincts or with other precincts. Known as cognitive proximity, this attribute reduces the distance between technology fields of the co-patenting inventors, an important feature found in innovation teams (Boschma 2005). The ability of precincts to cater for the process of creating external knowledge effects, i.e., the transfer of knowledge beyond intended boundary has also been widely studied (Cohen & Levinthal 1990; Lane, Koka & Pathak 2006; Trachuk & Linder 2019; Zahra & George 2002). The ability of precincts to facilitate the process of knowledge transfer, which includes knowledge evaluation, knowledge acquisition and knowledge assimilation, is critical for inducing knowledge absorptive capacity of firms.

Access to funding: External funding is deemed important in innovation outputs and the lack of access to external funding constitutes a barrier to innovation for small businesses operating in traditional industries (Harel, Schwartz & Kaufmann 2020). It is therefore an important precinct

attribute for firms located within knowledge-intensive precincts to access funding. The success of knowledge intensive precincts is dependent on the viability of the businesses or firms located within the precincts. Therefore, certain governments grant provisions or funding to firms or organisations that meet the eligibility criteria of being located in knowledge precincts to apply for specific or specialised funding. An example of such provision is the *Advanced Genomics Collaboration 2023 Innovation Fund* that supports the translation and commercialisation of genomic innovations, eligible to only applicants who are based in an innovation precinct.

Insert Table 1 about here

Shown in Table 1, this paper summarises the critical precinct attributes, classified by assets and processes and their sub-categories.

CONCLUSION AND FURTHER RESEARCH

This paper draws from previous theoretical studies of knowledge mechanisms and presents the idea of how knowledge mechanisms, comprising the components of knowledge creation, knowledge absorptive capacity and knowledge spillover interact to affect innovation and entrepreneurial activities.

Using precincts as units of analysis, this study then identifies attributes that can be found in knowledge intensive precincts and examines how they are driven by these knowledge components. Even though this research identifies the salient precinct attributes that promote innovation and entrepreneurial activities in knowledge-intensive precincts, more research is required to determine the necessity and sufficiency of these attributes in producing either innovative or entrepreneurial outputs or both with configurations of attribute inputs that yield the most optimal results.

Figure 1: Interconnection among Knowledge Creation, Knowledge Absorptive Capacity and Knowledge Spillover

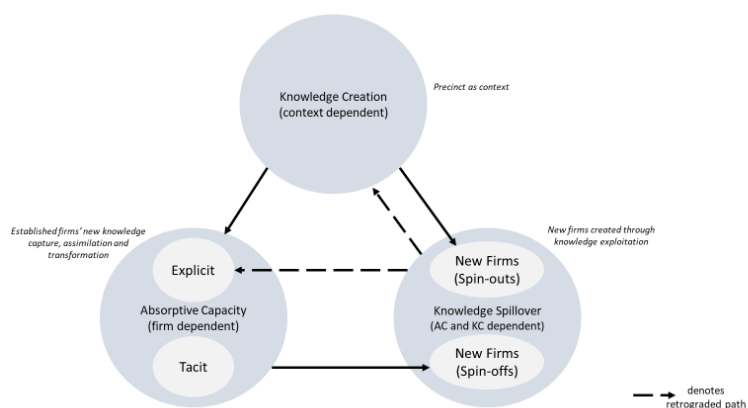


Table 1: Critical Precinct Attributes Identified Grouped into Assets and Processes

| Precinct Attributes | Assets | | | Processes | | |
|--|--------|---|---|-----------|---|---|
| Skilled Human Capital | | X | | | | |
| General Precinct Infrastructure | X | | | | | |
| Concentration of Related and Supporting Industries | | X | X | | | |
| Skills Enhancement | | | | X | | |
| Access to Market Knowledge | | | X | | X | |
| Exchange of Industry Information | | | X | | | X |
| Access to Funding | | | | | X | |

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1. Human Resource Management

The Role of Perceived Career Growth in the Relationship between Talent Management Practices Usage and Employee Outcomes

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The Role of the Perceived Career Growth in the Relationship between Talent Management Practices Usage and Employee Outcomes

ABSTRACT

Little is known about how talent management practices drive positive employee outcomes. Drawing on social exchange theory and the theory of met expectations, the study investigates the effect of talent management practices usage on perceived career growth, employee commitment and intention to leave. It also investigates the mediating role of perceived career growth in the talent management practices usage-employee outcomes relationship. Survey data were collected from 268 employees at eight organizations in Jordan. Talent management practices usage has a significant effect on perceived career growth, employee commitment, and intention to leave. Further, there is pioneering evidence that perceived career growth mediates these relationships: talent management practices and commitment; and talent management practices and intention to leave.

Keywords Talent management, talent management practices, perceived career growth, employee outcomes, intention to leave, employee commitment.

INTRODUCTION

Talent management (TM) is the systematic planning, acquisition, development, performance management, engagement, and retention of employees identified as “talent” (CIPD, 2006; Silzer & Dowell, 2010). Hereafter we refer to TM-related HR practices (e.g., talent development), as TM practices designed to manage talent and achieve several positive work outcomes. Employees react to TM practices based on their cognition and interpretation of these practices (Kravariti, Tasoulis, Scullion, & Alali, 2023). Employees perception of TM practices plays a key role in influencing their attitudes and behaviors (Wang Kim, Rafferty, & Sanders, 2020). TM practices may help attract and retain talent by providing career growth opportunities to employees to ensure their continued commitment to their organizations (Bethke-Langenegger Mahler, & Staffelbach, 2011; Collings & Mellahi, 2009).

Employees may perceive that their organization offers a range of TM practices, known as perceived offering of TM practices (Sonnenberg, van Zijderveld, & Brinks, 2014), but they may

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perceive that they use only some of these offered practices, known as perceived usage of TM practices (Khoreva Vaiman, & Van Zalk, 2017). Past perceived TM practices-employee outcomes literature can be summarized as follows: majority studies focused on the impact of offering of TM practices on employee outcomes (e.g., Mensah & Bawole, 2018; Mensah, 2019a; 2019b; Sonnenberg et al., 2014) while other studies investigated the impact of usage (or a mix of offering and usage) of TM practices on employee outcomes (e.g., Bonneton, Schworm, Festing, & Muratbekova-Touron, 2022; Khoreva et al., 2017; Younas & Bari, 2020). Studying perceived TM practices usage is important for two reasons. First, perceived TM practices usage might be a stronger predictor of employee processes and outcomes than perceived offering of TM practices (Khoreva et al., 2017). Second, understanding the perceived usage of TM practices would assist organizations in minimizing the variance between the actual offering of TM practices and perceived offering of TM practices (Wright & Nishii, 2013).

The findings of a small body of broadly-defined perceived usage literature are as follows. Bonneton et al. (2022) studied the perceived intensity of global TM practices in one multi-national corporation (MNC) headquartered in America. The study found positive effects of perceived intensity of TM practices on employees' intention to stay, objective career success and subjective career success. Khoreva et al. (2017) investigated perceptions of 439 high-potential employees of TM practices effectiveness in 11 Finnish MNCs. They found a positive association between perceived TM practices effectiveness and commitment to leadership competence development, mediated by psychological contract fulfilment. Younas and Bari (2020) investigated the effect of TM practices on intention to stay of generation Y employees of the IT industry of Pakistan. The results indicate a positive effect of TM practices (mentoring, strategic leadership and usage of social media) on intention to stay, with some mediation effects of competency development.

Tymon, Stumpf, and Doh (2010) investigated TM-related factors as perceived by 4811 employees across 28 Indian organizations. They found positive effects of intrinsic rewards on organizational satisfaction and career success, with some moderating effect of hygiene factors. Subramaniam, Silong, Uli, & Ismail (2015) studied the effect of supervisory styles of coaching, mentoring and abusive supervision on facilitating talent development based on data from 355 trainee doctors from 6 public hospitals in Malaysia. The findings show positive effects of two supervisory

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styles, coaching and mentoring, on facilitating talent development, with some moderating effects of clinical learning environment. No past study tested the specific usage of a range of TM practices and the mediating role of perceived career growth.

This study advances our knowledge of TM in several ways. First, it tests social exchange theory (Blau, 1964; Emerson, 1976) and theory of met expectations (Porter & Steers, 1973) for perceived TM practices usage and its direct and indirect effects on employee commitment/intention to leave via perceived career growth. Employee commitment refers to “the strength of an individual's identification with and involvement in a particular organisation” (Porter, Steers, Mowday, & Boulian, 1974, p. 604). Intention to leave is defined as “the possibility of seeking for other alternatives in other organizations” (Ghadi, 2017, p. 82). A study found that the most significant barrier for successful TM is the lack of understanding of the role of TM in shaping the career growth of employees (Othman & Khalil, 2020). Perceived career growth can be defined as the employees’ perception of their ability to meet their career growth needs such as career goal progress, professional ability development and promotion speed within their organizations (Weng, McElroy, Morrow, & Liu, 2010).

Second, this study addresses important knowledge gaps. It adds pioneering evidence on the perceived usage of TM practices to the perceived TM practices-employee outcomes literature. It also provides groundbreaking evidence of a mediating effect of perceived career growth on the TM practices-employee commitment and the TM practices-intention to leave relationship. Third, we tested the hypotheses in a rarely investigated developing nation, namely Jordan (Gallardo-Gallardo & Thunnissen, 2016). Jordan is similar to other countries in western Asia (e.g., Lebanon) in terms of being a developing country with an upper-middle income and having the Arabic culture (United Nations, 2020).

THEORY AND HYPOTHESES DEVELOPMENT

TM practices usage and employee outcomes

Social exchange theory assumes that humans are rational beings who tend to avoid losses and gain rewards when engaging in social interactions (Blau, 1964). It refers to social exchange as “voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others” (Blau, 1964, p. 91). It explains that social behaviors are based on

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a cost-benefit analysis in the interaction between two parties. The relationship between the two parties is one of an exchange of power and resources (Emerson, 1976). For example, the employer-employee relationship is a social exchange relationship. When an organization invests in its employees, employees in return may reciprocate with positive behaviors and attitudes (Gould-Williams & Davies, 2005).

This paper argues that TM practices usage enhances the employee commitment and reduces the intention to leave. According to social exchange theory, the two parties in TM are organizations and employees (De Boeck, Meyers, & Dries, 2018). Organizations invest in their employees by offering TM practices to improve their employees' work outcomes (Khoreva et al., 2017). When employees use these TM practices in their organizations, they may feel obliged to exchange this investment by demonstrating high commitment and low intention to leave (Narayanan, Rajithakumar, & Menon, 2019).

No past research tested a relationship between perceived TM practices usage and employee commitment/intention to leave. However, various studies found a relationship between perceived TM practices, with no clear specification of whether these practices are offered or used, and employee commitment/intention to leave. Luna-Arocas, Danvila-Del Valle, & Lara (2020) studied TM practices in multiple industries in Spain and found a positive association with employee commitment. Bethke-Langenegger et al. (2011) examined four TM strategies in Switzerland and found a positive association with employee commitment. Chami-Malaeb and Garavan (2013) studied talent and leadership development practices offered to high-potential leaders and employees in Lebanese organizations across industries. Their findings indicate that these practices lead to greater intention to stay. Gupta (2019) studied the Generation-Y hotel employees' perception of TM practices across the globe and found a negative relationship with their intention to quit. Thus, it is proposed:

Hypothesis 1: TM practices usage is positively associated with employee commitment.

Hypothesis 2: TM practices usage is negatively associated with the intention to leave.

TM practices usage and perceived career growth

Social exchange theory can also be applied to the relationship between TM practices usage and perceived career growth (Blau, 1964; Emerson, 1976). Organizations offer TM practices to provide their employees with opportunities for career growth to improve their performance and retain them

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(Bethke-Langenegger et al., 2011). When employees use these TM practices, they may perceive that they can meet their career growth needs within their organizations (Wang, Weng, McElroy, Ashkanasy, & Lievens, 2014).

Prior empirical research has not tested the effect of TM practices usage on the perceived career growth. However, some empirical research supports this argument. Chen et al. (2016) studied the perceived career growth of 323 Chinese new employees and found that person-organization fit positively affects career growth. Yang, Liu, Liu, & Zhang (2015) studied the perceived career growth of 526 nurses from 8 hospitals in China and found a positive association between work support and perceived career growth. Work support and person-organization fit can be viewed as talent acquisition and retention practices. Thus, it is proposed:

Hypothesis 3: TM practices usage is positively associated with perceived career growth.

Perceived career growth and employee outcomes

The theory of met expectations states that employees' attitudes and behaviors are the result to whether their organizations met their expectations (Porter & Steers, 1973). It refers to the concept of met expectations as "the discrepancy between what a person encounters on his job in the way of positive and negative experiences and what he expected to encounter" (Porter & Steers, 1973, p. 152). The degree to which organizations satisfy their employees' expectations affects their behaviors and attitudes in the workplace (Bedeian, Kemery, & Pizzolatto, 1991). For example, a meta-analysis found that met expectations lead to higher employees' commitment, satisfaction, performance and intention to stay than unmet expectations (Wanous, Poland, Premack, & Davis, 1992).

We argue that perceived career growth improves employees' commitment and lowers their intention to leave. According to the theory of met expectations, employees who can meet their career growth needs in their organizations are more likely to be more committed and less likely to leave their organizations (Chang, 1999). Organizations provide employees with opportunities for career goals, professional development and promotions which encourage employees to stay and constitute the costs of them leaving the organization (Weng & McElroy, 2012). Failure to meet employees' expectations may lead them to seek career growth opportunities elsewhere.

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Past empirical research supports the positive effect of the perceived career growth on employee commitment and the negative effect on intention to leave. Weng et al. (2010) found a positive relationship between perceived career growth and employee commitment in their study of 961 employees from multiple industries in China. Al Balushi, Thumiki, Nawaz, Jurcic, & Gajenderan (2022) studied the perceived career growth of 329 public sector employees in Oman and found a positive association with their commitment. Weng and McElroy (2012) examined career growth across multiple industries in China using data from 396 managers. Their findings indicate career growth is negatively associated with turnover intention. Kim et al. (2016) studied the perceived career growth of 230 South Korean employees from 25 companies and found a negative association with their turnover intention. Thus, it is proposed:

Hypothesis 4: Perceived career growth is positively associated with employee commitment.

Hypothesis 5: Perceived career growth is negatively associated with the intention to leave.

Mediating roles of perceived career growth

The mediating effects of perceived career growth in the TM practices-employee outcomes relationship can be derived from the integration of social exchange theory (Blau, 1964; Emerson, 1976) and the theory of met expectations (Porter & Steers, 1973). This paper argues that TM practices usage can lead to high perceived career growth. This may, in turn, improve employee commitment and lower their intention to leave. Organizations offer TM practices expecting positive improvement in their employees' work outcomes as an exchange which may reflect on the organizational performance (Blau, 1964; Emerson, 1976). Organizations provide opportunities for career growth to meet employees' expectations (Gould-Williams & Davies, 2005). When employees use these TM practices and career growth opportunities, they may feel that their career growth expectations are being met within their organizations (Bedeian et al., 1991; Porter & Steers, 1973). Employees in return may reciprocate with high commitment and less intention to leave their organizations (Wang et al., 2014).

Past empirical research has not tested the mediating effect of perceived career growth in the TM practices-employee outcomes relationship. However, some empirical research including two studies, previously explained, may support this argument. Yang et al. (2015) found that perceived career growth mediates the relationship between work support and turnover intention. Chen et al. (2016) found

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that perceived career growth mediates the relationship between person-job fit and turnover intention.

Thus, it is proposed:

Hypothesis 6: Perceived career growth mediates the relationship between TM practices usage and employee commitment.

Hypothesis 7: Perceived career growth mediates the relationship between TM practices usage and intention to leave.

METHODOLOGY

A cross-sectional research design was used to test the hypotheses. This design can be followed in case of limited evidence of whether the study variables covary (Spector, 2019). We used data from a survey of employees in large-sized for-profit organizations operating in the financial and services industries in Jordan.

Sample and data collection

A link to an online survey was sent to the HR managers in the sample of 42 organizations to forward to their employees. Due to their research policies, the 8 organizations that agreed to participate in the study did not distribute the survey to all employees resulting in 680 as a total number of distributed surveys. We received 448 responses from 8 organizations from which 180 responses were partially completed responses. The response rate was 39.41% based on 268 fully completed responses. Compared with some studies in the field (e.g., Glaister, Karacay, Demirbag, & Tatoglu, 2018), the response rate is acceptable provided the final sample represents the population (Cook, Heath, & Thompson, 2000).

Among 268 responses, 119 (44.4%) were from 5 organizations in the financial industry and 149 (55.6%) were from 3 organizations in the services industry. The sample comprised 164 (61.2%) males and 104 (38.8%) were females. Most respondents had undergraduate or below education (238; 88.6%) while 30 (11.2%) had postgraduate education. The 99 (36.9%) respondents were in a managerial position and 169 (63.1%) were employees. The mean age was 33.09 (SD = 6.589) years with an average experience of 10.54 (SD = 6.539) years.

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Measures

Predictors

TM practices usage was measured using a 16-item scale from CIPD (2006). These items comprise 16 TM practices commonly used by organizations (CIPD, 2006; Mensah & Bawole, 2018). This scale has been used by Sonnenberg et al. (2014) and Mensah and Bawole (2018) to measure the offering of TM practices by asking respondents whether they perceive their employer offering these practices (Yes/No). We used the same items to measure the TM practices usage. Our survey asked respondents to report their usage of these 16 practices on a 5-point Likert scale ranging from 1 (not at all) to 5 (to a very large extent). Mensah and Bawole (2018) reported a Cronbach alpha of 0.86 and in the current study it was 0.95.

Outcomes

Employee commitment was measured using a 9-item scale from Meyer, Allen, & Smith (1993), used by Gellatly, Meyer, and Luchak (2006) and Meyer, Stanley, & Parfyonova (2012). This scale covers three dimensions of employee commitment comprising affective, continuance and normative commitments. We focus on employee commitment as one variable in this study. Responses were reported on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach's alpha in the current study was 0.85.

Intention to leave was measured using a 3-items scale from Tymon et al. (2010), with a reported reliability of 0.82. The Cronbach's alpha for the current study was 0.93. Responses were reported on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Mediator

Perceived career growth was measured using a 12-item scale from Weng et al. (2010) with a reported reliability scale of 0.85. The original scale covers four dimensions of career growth comprising career goal progress, professional ability development, promotion speed, and remuneration growth with four items for each dimension. We had to remove the fourth dimension from the survey based on the participating organizations' request. We focus on career growth as one variable in this study. Cronbach's alpha for the current study was 0.94. Responses were reported on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

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Controls

We controlled the effects of industry type, gender, age, education, experience and management position. Dummy variables were created as follows: industry (0 = financial, 1: services), gender (0 = male, 1 = female), education (0 = undergraduate degree or less, 1 = postgraduate) and management position (0 = Yes, 1 = No). Age and experience were continuous variables.

RESULTS

Table 1 presents the mean, standard deviations and correlation coefficients for study variables. We performed Harman's single-factor test to assess the common-method bias (Harman, 1976, Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Results indicated that a single factor explained only 36.03% of variance (<50% is acceptable) suggesting that the common-method bias was not an issue (e.g., Kooij & Boon, 2018).

Insert Table I here

We used multiple regression in SPSS to test H1-H5. The analysis controlled for industry type, gender, age, education, experience and management position in testing all five hypotheses. We ran the analysis with and without the control variables and the results remained significant which indicate that multicollinearity between the variables does not seem to be an issue (Becker, 2005). Table 2 presents the results of the regression analysis for the effects of TM practices usage. The results indicate TM practices usage has a positive significant effect on perceived career growth ($\beta = 0.44, p < 0.001$) supporting H1. The results indicate that TM practices usage has a positive significant effect on employee commitment ($\beta = 0.34, p < 0.001$) and a negative significant effect on intention to leave ($\beta = -0.36, p < 0.001$) supporting H2 and H3.

Insert Table 2 here

Table 3 presents the results of the regression analysis for the effects of perceived career growth. We added TM practices usage as a control variable when testing H4 and H5. The results indicate that perceived career growth has a positive significant effect on employee commitment ($\beta = 0.35, p < 0.001$) and a negative significant effect on intention to leave ($\beta = -0.63, p < 0.001$) supporting H4 and H5.

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Insert Table 3 here

To test the mediation hypotheses, we used Process macro in SPSS which is based on the ordinary least squares regression including the bootstrap method for inference (Hayes, 2018). The simple mediation model of Process macro was used to test H6, and H7. The analysis controlled for industry type, gender, age, education, experience and management position. Table 4 presents the results of the mediation analysis. The results indicate that TM practices usage had a significant positive indirect effect on employee commitment via perceived career growth ($\beta = 0.16$, LLCI = 0.10, ULCI = 0.22) supporting H6. The results indicate that TM practices usage had a significant negative indirect effect on intention to leave via perceived career growth ($\beta = -0.28$, LLCI = -0.38, ULCI = -0.19) supporting H7.

Insert Table 4 here

DISCUSSION

The main objectives of this study were to investigate whether 1) perceived TM practices usage is associated with employee commitment and intention to leave; and 2) perceived career growth mediates the relationship between perceived TM practices usage and employee commitment/intention to leave. The findings provide evidence for these associations.

The results indicate a positive relationship between perceived TM practices usage and employee commitment. This result is consistent with past research of perceived *offering* of TM practices and employee commitment (Bethke-Langenegger et al., 2011; Luna-Arocas et al., 2020). The results also indicate a negative relationship between perceived TM practices usage and intention to leave, which is consistent with past research that found a negative relationship between perceived *offering* of TM practices and intention to leave (Chami-Malaeb & Garavan, 2013; Gupta, 2019). The study found a pioneering support for a positive relationship between perceived TM practices usage and perceived career growth. The findings are broadly consistent with past research that found a positive relationship between person-organization fit and work support and perceived career growth (Chen et al., 2016; Yang et al., 2015).

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The positive effects of perceived career growth on employee commitment and the negative effects of perceived career growth on intention to leave were consistent with past research (Al Balushi et al., 2022; Kim et al., 2016; Weng et al., 2010; Weng & McElroy, 2012). Moreover, this study found support for the unprecedented indirect effect of perceived TM practices usage on employees' outcomes via perceived career growth. These findings are broadly consistent with past research which shows perceived career growth mediates the relationship between work support and turnover intention (Yang et al., 2015) and the relationship between person-job fit and turnover intention (Chen et al., 2016).

THEORETICAL AND RESEARCH CONTRIBUTIONS

This study offers several theoretical and research contributions. The results support and extend social exchange theory (Blau, 1964; Emerson, 1976) to explain the relationships between perceived TM practices usage and employee commitment/intention to leave and the relationship between perceived TM practices usage and perceived career growth. The unprecedented findings extend social exchange theory for perceived TM practices usage-employee outcomes relationship and perceived TM practices usage-perceived career growth relationship since no past research tested these associations. The results support the theory of met expectations (Porter & Steers, 1973) to explain the relationship between perceived career growth and employee commitment/intention to leave. The study integrates social exchange theory and the theory of met expectations to propose the mediation effects of perceived career growth in the relationship between perceived TM practices usage and employee outcomes. The significant findings support the integration of these two theories to propose the mediation effect (Blau, 1964; Emerson, 1976; Porter & Steers, 1973). The unprecedented results extend the two theories since no past research tested the mediation effects of perceived career growth in the perceived TM practices usage-employee outcomes relationship.

The study address research gaps in TM literature. Past research focused on the perceived offering of TM practices, whereas this study addresses the gap by investigating the perceived TM practices usage since it might be a stronger predictor of employee outcomes (Khoreva et al., 2017). It provides evidence for a positive effect of perceived TM practices usage and perceived career growth on employee commitment and a negative effect on intention to leave. It also provides pioneering evidence of the mediating role of perceived career growth in the perceived TM practice usage and employee

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outcomes relationship. It adds empirical evidence from an unexplored context in the literature (Gallardo-Gallardo & Thunnissen, 2016).

PRACTICAL IMPLICATIONS

This study has a range of practical implications. First, our findings highlight the importance of understanding the impact of employees' perceptions on their attitudinal outcomes. They help organizations to understand that what matters more than actual TM practices implemented are employees' perceptions of these practices. Organizations need to consider how their employees perceive their TM practices for a positive effect on their attitudes and behaviors (Wang et al., 2020). Second, the findings related to the effect of perceived TM practices usage on employees' outcomes help managers to understand the significance of usage of TM practices. Organizations need to promote the usage of TM practices which in turn would lead employees to be more committed and less intended to leave their organizations. Third, the results inform managers that the effect of TM practices on employees' outcomes is mediated by perceived career growth. This highlights the importance of considering employees' career growth needs and expectations when designing and implementing TM practices to ensure achieving the desired outcomes.

LIMITATIONS

This study has some limitations. First, the study relied on cross-sectional data which may weaken causality (Zikmund, Babin, Carr, and Griffin, 2009). Future research to include time lags in data collection to investigate whether the effects of TM practices usage may vary across time lags. Second, we did not test the various dimensions of both employee commitment and perceived career growth (Meyer et al., 1993; Weng & McElroy, 2012). Future research may test the effect of perceived TM practices usage on the dimensions of both variables.

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Table 1: Means, Standard Deviations and Correlations Coefficients

| Variables | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------------------|-------|------|--------|---------|---------|-------|---------|---------|---------|---------|---------|
| 1. Industry Type | 0.56 | 0.50 | | | | | | | | | |
| 2. Gender | 0.39 | 0.49 | -0.14* | | | | | | | | |
| 3. Age | 33.09 | 6.59 | 0.01 | -0.23** | | | | | | | |
| 4. Education | 0.11 | 0.32 | -0.04 | 0.01 | 0.10 | | | | | | |
| 5. Management Position | 0.63 | 0.48 | 0.08 | 0.17** | -0.45** | -0.07 | | | | | |
| 6. Experience | 10.54 | 6.54 | -0.03 | -0.22** | 0.93** | 0.09 | -0.47** | | | | |
| 7. TM Practices Usage | 2.76 | 0.95 | -0.02 | -0.00 | -0.24** | 0.01 | 0.03 | -0.24** | | | |
| 8. Perceived Career Growth | 3.37 | 0.81 | 0.04 | -0.08 | 0.02 | 0.00 | -0.14* | -0.00 | 0.50** | | |
| 9. Employee Commitment | 3.50 | 0.73 | 0.00 | -0.05 | 0.12 | -0.05 | -0.13* | 0.12* | 0.38** | 0.50** | |
| 10. Intention to Leave | 3.01 | 1.16 | -0.02 | 0.07 | -0.13* | 0.02 | 0.12 | -0.15* | -0.25** | -0.47** | -0.63** |

2-tailed; * $p < 0.05$, ** $p < 0.01$.

Table 2: Regression Results for H1 – H3

| Variables | Perceived Career Growth | | | Employee Commitment | | | Intention to Leave | | |
|----------------------|-------------------------|-------|--------|---------------------|-------|--------|--------------------|-------|--------|
| | β | t | p | β | t | p | β | t | p |
| Industry Type | 0.08 | 0.94 | 0.35 | 0.03 | 0.31 | 0.75 | -0.07 | -0.54 | 0.59 |
| Gender | -0.05 | -0.59 | 0.56 | 0.02 | 0.27 | 0.79 | 0.03 | 0.19 | 0.85 |
| Age | 0.02 | 1.30 | 0.20 | 0.01 | 0.72 | 0.47 | 0.01 | 0.33 | 0.74 |
| Education | -0.05 | -0.36 | 0.72 | -0.18 | -1.41 | 0.16 | 0.14 | 0.63 | 0.53 |
| Management Position | -0.20 | -2.05 | 0.04 | -0.08 | -0.78 | 0.44 | 0.09 | 0.53 | 0.60 |
| Experience | -0.01 | -0.76 | 0.45 | 0.01 | 0.77 | 0.44 | -0.04 | -1.61 | 0.11 |
| TM Practices Usage | 0.44 | 9.57 | <0.001 | 0.34 | 7.57 | <0.001 | -0.36 | -4.87 | <0.001 |
| Model Summary | | | | | | | | | |
| R^2 | | | 0.29 | | | 0.20 | | | 0.11 |
| F | | | 14.90* | | | 9.40* | | | 4.58* |

$n = 268$, Unstandardized regression coefficients are reported, * $p < 0.001$

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Table 3: Regression Results for H4 & H5

| Variables | Employee Commitment | | | Intention to Leave | | |
|-------------------------|---------------------|-------|--------|--------------------|-------|--------|
| | β | t | p | β | t | p |
| Industry Type | 0.00 | -0.03 | 0.97 | -0.02 | -0.18 | 0.86 |
| Gender | 0.04 | 0.52 | 0.61 | -0.01 | -0.04 | 0.97 |
| Age | 0.00 | 0.27 | 0.79 | 0.02 | 0.91 | 0.36 |
| Education | -0.17 | -1.37 | 0.17 | 0.11 | 0.53 | 0.60 |
| Management Position | -0.00 | -0.03 | 0.98 | -0.04 | -0.30 | 0.77 |
| Experience | 0.02 | 1.12 | 0.26 | -0.05 | -2.07 | 0.04 |
| TM Practices Usage | 0.18 | 3.76 | <0.001 | -0.08 | -1.02 | 0.31 |
| Perceived Career Growth | 0.35 | 6.31 | <0.001 | -0.63 | -6.90 | <0.001 |
| Model Summary | | | | | | |
| R^2 | 0.31 | | | 0.25 | | |
| F | 14.44* | | | 10.67* | | |

$n = 268$, Unstandardized regression coefficients are reported, * $p < 0.001$

Table 4: Regression Results for Simple Mediation (H6 & H7)

| Total/ Direct/ Indirect Effects | Employee Commitment | | | Intention to Leave | | |
|------------------------------------|---------------------|------|------|--------------------|-------|-------|
| | β | t | p | β | t | p |
| Total Effect | 0.34 | 7.57 | 0.00 | -0.36 | -4.87 | 0.00 |
| Direct Effect | 0.18 | 3.76 | 0.00 | -0.08 | -1.02 | 0.31 |
| Indirect Effects | β | LLCI | ULCI | β | LLCI | ULCI |
| Indirect 1: TMP usage -> PCG -> EC | 0.16 | 0.10 | 0.22 | - | - | - |
| Indirect 2: TMP usage -> PCG -> IL | - | - | - | -0.28 | -0.38 | -0.19 |

$n = 268$. Unstandardized regression coefficients are reported.

Bootstrap sample size = 5000 bias corrected, EC: employee commitment, IL: intention to leave, PCG: perceived career growth, TMP: talent management practices, LLCI: lower limit confidence interval, ULCI: upper limit confidence interval, level of confidence 95%

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COVER PAGE

**Regarding the Symbiotic Relationship between NGOs and News Media Organisations in
Disaster Management and Messaging**

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Regarding the Symbiotic Relationship between NGOs and News Media Organisations in Disaster Management and Messaging

ABSTRACT:

As news media tend to influence public perception on the salience of natural disasters, NGOs often take cues from media to manage their own messaging when fundraising about disasters. This paper researches the symbiotic relationship between news media organisations and NGOs by explicating the roles of disaster location and tone of messaging about the disaster. We offer that disaster location may play a key role in journalists' decision to emphasise similarity-based or difference-based reporting when informing the observing public. Grounded in agenda setting theory, our propositions also discuss the importance of responsible journalism to encourage news media and NGOs towards practicing sustainable disaster management. Media's news content and messaging tone, and in effect NGOs' messaging tone, can act as catalysts for framing public opinion on a disaster and thereby, help advance disaster-related policy changes.

Keywords: Non-Government Organisations, Disaster Management, News Media, Sustainable Practices

Between 2022 and 2023, natural disasters took the lives of nearly 87,000 people and directly affected more than 200 million others (EM-DAT¹). Because the world's perception of international crises is primarily shaped by how the news media covers crises, these media play a fundamental role in drawing the attention of the local, national, and international public to disasters. As Franks (2008, pp. 27) described, "disasters . . . exist only when they are covered by the media". Moreover, with people injured and killed in disasters all over the world, non-governmental organisations (NGOs) have played a key role in providing humanitarian relief, and reconstruction services by either working independently or by cooperating with governmental organisations and agencies (Rouhi et al. 2019). In noting the relevance of news media and NGOs in disaster management, for the purposes of this paper, we limit the discussion of 'disasters' to natural disasters like earthquakes, hurricanes, tsunamis, droughts, and such wherein humanitarian NGOs

¹The International Disaster Database; <https://www.emdat.be/>

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play a significant role in providing disaster relief to affected communities. Additionally, among the four phases of disaster management (mitigation, preparedness, response, and recovery) (Altay & Green, 2006), we focus on the response and recovery phases which involve providing humanitarian assistance and infrastructure reconstruction.

Because various news media influence public perception, NGOs and non-profit organisations are known to take cues from media in managing their own messaging when fundraising for disasters. As examples, World Vision Australia, The International Federation of Red Cross, and Doctors without Borders are popular disaster relief NGOs that engage in the response and recovery phases of disaster management and humanitarian relief efforts. In Australia alone, a local NGO could be influenced by numerous news media channels like the Australian Broadcasting Corporation (ABC News), The Sydney Morning Herald, and The Daily Telegraph. Such a dependence of NGOs on news media for disaster response and recovery has led to the creation of media strategies wherein local NGOs and local news media organisations network and collaborate to not only spread awareness to the national and international public about the local disaster but to also engage in fundraising efforts. Médecins Sans Frontières (MSF) in Belgium and Action Contre la Faim (ACF) in France are two such examples of NGOs that have developed sustained relationships with national and international media like Reuters and BBC News in order to receive information or confirm data on disasters (Sharma, 2010).

Knowing that such collaborations exist between news media organisations and NGOs, this paper further researches their symbiotic relationship by explicating the roles of disaster location and tone of messaging about the disaster. Our arguments on NGOs' influence by news media are grounded in agenda setting theory. Furthermore, this paper aligns with the 2023 ANZAM conference theme, 'Changing Management Values and Practices for a Sustainable Future' because we recognise the need to update journalistic practices towards more sustainable disaster management and messaging. In the third proposition, we discuss that the various stakeholders (i.e., news media organisations, journalists, affected communities, NGOs, and observing public) all mutually benefit from adopting responsible practices.

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LITERATURE REVIEW AND PROPOSITIONS

News Media's Messaging of Disasters

In an attempt to understand the international news flow and selection of certain news over others, studies have identified factors that determine an event's news value and, consequently, its possibility for selection by journalists. While factors such as geographic distance, social and cultural distance, language or cultural affinities, economic relations, trade connections, geopolitical status of the nation, migration, and tourism play a role (Galtung & Ruge, 1965; Van Belle, 2000; Wu, 1998, 2000; Shoemaker, 2006; Singer et al. 1991), these studies also identified biases in international news coverage that result in “an inadequate, negative, and stereotypical portrayal” of certain nations (Rampal 2002, pp.111) that may negatively influence public opinions (Golan, 2008).

In particular, an event that takes place outside of an individual's geographical, cultural, or psychologically distanced location is often referred to as ‘other’. When a crisis strikes in a location area that is both physically and psychologically distant from the news receiving community, it creates a condition in which the depiction and perception of the event is entirely dominated and shaped by the media (Servaes & Lie, 1996). These stereotypes and incomplete depictions of the ‘other’ are exacerbated by the fact that these portrayals either have colonial roots or are ideologically motivated (Said, 1987). For instance, people from the third world are mostly portrayed in western media as the exotic ‘other’ and often depicted as being weak, negative, and inferior to ‘us’ (Benthall 1993, pp. 186-188). Joye (2009) highlighted how disasters that occurred in advanced nations like Australia or the United States had a positive representation of their citizens by the western media where people's suffering was relayed as ‘people like us’, whereas a disaster in a developing nation like Indonesia or Pakistan was presented with a negative depiction of helplessness and chaos dominating the news coverage.

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A similar pattern was identified in Jamieson and Van Belle's (2019) study, which demonstrated that if an earthquake were to occur in a highly developed community, the news coverage emphasised positive aspects that led to necessary disaster risk management policies being undertaken by their own community. On the other hand, if an earthquake were to occur in an underdeveloped community, the chances of 'othering' increased. Such a discrimination in news coverage and messaging impacts disaster risk reduction initiatives for the observing community. Furthermore, it has an immediate effect on receiving public funds in the aftermath of the disaster due to the national or international public's perceptions of the victims. Because when news media frame a biased narrative and tone of messaging about the disaster based on the location, people external to the disaster who are largely informed by these media for their interpretation of those events tend to form biased perceptions of the affected communities.

Proposition 1: Location of the disaster influences the tone of messaging adopted by the news media organisation.

NGOs' Messaging of Disasters

Journalists and news organisations significantly impact how their viewers react to crises and disasters occurring in and outside their communities. Additionally, media coverage of a crisis strongly influences the amount of emergency aid that can be procured from governmental agencies and humanitarian organisations (Eisensee & Strömberg, 2007; Rioux & Van Belle, 2005). When media coverage of disasters depicts the need to help 'others', donors are more likely to contribute to fundraising efforts (Bennett & Kottasz, 2000). Portrayal of human suffering arouses compassion, which may prompt financial donations or other acts of kindness from people (Höijer, 2004). Scholars have noted that nonprofit organisations also disseminate similar news stories about said disaster to the donors to emphasise the need for donations (Johnston, 2002). This is evident in the representation of global poverty, containing images of starving children, which first began to appear in television news and, later in fundraising materials, implying that NGOs were taking cues from news media for their aid strategies (Waters & Tindall, 2011).

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We posit that NGOs will be influenced to adopt the same tone of messaging that the news media puts forth. As news coverage of natural disasters is crucial in educating the public about what happened and how they could help with disaster relief efforts, NGOs adopting the same emotionally charged media depictions of victims would help them tap into the preconceived disaster narrative (that the public has already formed) to encourage monetary and material donations. This is especially true for countries for which the ‘othering’ effect is prominent as people in developed nations claim their primary sources of information about developing nations are the news media and NGOs (Dogra, 2012).

We further ground our argument in the agenda setting theory in mass communication which holds that mass media sets the agenda for which current events the public should care about by filtering and framing news stories about events (McCombs & Shaw, 1993). There is a positive correlation between the media’s coverage of an issue and that issue’s perceived salience by the public (Waters & Tindall, 2011). In other words, the more attention the media gives to a disaster in a region, the more likely the public will consider that disaster to have had devastating effects. This assumption is also consistent with CNN² effect theory, which posits that repeated media coverage of a news story (such as a story about a recent natural disaster) plays a vital role in accelerating decision-making processes around that disaster and influencing government and economic policies. Holm (2002) identified a positive correlation between media coverage and humanitarian assistance, in that the media playing a key role in agenda setting of a disaster attracts more public attention which, thereby, increases opportunities for receiving humanitarian assistance.

Therefore, we argue that NGOs that echo the news media’s amount of coverage and tone of messaging of a particular disaster would likely be successful in their fundraising and donation-seeking efforts. Waters and Tindall (2011) offered that such NGOs could expect to see donations flowing in through traditional fundraising methods like postal mail and telephone hotlines as well as through online methods

²The phrase ‘CNN effect’ was coined as CNN was the first news network to start 24-hour news broadcasting wherein the TV channel took the opportunity to amplify certain news stories by broadcasting them repeatedly.

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like e-mail campaigns and e-gifts on Web sites when the public receives frequent and consistent messages from both the media and NGO.

Proposition 2: NGOs will adopt the same tone of messaging as the news media organisations for fundraising.

Sustainable Management Practices in Disaster Messaging

With NGOs depending on news media content and messaging to achieve their fundraising goals, both the media and NGOs have a certain responsibility in accurately informing the masses about disasters. Disaster researchers have long criticised victim image exploitation by the news media and NGOs (Dogra, 2012; Tallon, 2008) because the general public is prone to accepting myths about disasters from these sources. People from developing nations are frequently portrayed as being dependent on assistance or intervention from outside their own countries (Vossen et al. 2018). NGOs, in particular, foster the developing world's reliance on the West because they seldom highlight the initiative actions of the local population. As a result, most NGO commercials frequently imply that Western donors or NGOs are required to bring about progressive change, justice, and equality in developing nations and often do so by downplaying the local government's initiatives to combat poverty, fight injustice, or enhance governance. 'Othering' effects could be minimised if journalists are appropriately encouraged to report the local public's and government's initiatives towards improved disaster reduction management (Jamieson & Van Belle, 2019). Responsible journalistic practices by news media should move away from pitiful imaging and victim framing of developing nations towards choosing images and messages that respect human dignity. In doing so, the trickle-down effect of 'us vs them' arising from media to NGO to the public could also be minimised.

In proposing that the long-term survival of NGOs depends on clearly identifiable and realistic disaster management outcomes, Sharma (2010) discussed the need for sustainable NGO-media collaboration that is based on monitoring, evaluating, and considering critical perspectives on journalistic

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coverage of disasters. NGOs assisting with sustainable disaster management practices that involve a commitment to people-centred recovery and building back the affected community with more resilient, greener systems that use sustainable resources would help reduce inequalities, promote inclusiveness, and improve overall well-being in affected communities (Andrew, 2020). From agenda setting theory, we know that there is a relationship among media relations, nonprofit communication strategy, and public giving behaviour (Waters & Tindall, 2011). Hence, media and NGOs adopting such sustainable practices both independently and collaboratively would benefit both parties in gaining public attention.

Proposition 3: Sustainable management practices in disaster messaging incorporated by news media organisations will positively influence sustainable management practices in disaster messaging by NGOs.

DISCUSSION AND POLICY IMPLICATIONS

The current proposal adds to prior literature on the established relationship between news media organisations and NGOs in disaster management and relief efforts. In delineating the dependency of NGOs on mass media through the lens of agenda setting theory and by using example narratives, we consider existing biases in the tone of messaging adopted by the media based on the disaster's location. Furthermore, our propositions discuss the importance of responsible journalism to encourage news media and NGOs towards practicing sustainable disaster management. The current research bears important implications not just for NGOs and news media organisations engaged in disaster relief but also for affected and observing communities. Building on Jamieson and Van Belle's (2019) research that showed systematic evidence of news media emphasising similarities and differences between affected and observing communities, we offer that disaster location may play a key role in journalists' decision to emphasise similarity-based or difference-based reporting when informing the observing public.

Additionally, our research could also have public policy implications. News media delivering localised content regarding distant disasters can increase public support and demands for disaster risk

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reduction (DRR) policies in their own communities (Van Belle, 2015). An example of such a DRR policy would be in the case of an earthquake in a particular state or region of a country, where the state's residents were likely to be receptive to public policy aimed at reducing the loss of life and limiting the economic damage caused by earthquakes (Jamieson & Van Belle, 2018). An extension of this example is seen when news coverage of disasters and crises within one country influences public attitude and policy changes in another country that is prone to similar disasters as media coverage continues to emphasise similarities between both communities (Waters & Tindall, 2011; Jamieson & Van Belle, 2019). Hence, media's news content and messaging tone, and in effect NGOs' messaging tone, can act as catalysts for framing public opinion on a disaster and thereby, help advance disaster-related policy changes at the state-, national-, or international-levels.

CONCLUSION

In summary, responsible journalistic reporting of disasters and reduction in biases - that lead to location-influenced 'othering' of affected communities - will help enhance the voices of the affected and observing public towards creating and implementing better DRR policies. This will, in turn, lead to successful collaboration and relationship building between mass media and NGOs, wherein NGOs focus on providing accurate messaging for fundraising efforts, thereby further reducing the 'us vs them' narrative.

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Refereed Presented

**“HR is different up here”: An exploratory study of HR in
tropical northern Australia**

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Stream 1: Human Resource Management
Refereed Presented

“HR is different up here”: An exploratory study of HR in tropical northern Australia

Abstract: Tropical northern Australia is a region of economic opportunity, often considered the next frontier. The north of Australia is, however, very different to the south, and this is not limited to the weather and the wildlife. HR professionals in northern Australia have been known to proclaim that ‘HR is different up here!’ This mixed-methods study sought the perspectives of HR professionals to explore the narrative that HR is different in tropical northern Australia. Through a review of recruitment advertisements and an online survey of HR professionals, the study found that many HR professionals believe that HR is different in northern Australia, providing examples that suggest there is value in examining the location-specific HR needs of businesses operating in the tropics.

Keywords: HRM, HR workforce, HR practices, tropical businesses, regional development

This study explores the notion that human resources (HR) practices may not be generic, and that there are contexts within which HR is *done differently*. Using tropical northern Australia as the context in which to explore this idea, this study draws on an unsubstantiated narrative among HR professionals working in regional, rural, and remote communities in the tropics, that “HR is different up here!” This narrative implies that HR practices are different in northern Australia but there are few cited scholarly examples of this being the case (Seet, Jones, Acker, & Jogulu, 2021). Further, the Australian Human Resources Institute’s (AHRI) HR Professional capability framework (AHRI, n.d.) does not differentiate HR skills, competencies and experience levels by context, such as location. The scarcity of evidence in the literature, together with the sincerity of the HR professionals’ narrative, provide the impetus to investigate the view that HR is specific to locational contexts. Hence, the aim of this study is to identify if, and how, HR practices differ in tropical northern Australia.

BACKGROUND

Widespread workforce shortages focus attention on the need for improved recruitment and retention strategies to minimise the impact on businesses operating in regional northern Australian, an area that typically experiences challenges in attracting and retaining talent (Onnis, 2014; Onnis, 2016; Wakerman, Humphreys, Russell, Guthridge, et al., 2019). Emerging HR workforce needs, suggest differences in needs by industry, organization-type, and location (Salleh, Alam, Alam & Alam, 2015; Srinivasan & Chandwani, 2014). However, location is usually limited to country, with few studies investigating HR workforce needs in regional contexts, e.g. tropical northern Australia.

The tropics is home to approximately 42% of the global population including some of the poorest, most vulnerable populations in the world (State of the Tropics, 2022), and several emerging

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economies. Where there is economic growth, there is a need for HR leadership (Srinivasan & Chandwani, 2014; Salleh et al., 2015). However, few studies focus on the HR capabilities needed to meet the workforce needs of businesses in the tropics (Seet et al., 2021; State of the Tropics, 2022).

Of the few published studies, relevant findings included the Salleh et al. (2015) study highlighting a need to match HR competencies with local demands. Also, Seet et al. (2021) found evidence that the attitudes of workers in remote communities did not link with any formal HRM practices suggesting a need for more formal HRM processes. With businesses in the tropics' rural and remote areas experiencing workforce shortages and widespread retention challenges, there is a need to investigate the HR competencies required for businesses in the tropics to manage workforces that ensure the region remains competitive in a global economy. Hence, this study is exploring whether the HR capabilities needed in the tropics are different to those needed more generally. This study is a first step towards understanding whether HR *is* different in tropical northern Australia.

METHOD

This mixed-methods study uses a concurrent transformative research design where the hypothesis, 'HR is different up here in the tropics', will be explored through the study. Gaining the perspectives of HR professionals to determine the extent to which they believe that HR capabilities, behaviours and challenges in the tropics are different to those in other regions is essential. Particularly, given the scarcity of published information which makes it difficult to determine whether this is a phenomenon that warrants further investigation or industry folklore. Conducting this study will inform the decision about whether, and how, to proceed with the line of research inquiry.

The study comprises two datasets: 1) an analysis of the HR skills and competencies sought in north Queensland through a dataset of recruitment advertisements of HR vacancies (October 2022-March 2023); and 2) an online survey asking HR professionals currently working in organisations operating in tropical northern Australia their perspective. Using these two datasets, the study was guided by the following research questions:

RQ1: What evidence is there that there are HR practices specific to tropical northern Australia?

RQ2: Do HR professionals in tropical northern Australia believe that *HR is different up here*?

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RQ3: What evidence is there of location-specific scenarios and/or issues that require HR practices specific to tropical northern Australia?

Data collection: recruitment advertising

The recruitment advertisements on seek.com.au were reviewed every Wednesday for six months (October 2022 - March 2023) for positions listed under the classification, *Human Resources & Recruitment*. A total of 354 advertisements were analysed for three discrete regions: North Queensland (including Townsville) (n=156), Far North Queensland (including Cairns) (n=148), and North-western Queensland (including Mt Isa) (n = 50). Most of the advertisements across all three locations were for HR positions in a regional city¹ (n=268), with approximately one quarter (n=86) for HR positions in a rural or remote area² (Figure 1).

Insert Figure 1 about here

Data collection: Survey of HR Professionals

The study used the snowball sampling approach, a purposive non-probability sampling method (Saunders, Lewis, & Thornhill, 2019). Participants were recruited in one of two ways: via email invitation through professional networks or an advertisement on LinkedIn. To be eligible, the participant was currently working as a HR professional for a business operating in tropical northern Australia. Both methods provided HR professionals with an opportunity to participate in the survey as well as extend the invitation to other HR professionals who may be interested in participating in this study. This form of sampling is often used to identify cases that will best test a hypothesis (Tashakkori & Teddlie, 2003). Forty-two completed surveys were submitted using Qualtrics in May 2023.

Data analysis

The quantitative data from the survey and the recruitment advertising were analysed using SPSS. Descriptive statistical analysis was conducted to identify the most frequent responses and cross-tabulation to describe relationships between variables.

¹ Regional City is defined using the ASGC category RA3 (includes Townsville and Cairns) (ABS, 2021).
² Rural and Remote areas area defined by ASGC categories RA4 and RA5 (includes Mt Isa) (ABS, 2021)

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A thematic analysis was conducted on the qualitative survey data to identify the key themes in the responses about HR in tropical northern Australia. The questions were used to guide the structure of the coding, with emergent themes grouped by the line of questioning: (a) biggest HR challenges in their organisation; (b) challenges specific to employees who work in rural or remote areas; and (c) HR practitioners’ perspectives on whether the statement “HR is different up here in the Tropics” is true.

RESULTS AND DISCUSSION

Recruiting HR Professionals

The recruitment advertisements were analysed to identify location-specific HR practices for positions in the tropics. The HR positions advertised ranged from HR Assistant and trainee positions through to senior management and executive positions. Given the focus on location, and suggestions in the literature that there may be location-based differences between working in regional and rural/remote areas (Brewer et al., 2021; Onnis, 2017; Wakerman et al., 2019) the advertisements were stratified by rural/remote location as well as by the three seek.com locations (see Table 1).

Overall, the three most frequently advertised positions were the same for both rural/remote areas, and regional cities - HR Advisors (n=33, n=51) HR Officers (n=19, n=56) and HR Managers (n=9, n=44) (Table 1). There were fewer advertisements for senior roles in rural and remote areas; however, the proportion of recruitment advertisements for managers during the study period was similar – rural and remote areas (17%) and regional cities (20%). For approximately one quarter (26.4%) of the advertisements, qualifications in HR or a related discipline were mandatory. In addition, approximately one third (30.6%) of the recruitment advertisements mentioned that qualifications were desirable. Where qualifications were mandatory, the type of qualification mandated was most frequently in Human Resources (56.8%), Work health and safety (27.2%) or in a related field (16%).

Insert Table 1 about here

Overall, the skills and experience required, the desired or mandated qualifications, and the lists of activities the HR positions comprised were typical of the role of HR professionals (AHRI, n.d.; Nankervis, Baird, Coffey, & Shields, 2022). The only content specific to the tropics were descriptions

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of the working and/or living environment. Some described the tropics as a desirable location, saying ‘Permanent Full-time and Part-time options may be available for this rare opportunity to live and work in a desirable tropical location in Far North Queensland’ (AD25, Regional city). Some focused on the natural beauty of the environment, saying ‘an unspoiled tropical paradise of rainforest and beaches within the calm sheltered waters of the Great Barrier Reef’ (AD61, Regional city), while others highlighted the benefits of a tropical lifestyle:

Our gorgeous weather promotes an active and outdoor lifestyle, where the sun shines for over 320 days of the year, where you enjoy the benefits of urban living without the nightmare of metropolitan traffic. Appreciate the change of pace as you immerse yourself in a tropical North Queensland lifestyle. (AD92 - Regional city)

Descriptions in the recruitment advertisements, also contained location-specific content about working and living context in northern Australia, that was not specific to the tropics. For example, ‘Knowledge and experience in dealing with the IR/HR complexities in relation to Aboriginal and Torres Strait Island peoples and the issues faced by staff in remote communities’ (AD63 – Regional city) and another appealing to potential applicants to consider their suitability for living and working in a remote location, saying, ‘Working in a remote location is not for everyone, so you must think carefully about the reality of living in a remote location for an extended period of time.’ (AD64 – remote). While this content was not specific to the tropics, it was typical of advertising for positions in northern Australia generally, where organisations balance enticements and expectations (Onnis, 2017).

HR professionals’ perspectives

The survey was completed by 42 HR professionals who all offered their perspectives on whether ‘HR is different up here!’ Table 2 contains a summary of the participants’ characteristics.

Insert Table 2 about here

Are HR capabilities and behaviours generic? When asked whether HR competencies required by HR professionals are generic, the majority of respondents (74%) reported that they were generic. Similarly, 74% of respondents reported that HR behaviours were generic regardless of geographical context. Of note, most of those who said they were *not* generic were from Queensland.

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HR challenges. The survey asked about the biggest HR challenges for their organisation. Many responses were typical of the HR challenges experienced in Australian workplaces (AHRI, May 2023). Using the HR capabilities from the AHRI capabilities framework (AHRI, n.d.) to structure the findings, Table 3 provides a summary of the HR issues reported that are typical of HR in general, and those HR challenges identified as being specific to the tropics.

| |
|---------------------------|
| Insert Table 3 about here |
|---------------------------|

HR challenges specific to rural or remote locations. Once again, the HR challenges for organisations employing people to work in rural and remote areas were consistent with the known challenges of workforce shortages, resourcing, and isolation in northern Australia (e.g. ‘shortage of skilled workers emotionally equipped and wanting to work in remote communities’ (HR36, HR Manager, NT). (Brewer et al., 2021; Onnis, 2017). Some respondents reported that the HR challenges for employees working in rural and remote areas were similar to the challenges when employees in regional areas are working from home (e.g. ‘Same as those who work remotely’ (HR16, HR Coordinator, NQ)) which is consistent with observations in the management literature describing challenges of working from home to include social and professional isolation, absence of in-person interactions, difficulties engaging and managing employees at a distance (Bentley, Caponecchia, Onnis, Brunetto, et al., 2023; Franken, Bentley, Shafaei, Farr-Wharton, et al., 2021).

Wellbeing was a frequently mentioned HR challenge, with employee mental health and wellbeing being described as a challenge which is consistent with the contemporary literature for workers in general (AHRI, 2022; The Wellbeing Lab, 2022). In addition, one respondent explained that the challenges for rural/remote workers include, ‘managing ‘bush burnout’ whereby workers in remote communities can spend too long in one community which can have negative consequences in some cases’ (HR37, HR Officer, NT). Examples such as this, identify context specific challenges, but many were potentially more common for rural and remote contexts rather than being specific about tropical locations. Yet, there were elements to their reasoning about why HR was different worth further exploration. For example, one respondent said, ‘We are dealing with HR issues in a reactive way more with this staff selection. In other words, we have line managers that go rogue and make

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decisions without the support of HR' (HR20, HR Officer, NQ). Respondents also highlight locational infrastructure and resourcing that create HR challenges including 'Adapting processes or creating alternative options to accommodate the challenges of remote areas such as technology / connectivity / wifi issues' (HR2, nil details). Few respondents mentioned technology which was surprising given the limitations on access in some areas of tropical northern Australia (Brewer et al., 2021).

In summary, the respondents described HR challenges relevant to the tropics. Generally, where the organisation had employees in rural and remotes areas, the challenges were not specific to the tropics as a region, more to the rural/remote environmental factors impacting workforces. Therefore, it is essential to understand those HR issues that are central to rural and remote employees and those specifically related to the tropics if we are to support HR professionals to not only respond to current HR challenges, but to recruit, train and support a future HR workforce to meet the emerging needs of populations living in the tropics, and regional development for businesses.

HR is different up here in the Tropics

The respondents were asked their perspective on whether HR was different in the tropics. More than two thirds of respondents (69%, n=29) said 'Yes', HR is different up here, giving a range of explanations for their opinion. Of those who believed that HR is different in the tropics, 69% (n=20) believed that HR behaviours were generic and 72.4% (n=21) believed that HR capabilities were generic. In other words, at least half of the sample thought that HR capabilities and behaviours were generic, *and* that HR is different up here in the tropics.

Examining the two groups, those that either *did* or *did not* believe HR was different in the tropics, approximately the same proportion for each group had employees working in rural and remote communities (59% and 62% respectively); and working remotely (83% and 85% respectively). Of those who believed that HR is different in the tropics, respondents were from private (45%), non-profits (37.9%), and government (10%) organisations; and from each location (i.e. NQ, NT, Other). Respondents who believed that HR is different in the tropics, most frequently were HR Managers (28%), HR Officers (24%), HR Directors (17%) which may mean that the type of HR activities undertaken by people in these roles may differ in the tropics more so than HR activities carried out by

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HR assistants, HR coordinators and consultants. Further, those HR professionals who had been in their role for 1-2 years (31%), 2-5 years (31%) more frequently believed HR is different in the tropics suggesting sufficient work longevity in the tropics to inform their opinion; however, this is reported with caution as few respondents had worked in their role for more than 5 years.

An analysis of the short text responses revealed that the respondents who believed the HR is different up here in the tropics, provided explanations captured by the following themes: tropical populations, lifestyle, the natural environment, and the business environment.

Tropical populations. The analysis found that the characteristics and lifestyle preferences of the people who live in the tropics contributes to how HR is practiced, as well as how people work in the tropics.

One respondent said, 'Everyone who chooses to live up here in the tropics are a different breed of people and therefore require different tactics to hire and retain and to manage' (HR9, HR Officer, NQ). Another said, 'I think the community and socio-economic area affects how we work in the tropics, particularly with the employees living here and how we manage them' (HR41, HR Officer).

Lifestyle. Several respondents mentioned lifestyle, with one respondent saying, 'lifestyle differences need to be considered, with perhaps greater flexibility and balance sought after than capital cities' (HR10, HR Consultant, NQ). Another respondent explained,

FNQ [Far North Queensland] has a 'laid-back' lifestyle [more] than in cities. It has been this way for years, and hard to change. Cairns and it's surrounds is a small place, and everyone knows everyone. The big city corporate way of working is not considered necessary up here. There seems to be a big focus on work/life balance. (HR20, HR Officer, NQ)

In addition, family circumstances influence the way of life in the tropics and workforce shortages (Campbell, McAllister & Eley 2012; Onnis & Pryce 2016). According to one respondent, 'Seasonal environmental factors are not conducive to many older Australians hence it is hard to build multigenerational family support groups e.g. people move south to support elderly parents' (HR38, HR Manager, NT). The same respondent also suggested that 'Elderly parents [are] unlikely to move north to care for grandchildren as a support to working parents etc.' (HR38, HR Manager, NT).

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Business environment. Several respondents commented on the business environment in northern Australia, saying that, ‘there is a completely different culture and approach to work’ (HR15, People & Culture Officer, NQ) which influences how HR is done in the tropics. With a contrasting perspective on retirement in the tropics, one respondent said:

We are dealing with an extremely fast, yet slow paced environment. Our tropics is a tourism hotspot and retirees’ dream. Many employees are generally short term or close to retirement [...] this is a struggle to every industry. (HR7, HR Assistant, NQ)

The impact of workforce shortages has been discussed previously, and while there is broad consensus that rural, remote and some regional areas experience workforce shortages at a higher rate than urban areas, this is not limited to tropical regions. Extending on what is known about workforce shortages, one respondent commented that there are ‘VERY rigid mindsets’ about business matters up here and several respondents suggested that the ways of doing business in the tropics impacts HR practices, such as retention with one respondent saying:

There are different ways of doing business and different requirements on business. With less diversity of economic drivers in the region compared with capital cities, there is a small scope of businesses in the area, often leading to increased competition. (HR10, HR Consultant, NQ)

Natural Environment. The natural environment influences HR policies and practices specific to tropics-related risks (Dale, 2013). According to one respondent, workers in the tropics ‘face many natural challenges such as cyclones or our heat’ (HR7, HR Assistant, NQ) and management ‘Different risk profile for some roles, e.g. Setting croc traps’ (HR25, HR Manager, NQ).

HR practices specific to the Tropics

This exploratory study sought to find out whether HR professionals working in tropical northern Australia believed that ‘HR is different up here’ in the tropics, and evidence of location-specific scenarios and/or issues that require HR practices specific to tropical northern Australia. With more than two-thirds for the respondents (69%) believing that HR is different up here, there were several examples offered as evidence that HR is different up here. One respondent said, ‘There is a unique culture and attitude to HR in the north with many practitioners having to fight for a seat at the table to

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be respected.’ (HR12, HR Officer, NQ). Another respondent described it as a ‘Different culture, a market that is always changing and 'flying' and salaries that might not be comparable with other cities vs the cost of life’ (HR23, Talent Acquisition Coordinator, NQ). The challenges of attraction and retention when salaries are not comparable to the HR positions in the city had been identified in other studies (Brewer, Dale, Gerritsen, Harwood, et al., 2021); hence, the use of geographic and lifestyle, factors frequently attract workers to tropical northern Australia (Onnis, 2016; Onnis, 2019).

Some respondents highlighted the tendency for business to create their own rules, as one respondent said, ‘People are less inclined to follow professional guidelines, and have a reduced level of respect and/or sense of HR workforce planning’ (HR13, NQ). Similarly, another respondent said:

The number of times I have heard "that only applies in the big cities" when referring to legislation and Fair Work is incredible, as is the willingness to ignore Award requirements, resulting in underpayment of staff. There are many employers who operate up here under some misapprehension that the rules don't apply to them. (HR6, HR Director, NQ)

This tendency for businesses in the tropics to operate in ways that are inconsistent with business practices has been reported previously (Dale, 2013; Seet et al., 2021).

Several respondents explained that the regional areas typically have many small businesses (Australian Government, February 2023) which means that HR is usually a generalist role, and may be part-time or combined with other responsibilities, as one respondent explained, ‘HR in the tropics is often not a multi-disciplinary HR team, but usually one "HR" person in a true generalist position, and sometimes a combined admin / finance / management role’ (HR10, HR Consultant, NQ).

Finally, respondents described positive aspects to HR being different in the tropics, saying, ‘Teams are smaller and more multi skilled with development opportunities created through a lack of team members so more is allocated to individuals earlier in their careers than in metropolitan areas.’ Opportunities to fast-track careers is common in rural/remote work locations (Onnis & Pryce 2016).

An analysis of the reasons for saying that HR is *not* different up here, found that some of the respondents still acknowledged that there are locational differences, with one respondent saying ‘HR

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is different everywhere, not just the tropics. E.g. HR in the DRC is not the same as HR in Australia, and HR in the Federal system is not the same as the State systems”. Another respondent said:

[T]here are some differences due to the geography and climate but that's true of everywhere. I don't think the tropics should see itself as being special. There will always be differences due to context, industry etc. (HR26, HR Consultant, NQ).

In contrast, one respondent said, ‘HR is the same everywhere. Every location is going to have their particulars but generically, we are all the same’ (HR28, HR Advisor, NQ) and another said ‘With the exception of attracting talent, I consider the challenges we face are consistent to those my southern colleagues face’ (HR30, Senior HR Business Partner, NQ) Finally, one respondent said, ‘I’ve worked regionally in outback towns as well as in the tropics. People are the same no matter where you live’ going on to say that they believed that ‘It’s more about having knowledge and understanding of the tropics/region you live & work more so than HR being different’ (HR35, HR Manager, NQ).

In summary, most HR professionals believed that HR competencies and behaviours are generic. The HR professionals’ perspectives suggested that there are aspects of working in HR in tropical northern Australia that are considered by those who work there, to be different to HR in other contexts (Brewer et al., 2021). The findings suggest that the tropical environment and lifestyle influence HR practices in tropical northern Australia to some extent. Further, the business environment, the regard for HR as a profession, and the populations that reside in tropical northern Australia also influence the HR practices used in tropical northern Australia. Finally, while there was little evidence in the recruitment advertising that different HR competencies, skills or behaviours were required in northern Australia, there was evidence of organisations commonly using narratives that showed the positive aspects of the tropics, the lifestyle, the people and the environment to attract candidates.

Limitations

As the cohort of HR professionals sought for this study maintain professional networks, this snowball sampling methods draws upon their insider knowledge of identifying potential participants to maximise the chance that the desired sample size is obtained (Tashakkori & Teddlie, 2003). It is acknowledged that the sample may not be representative of the entire tropical HR professional

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population in tropical northern Australia. In particular, the higher proportion of participants from north Queensland due to the researcher's professional networks in the region is acknowledged as a potential bias; however, it is unlikely that it negatively impacted the findings of this exploratory study.

CONCLUSION

In conclusion, this exploratory study set out to see whether there was any truth to the narrative among HR professionals working in the tropics, that "HR is different up here!" and found that a large proportion of HR professionals agree with this statement. In addition, the survey respondents provided examples of how HR is different in the tropical environment in which they practice HR and provided insights into the aspects of living and working in the tropics that contributed to their understanding of how, and why, 'HR is different up here'.

While this is reported cautiously given the small sample, more than two-thirds of the respondents agreed with the statement, enough to warrant further investigation. Future research should investigate HR practices with a larger sample of HR professionals from the tropics to differentiate the characteristics of HR in the tropics, with other factors that inadvertently intersect with the tropics, i.e. rural and remote communities, populations with lower socio-economic conditions, and isolation. While the analysis of the recruitment advertising did not reveal that HR competencies, skills or behaviours specific to the tropics were being sought, there was sufficient evidence in the survey responses to suggest that there may be a need to consider whether there are skills, competencies, capabilities, or experience, that would assist organisations to recruit professionals with HR skills and experience suited to tropical northern Australia.

Finally, if HR is different in tropical northern Australia, there is a need for universities educating future HR workforces, and organisation recruiting HR practitioners in the tropics, to consider how to better develop and recruit HR professionals experienced in the HR practices needed for workforces in tropical northern Australia. If economic development in the tropics progresses at the rate proposed (Brewer et al., 2021, State of the Tropics, 2017) there is value in exploring the HR needs of businesses operating in tropical northern Australia.

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Figure 1: Recruitment Advertisements categorised by location

Table 1: The types of HR positions advertised by location (n=354)

| | Trainee | Graduate | Assistant | Coordinator | Officer | Consultant | Advisor | Business Partner | Team Leader | Manager | Director | General Manager | Total |
|-------------------------------|----------|----------|-----------|-------------|-----------|------------|-----------|------------------|-------------|-----------|-----------|-----------------|------------|
| Rural and Remote Areas | | | | | | | | | | | | | |
| Far North Queensland | 0 | 0 | 1 | 5 | 10 | 0 | 9 | 2 | 1 | 4 | 0 | 1 | 33 |
| North Queensland | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 6 |
| North-western Queensland | 1 | 1 | 1 | 1 | 8 | 4 | 24 | 1 | 0 | 3 | 1 | 2 | 47 |
| Total | 1 | 1 | 2 | 7 | 19 | 5 | 33 | 3 | 1 | 9 | 1 | 4 | 86 |
| Regional City | | | | | | | | | | | | | |
| Far North Queensland | 0 | 1 | 10 | 10 | 24 | 9 | 22 | 6 | 2 | 24 | 6 | 1 | 115 |
| North Queensland | 0 | 7 | 7 | 10 | 31 | 32 | 29 | 12 | 1 | 18 | 3 | 0 | 150 |
| North-western Queensland | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3 |
| Total | 0 | 8 | 17 | 20 | 56 | 41 | 51 | 16 | 3 | 44 | 9 | 1 | 268 |
| Overall total | 1 | 9 | 19 | 27 | 75 | 46 | 84 | 21 | 4 | 53 | 10 | 5 | 354 |

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Table 2: Characteristics of the survey participants

| Location | % |
|----------------------|------|
| North Queensland | 73.8 |
| Northern Territory | 9.5 |
| Other | 16.7 |
| Organisation-type | |
| Government | 16.7 |
| Private | 35.7 |
| Non-profit | 35.7 |
| Other | 4.8 |
| Role | |
| HR Graduate | 2.4 |
| HR Assistant | 2.4 |
| HR Coordinator | 7.1 |
| HR Officer | 19.0 |
| HR Consultant | 4.8 |
| HR Advisor | 2.4 |
| HR Business Partner | 4.8 |
| HR Team Leader | 2.4 |
| HR Manager | 26.2 |
| Senior HR Manager | 2.4 |
| HR Director | 14.3 |
| Time in current role | |
| < 1 year | 21.4 |
| 1-2 years | 28.6 |
| 2-5 years | 26.2 |
| 5-10 years | 7.1 |
| > 10 years | 9.5 |
| Nil response | 7.1 |

Table 3: Biggest HR challenges

| Typical HR challenges | HR challenges specific to context |
|---|---|
| Culture and Change leader: change management, organisational culture, lack of awareness or buy in for Diversity, Equity and Inclusion (DEI). | Culture and Change leader: ‘Recruiting in FNQ regional towns where the talent pool is smaller than capital cities, finding people with the relevant skills, experience and are a good cultural fit for the organisation’ (HR18, People & Culture Manager, NQ). |
| Workforce and workplace designer: Attraction, recruitment, training, performance management, engagement, communication, work-life balance, poor leadership, managing flexible workers. | Workforce and workplace designer: ‘training in regional areas (always have to fly somewhere or do online)’ (HR19, HR Officer, NQ); Recruiting and ‘retaining talent locally’ because many ‘younger employees seek the big city life’ (HR7, People & Culture Assistant, NQ) |

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| | |
|---|---|
| Expert practitioner: Retention, Work Health and Safety, wellbeing, compliance with legislation. | Expert practitioner: The ‘ability to recruit and retained a skilled workforce in a highly regulated industry in a "regional location" (HR22, HR Manager, NQ); ‘keeping up with changes in HR best practice when far from large networks’ (HR12, HR Officer, NQ). |
| Organisational enabler: technology, HR information systems, cybersecurity | Organisational enabler: Nil |
| Trusted partner: complex organisational structures | Trusted partner: Nil |
| Business strategist: workforce shortages, Indigenous employment, systems to support HR, management buy-in, competitive job market, business demands. | Business strategist: ‘Lack of support from local management on larger HR initiatives as they may not see a wider picture or think outside the regional mindset’ (HR22, HR Manager, NQ). |

**Does it matter? External stakeholder perceptions towards
business program accreditation**

Katherine Attree

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Does it matter? External stakeholder perceptions towards business program accreditation

Abstract

This research examines external stakeholder (i.e., students, employers, business professionals) perspectives toward international and professional discipline-based accreditation of business schools. Survey responses from 117 participants were analysed using Netica's Bayesian Network (BN) software package. Findings reveal a low level of awareness of international accreditation amongst survey participants. Both types of accreditation were viewed as useful for employment and career prospects, with membership of professional bodies seen as beneficial for networking and professional development. Practical implications suggest information on accreditation (including quality indicators and benefits) could be more consistently and iteratively conveyed to stakeholders. Additionally, professional bodies and business schools could investigate further opportunities to increase awareness about the value and career-related benefits of professional body membership.

Keywords

Accreditation, career, AACSB, quality, employment, business school

Structured Submission

Overview

This research examines external stakeholder (i.e., students, employers, business professionals) awareness of and perspectives toward international and professional discipline-based accreditation of business school programs. In particular, the research sought to understand the value these stakeholders placed on accreditation as a marker of quality or graduate employability and additional benefits they may associate with accreditations. Such information helps guide decision-making processes in relation to business program accreditation at higher education institutions.

Current understanding

University business schools invest significant financial and human resources into gaining both professional discipline-based and international accreditation for their courses (Avolio & Benzaquen, 2020). These accreditations are often viewed as symbols of prestige, enhancing institutional reputation and signalling quality to prospective students (Kundu & Majumdar, 2020; Bitter, 2014; Elliott, 2013; Mackenzie Jr, Scherer, Wilkinson, & Solomon, 2019), thereby positively impacting student recruitment and enrolment. Noted internal institutional benefits to accreditation include improvements to assurance of teaching and learning, enhanced leadership, heightened research outputs, greater creativity, improved ability to attract and retain quality academic staff, and better alignment of processes and practices with school strategy and mission (Bryant, 2013; Elliott, 2013; Bitter, 2014; Zhao & Ferran, 2016). Perceived benefits to students include enhanced quality of teaching and closer alignment of the curriculum with critical employability skills (Al Motairy, 2016), particularly in the case of professional discipline-based accreditation (Attree, Neher, Jenkins, & Esler, 2022). For employers, accreditations are expected to provide more meaningful indicators of quality, content, capability, and skill development (Miles, Franklin, Grimmer, & Heriot, 2015).

Criticisms of accreditation suggest that the need to comply with discipline (or industry) based standards can result in a program design approach prioritising compliance over a holistic, transformative, student-centred, and authentic design (Wood, Auhl, & McCarthy, 2019). Analysis of professionally accredited programs in accounting has revealed gaps in learning outcomes and in

meeting minimum educational expectations of the profession (Bayerlein & Timpson, 2016).

Internationally based accreditation has been criticised as driven by the need to be competitive in an increasingly international marketplace (Friedman & Kass, 2016), leading to a global standardisation of education (Bryant, 2013), which may overlook important national and cultural nuances and regional disparities in skill requirements (Al Motairy, 2016; Hou, Morse, Ince, Chen, Chiang, & Chan, 2015).

Amongst the extant literature on accreditation, studies examining the value of accreditation from the perspective of external stakeholders are rare. For example, in a systematic review by MacKenzie Jr et al. (2019), none of the 91 studies reviewed included students, employers or participants from the business community in their surveys or interviews. Therefore, this paper seeks to address this gap by reporting the external stakeholder perception towards both international and professional/discipline-based accreditation of business courses.

Research question

As mentioned above, this research aimed to examine external stakeholder perceptions toward two forms of accreditation of university business programs, that is,

- International accreditation (e.g., Association to Advance Collegiate Schools of Business (AACSB), Association of MBAs (AMBA), European Quality University Improvement System (EQUIS))
- Professional accreditation based on discipline (i.e., accounting, marketing, HR, finance)

In particular, the research sought to understand the value external stakeholders place on accreditation as a marker of quality and graduate employability and any additional benefits they may associate with accreditation. Such information is helpful in guiding decision-making processes about business course accreditation at higher education institutions.

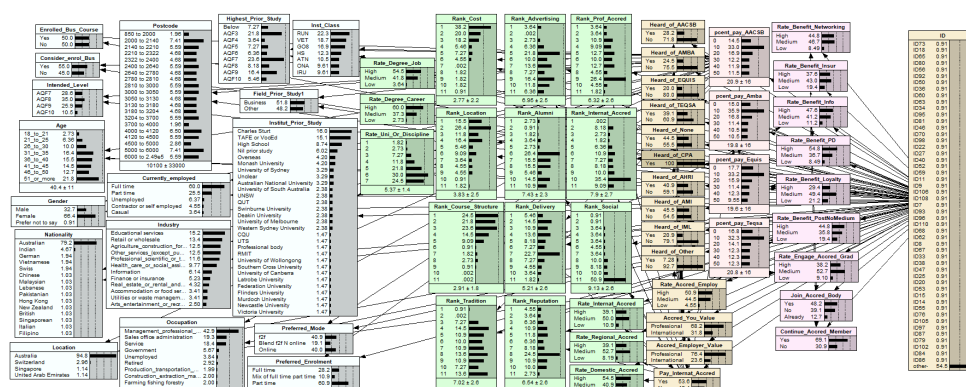
Research approach

Data was collected via an online survey using the Qualtrics platform. The structured questionnaire comprised 31 closed and five open questions using free-text fields to collect the data. The survey was

pilot tested through business contacts and academic peers. Issues regarding terminology, survey flow, and logic were addressed before creating a survey weblink that enabled secure and anonymous data collection. The weblink was distributed using two paths: 1) via LinkedIn social media network, and 2) via Qualtrics' data collection service. The survey was designed to be completed using various platforms such as laptops, tablets or smartphones and allowed completion across multiple sittings. Participation was voluntary, and participants could quit at any time. None of the information was identifiable by the researchers, and the data were analysed in an aggregated fashion. This research project was approved by the Charles Sturt University Human Research Ethics Committee (approval protocol number: H21484). Once collected, raw data was downloaded from the Qualtrics platform and cleaned to remove erroneous entries and out-of-the-range values. Cases with missing values were excluded, resulting in a final number of 117 usable responses from initially 124 obtained responses.

Netica's Bayesian Network (BN) software package was used to examine the data. BN is a form of statistical modelling based on empirical data that allows for identifying complex interrelationships between variables of interest (Wilson, Jenkins, Barnes, & Brooks, 2020; Lewis & McCormick, 2012). A graphical network is usually used to describe the dependency structure of these variables. While multivariable regression analyses aim to identify statistical associations between an outcome variable and one or more covariates, the BN's approach seeks to uncover any statistical relationship between the selected variables, irrespective of direct or indirect dependencies (Lewis & McCormick, 2012). Despite not being causal, BN analyses are suitable for examining survey data as all potentially dependent variables can be illustrated, and thus statistical associations can be defined holistically (Firestone, Lewis, Schemann, Ward, Toribio, Taylor, & Dhand, 2014; Manyweathers, Maru, Hayes, Loechel, Kruger, Mankad, ... & Hernandez-Jover, 2020). Figure 1 visualises our graphical network.

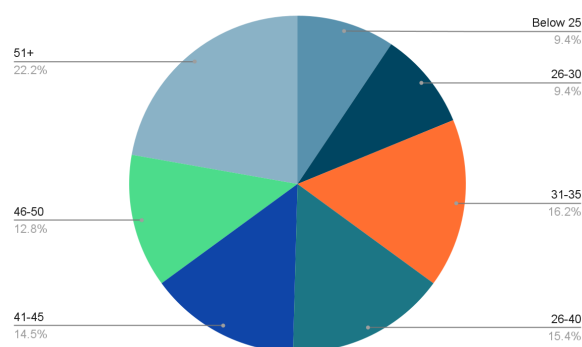
Figure 1: Visualisation of our Bayesian Network on business accreditation



Findings

Survey recipients predominantly identified as Australian (79%), and the majority were based in Australia (as indicated by their postcode). Other nationalities were spread across Asia and Europe. Two-thirds of respondents were female. Slightly more than half (51%) were currently enrolled in a business-related course at an Australian university, and of those not enrolled, 63% were considering enrolling in business studies. The majority were either enrolled in or considering graduate studies, that is, a graduate certificate through to PhD (74%), reflecting the more mature age range of participants (see Figure 2). Of those who had previously studied, 50% had attended a university with at least one international accreditation.

Figure 2: Age range of participants



Most participants were engaged in full-time employment (62%) or part-time fixed hours (24%), with only 6% not employed and the remainder being self-employed or employed as contractors or casuals. The main industries of employment included educational services (15%), retail or wholesale (13%), agriculture, construction, or forestry (13%), professional services (12%), and health care 10%. In terms of occupation, management and professional level predominated (43%), followed by office administration (19%), service professionals (18%) and government (6%).

Participants were asked to indicate whether they had heard of any of the three main international business accreditation bodies AACSB, AMBA, EQUIS and the Australian Tertiary Education and Quality Standards Agency (TEQSA). The results indicate a low awareness of any of these bodies (see Figure 3), with only 30 people confirming they had heard of AACSB and only 43 people aware of TEQSA.

Figure 3: Heard of international accreditation body

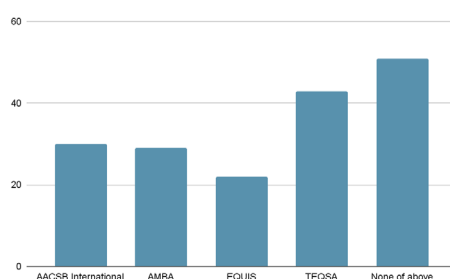
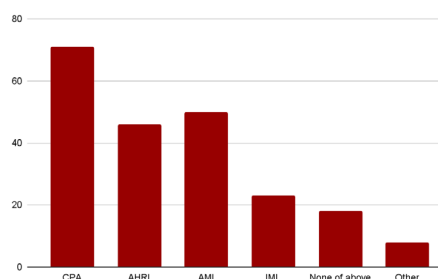


Figure 4: Heard of professional body



Awareness of professional bodies was higher, with only 18 people indicating that they had heard of none of the major Australian professional bodies (i.e., Chartered Professional Accountants (CPA), Australian Human Resource Institute (AHRI), Australian Marketing Institute (AMI) or the Institute of Managers & Leaders). Amongst these, awareness of the CPA was highest (see Figure 4).

BN analysis was undertaken to investigate whether age, gender or current or prior enrolment in business studies increased the likelihood of awareness of either international or professional bodies, with no apparent pattern emerging from the data.

Participants were asked about their attitudes to education before inquiring about specific accreditation questions. The overwhelming majority felt that obtaining a degree to get a job was essential, with almost 55% rating it as ‘highly important’ and 42% as ‘somewhat important’. Similarly, the participants believe getting a degree is ‘highly relevant’ (60%) or ‘reasonably relevant’ (37%) for their career. This clear view on the importance of getting a degree is corroborated by the fact that 71% of the respondents had at least a qualification at AQF level 4 and 54% at level 7 (bachelor’s degree).

When asked about the relevance of the accreditation of a degree for their employability, again, respondents rated the importance as ‘high’ (51%) and ‘relatively high’ (45%), with a notable pattern between high responses and increasing age. Moreover, 66% of the respondents in management-related jobs rated accreditation relevance as high and thus scored the highest across all occupations.

Qualitative responses suggested stakeholders associated accreditation with quality, credibility, and employability. Hence, it can be concluded that, if available, an accredited degree is generally perceived as relevant for getting a job, particularly in the management discipline and amongst older stakeholders.

Further insights reveal that professional accreditation bodies are valued higher than international ones. Participants were asked to indicate which accreditation they valued, with more than two-thirds preferring professional over international (32%) accreditation. When asked what they believed employers would value, the result is even more significant, with 76% indicating they believed employers would value professional accreditation more highly than international (24%). In both instances, high ratings increase with age. Given the respondents’ origin, the preference for professional accreditation bodies predominantly mirrors the Australian perspective.

Participants were asked whether they would be interested in becoming a member of a professional body whilst studying, with 48% responding ‘yes’ or indicating that they were ‘already members’ (13%). Of the 61% answering yes or who were already members, the majority stated that they would continue membership after completion of the degree, citing networking, keeping up to date with industry trends, and professional development opportunities as the most important benefits.

Contribution and Limitations

This study contributes to the extant literature by addressing a significant gap in empirical research by investigating external stakeholder perceptions towards the accreditation of business courses in higher education. Awareness of professional accreditation bodies was reasonably widespread, with 82% of participants indicating they had heard of at least one professional body. However, overall awareness of international accreditation bodies was significantly lower, with only 30 people out of 117 noting that they had heard of AACSB (the highest rated accreditation). Interestingly most viewed accreditation as useful for employment and career prospects. Ongoing membership of professional bodies was seen as important for networking and continued professional development.

Although this study provides valuable insights into the perspective of accreditation from a student and employer perspective, the study has some limitations. Methodologically, this cross-sectional dataset allowed identifying statistical relationships, however, it did not permit drawing causal relationships. Further research may therefore use multivariable regression to discover correlations, for example, whether the more professional and international accreditations a university has, the more attractive it is to students and, thus, more enrol in accredited courses. Furthermore, it should be acknowledged that the dataset encompasses a moderate number of responses and focuses on Australia. A larger dataset covering more geographical regions, such as Europe, North America, and South-East Asia, would obtain a more comprehensive perspective, allowing comparability. Lastly, as the distinction between the student, business professional, and employer perception of accreditation is blurred, presuming due to the mature age of the postgraduate students (who may encompass all three roles), a survey focussing either on the students or employers may provide a clearer picture.

Implications

The findings of this research have implications for both business schools and professional accreditation bodies. Given the significant investment and expenditure outlaid by institutions seeking and maintaining international and discipline-based professional accreditation, opportunities exist for business schools to raise awareness of their accredited programs beyond simply advertising on

websites and promotional materials. Information on both types of accreditation (including quality indicators and benefits) could be conveyed to students as part of the curriculum delivery in an ongoing and iterative manner. Additionally, professional bodies and business schools could investigate further collaborative opportunities to increase awareness about the value and career-related benefits of professional body membership.

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Stream 2: Organisational Behaviour

Does a Bureaucratic Climate have a Double Edge Effect? Testing Effects on Workplace Behaviours in New Zealand

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Does a Bureaucratic Climate have a Double Edge Effect? Testing Effects on Workplace Behaviours in New Zealand

ABSTRACT: *A bureaucratic climate represents an organizational context with high levels of centralisation, formalisation, and red tape. While largely viewed as detrimental (e.g., higher job stress), there are theoretical arguments that a bureaucratic climate might enhance performance. The present study explores these untested relationships and examines the bureaucratic climate towards positive behaviours (innovative and organisational citizenship) and negative behaviours (turnover intentions). We argue for a double edge effect, whereby a bureaucratic climate can enhance positive work behaviours, while simultaneously encouraging detrimental behaviours. We also include job stress to test the expected detrimental effect on wellbeing. Using a large and representative sample of New Zealand employees (n=1085) we find support for our dual edged effect from bureaucracy, and we discuss the implications.*

Keywords: bureaucratic climate; innovative work behaviours; citizenship behaviours; turnover intentions; managers versus employees.

Overview

Van der Voet (2014) defined bureaucracy as an organisational structure with “a high degree of centralization, formalization and red tape” (p. 376). While linked detrimentally to employee wellbeing (e.g., Bilal & Ahmed, 2017), we understand much less about the effects on work behaviours. Fischer et al. (2019) contends that providing centralization and formalisation creates certainty and expectations, that can free up cognitive resources for employees, fostering increased citizenship behaviors in employees. This influence on resources aligns with Conservation of Resource (COR) theory which is defined as “a motivational theory that explains much of human behavior based on the evolutionary need to acquire and conserve resources for survival” (Hobfoll et al., 2018, p. 104). The resource focus is used to understand how employees are affected by the context of their workplace including bureaucratic settings (e.g., Neveu, 2007), and has been used to understand employee workplace experiences including work behaviours (e.g., Ghafoor & Haar, 2022). Thus, a bureaucratic climate represents a workplace context that might drain resources, leading to poorer behaviours, or build resources (resource gains), enhancing behaviours.

According to Tremblay (2019), elements of bureaucracy – especially formalisation – might nurture organizational citizenship behaviors and thus lead to positive work behaviours. In a distinct but interesting way, Taylor (2018) argues that the experience of red tape may push employees to work longer hours (which they theorized as doing citizenship behaviors). The present study suggests that exploring these relationships is vital to a better understanding of the links between a bureaucratic

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climate and workplace behaviours. Despite these potential links between bureaucracy and performance (Taylor, 2018; Tremblay, 2019), this paper argues a dual edge effect might be found. Under COR theory, bureaucracy might free up cognitive space and lead to more time commitment, which are both theoretical resources (Hobfoll et al., 2018). However, we also know that the red tape aspect of bureaucracy is especially detrimental. A bureaucratic climate might hinder effective functioning because of the complexity, power dominance, and red tape (Raub, 2008). Indeed, within the bureaucracy literature, there is dominance on red tape. Meta-analysis by George et al. (2021) provided support for the detrimental influence of red tape on employee outcomes. Hence, what remains unknown is whether a bureaucratic climate can be positive towards positive work behaviours and negative work behaviours. The focus of the present study is to answer these unknown questions.

Current understanding

The components of bureaucracy are (1) centralization, which can be explained in terms of the non-involvement in decision making and power vested in the authority hierarchy. It refers to an arrangement where the decision-making power is concentrated in a few authorities at the top of the organizational hierarchy, while (2) formalisation refers to the extent to which work routines are carried out through formally given rules, procedures, and written guidelines (Van der Voet, 2014). Organisations use this approach to bring system stability, simplify coordination and workflow, and guide employee actions, and formalization is linked to positive employee effects (e.g., Teller et al., 2012; Lambert et al., 2006). Finally, (3) red tape is the main source of criticism of bureaucratic structures, defined as “rules, regulations, and procedures that remain in force and entail a compliance burden for the organization but have no efficacy for the rules’ functional object” (Bozeman, 1993, p. 283). Rauf (2020) contends that red tape can negatively impact employee performance, and the meta-analysis by George et al. (2021) confirms the negative influence of red tape on organizational performance and employee outcomes.

Bureaucracy remains a consistent organisational approach to work, that has not diminished (Walton, 2005). Further, Monteiro and Adler (2022) argue that bureaucracy as a structure exists broadly even where it should be irrelevant, such as ‘hippie-like collectives’. This suggests that bureaucracy has become an acceptable way to structure organisations. We seek to answer important questions about the

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influence of bureaucratic climate on three work behaviours. First, innovative work behaviours (IWBs) representing “the intentional creation, introduction and application of new ideas within a work role, group or organization, in order to benefit role performance, the group, or the organization” (Janssen, 2000, p. 228). Second, organisational citizenship behaviors (OCBs) are discretionary behaviours by employees that are explicitly recognised by the formal reward system (Organ, 1988). Our third behaviour is detrimental – turnover intentions, which represents employee’s intentions to quit. Finally, we know that bureaucracy is positively related to job stress (Conner & Douglas, 2005) and thus include this. This ensures that more established detrimental effects like bureaucracy enhancing job stress are similarly found.

Finally, we add to the literature by examining whether perceptions of bureaucratic climate differ by managers and employees and whether the effects of a bureaucratic climate differ by job status (managers versus employees). We suggest managers might perceive greater value in a bureaucratic climate. Thus, we expect managers to have more positive and less detrimental effects.

Research question

Hypothesis 1. Bureaucratic climate will be positively related to (a) IWBs and (b) OCBs.

Hypothesis 2. Bureaucratic climate will be positively related to turnover intentions.

Hypothesis 3. Bureaucratic climate will be positively related to job stress.

Hypothesis 4. The effects of bureaucratic climate will differ between managers and employees, with positive relationships being more positive for managers and detrimental relationships weaker.

Research approach

Using a Qualtrics panel, we sampled 1085 New Zealand employees in 2022. These came from a broad geographical spread of New Zealand. On average, with 53.4% of respondents were females, with an average age 38 years (SD=8.6), with 46.5% managers. By sector: 78.8% private, 18.6% government, and 2.6% not-for-profit. Measures included bureaucratic climate (4-items, $\alpha=.83$), OCBs Individual (4-items, $\alpha=.73$), IWBs (9-items, $\alpha=.92$), turnover intentions (4-items, $\alpha=.92$), and job stress (single-item). Several demographic and organisational variables were also collected.

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Analysis was hierarchical regression analysis in SPSS using PROCESS 4.0 macro, with bureaucratic climate as the IV, manager status as moderator, and work behaviours and job stress as DVs.

Findings

Managers' report significantly higher bureaucratic climate than employees ($M=3.70$ v. 3.23 , $t=8.89$, $p<.001$). Respondents in the private sector reported higher bureaucratic climate than public sector employees (mean difference $.20$, $p=.004$). Overall, Hypotheses 1-3 are all supported with bureaucratic climate being positively related to IWBs ($\beta=.23$, $p<.001$), OCBs ($\beta=.$, $p<.001$), turnover intentions ($\beta=.23$, $p<.001$), and job stress ($\beta=.23$, $p<.001$). Significant moderating effects from manager status are found towards OCBs ($\beta=.14$, $p=.002$), turnover intentions ($\beta=.14$, $p=.023$), and job stress ($\beta=.48$, $p=.001$). Graphing effects shows a bureaucratic climate led to higher OCBs, turnover intentions, and job stress for managers compared to employees. This supports Hypothesis 4 for three of the four effects.

Contribution and Limitations

The present study sought to explore whether a bureaucratic climate might have a dual edge effect, and both enhance positive and negative behaviours. This was supported and adds to the arguments that a bureaucratic climate might aid performance (e.g., Teller et al., 2012; Lambert et al., 2006). Thus, a bureaucratic climate can provide guidance and direction for workers that provides them with more cognitive resources which can be applied to positive work behaviours including supporting the organization (OCBs) and creating new innovations (IWBs). However, the benefits of a bureaucratic climate come at a cost. There is also a positive influence on negative behaviours, specifically turnover intentions. Thus, under COR theory, the more detrimental effects of red tape (George et al., 2021) might be viewed as driving those to consider alternative employment. Finally, the links to job stress also reinforce this detrimental effect and build on the links with wellbeing (e.g., Conner & Douglas, 2005).

Another contribution of the present study was exploring the effects of bureaucratic climate by managerial position. We suggested that this area had received scant attention in the literature, and we suggested an intensification effect for managers. These are the positions (compared to employees) who need to enforce rules and processes of formalization, as well as being part of the centralization process.

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As expected, managers did report higher bureaucracy and indeed, the effects of a bureaucratic climate on behaviours were stronger for managers over employees. While this led to higher OCBs, a beneficial effect, it also led to lower personal wellbeing (via higher job stress) and higher turnover intentions. This shows that while a bureaucratic climate does have a dual edge effect, these are retained and strengthened for managers.

Single sourced data can be a limitation. However, from Monte Carlo simulations, Evans (1985) showed that significant moderation effects are unlikely when common method variance is an issue. Thus, it is unlikely the data suffers critically from this issue.

Implications

Organisational implications include highlighting the dual edge effects of a bureaucratic climate and how these effects are exacerbated by those in managerial positions. Organisations seeking to enhance workforce behaviours need to consider that a bureaucratic climate can be both positive and negative.

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Breakthrough of Organizational Defense from the Conservation of Resources Theory

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Breakthrough of Organizational Defense from the Conservation of Resources Theory

ABSTRACT: *This study analyzes how enterprises break through organizational defense management practices based on the conservation of resource theory in a single longitude case study. This research findings expand on the characteristics and antecedent attributes of organizational defense, explain the relationship between resources and breakthrough organizational defense, and propose the mechanism for overcoming the organizational defense process. Extending the boundaries between theories and adding novel viewpoints to related research.*

Keywords: organizational defense, conservation of resources theory, process research, case study

Overview

In the process of enterprise development, many factors affect organizational learning, among which organizational defense is the most important factor that hinders organizational learning and continuous development. According to the manifestations of organizational defense, scholars have found that it can cause people to hide or distort knowledge (Noonan, 2012), prevent genuine communication, and consequently reduce organizational performance (Zhang & Min, 2019), and even lead to organizational rigidity (Whittaker & Havard, 2015), impeding effective organizational change (Henfridsson & Soderholm, 2000). Defensive decision-making can also increase an organization's exposure to risks, as employees may prioritize protecting themselves in the event of failure over the organization's best interests (Gigerenzer, 2014). Argyris (1996) proposed that it is imperative for organizations to identify and eliminate organizational defense to the greatest extent possible.

Although numerous scholars have explored and proposed many insights into existing research on organizational defense, some issues have not yet been resolved. In the past, scholars have primarily focused their attention on preventing or minimizing the damage caused by organizational defense. Despite the fact that numerous targeted recommendations have been made for organizations and managers, a review of the research reveals that many scholars have mixed up the origins and characteristics of organizational defense, making it difficult to differentiate between relevant measures.

Additionally, most researchers view organizational defense as a general concept or analyze and explain it based on a specific phenomenon, but a comprehensive explanation of the mechanisms of overcoming organizational defense is lacking. Consequently, a longitudinal case study will be utilized to fill the gaps in this field that have been identified.

Current understanding

The concept of organizational defense was first proposed by Argyris and Schön (1991), who described it as "actions or policies that prevent individuals or segments of the organization from experiencing embarrassment or threat". The basic principles of organizational defense are as follows: (1) avoid errors and cover them up; (2) make the act of avoidance non-negotiable; and (3) this non-negotiability cannot be discussed. Studies have demonstrated that defensive routines are repetitive, stable, and quiescent, whereas organizational defensive routines are reinforced through social activities in which individuals unconsciously reinforce each other's defensive behaviors (Yang et al., 2018).

It is possible to apply the conservation of resources theory that was established by Hobfoll (1989) to understand the formation of organizational defense as well as its principles of operation. Hobfoll (1989) defines resource land as everything valuable to the survival and development of individuals and divides resources into four categories: material resources (such as housing), conditional resources (such as work), individual characteristic resources (such as self-esteem), and energy resources (such as time). Organizational defense is the impact of individual reactions on the organizational level produced by disparities in the acquisition and loss of resources held by individuals in decision-making acts. When employees lack the ability or fear of losses, they may avoid taking risks to conserve resources, this may lead to defensive behavior (Chen et al., 2015).

According to existing research results, most scholars have proposed solutions to reduce organizational defense from the perspective of its general or single phenomenon, to mitigate its negative impact on the organization. Some scholars believe that enterprises can reduce the negative impact of defense practices by fostering an effective communication atmosphere (Henfridsso & Soderholm, 2000); replacing senior management employees regularly to offset the blocked routines (Cegarra Navarro & S'anchez Polo, 2008; Ransbottham & Kane, 2011); reflecting on one's behavior to maintain an open mind at work (Ditrich et al., 2016); promoting communication channels among members (Mitcheltree, 2021). Due to the relationship between organizational defense and interpersonal interactions, organizations can reduce the likelihood of embarrassment or knowledge hiding by increasing people's positive emotions and mutual trust, thereby minimizing the need for individuals or groups to use organizational defense (Madrid et al., 2015).

Research question

According to a literature review, most of the scholars' studies on organizational defense concentrate on either a broad concept or a particular phenomenon. Based on the conservation of resources theory, individuals display varying behavioral mechanisms in response to changes in resources, so the individual's resource situation is an important antecedent of organizational defense characteristics. First, this study will explore the antecedent attributes of organizational defense comprehensively.

Further, research has shown that facing uncertain environments or attractive potential successes, individuals' reactions to resource acquisition and loss flow may lead to different decision-making motivations (Marx-Fleck, 2021). Therefore, it is necessary to explain the relationship between resources in breaking through organizational defense processes.

Third, organizational defense not only occurs in individual behavior but also changes organizational routines through the perception of resources. Although scholars have made progress on the targeted strategy of overcoming organization defense, the description of the process is still blank. This study will present the process and the mechanics for breaking through the organizational defense.

Research approach

This study adopts case study to analyze longitudinal case data from a large integrated service enterprise in the north of China. The reason for selecting the case enterprise is that the enterprise's distinctive management system has brought about remarkable vitality and various changes. An interesting phenomenon occurred in the enterprise when people questioned the organizational defense, the leaders did not discourage, and even highly beneficial and encouraged, provided a range of resources to motivate employees. The core of the management system is to overcome employee defense reasoning and establish an anti-bureaucratic organizational environment that permits employees to work independently, with the system operating as authorization. The follow-up of the case enterprise continued from 2016 to 2021, and a total of 7 field studies were conducted with interviews, documents from the enterprise's social media, and internal assessment data from supervisors and administrators of varying levels and front-line employees, the multi-source data structure can play the role of triangulation and cross-validation for this research question(Yin, 1994). The selected focal events for this study occurred between November 2018 to February 2019. The designated focal events in the case are all disruptive events during the enterprise transformation, previous research has demonstrated that disruptive events play a significant role in the modification of organizational processes(Zellmer-Bruhn, 2003).

We have compiled a comprehensive list of the three focal events that overcome

organizational defense in the enterprise during the period covered by the case study and presented it in Table 1.

--- Insert Table 1 about here ---

Findings

Effective resource replenishment can provide individuals with more vitality to mitigate the negative impacts of organizational defense. Faced with complex forms of organizational defense, the company has taken a variety of targeted management actions based on its assessment of the organizational context, effectively reversing the unfavorable situation and ultimately eradicating organizational defense. According to the case analysis, Table 2 provides an extensive listing of the key components of breakthrough organizational defense, and Figure 1 shows the mechanism for breaking through the organizational defense process.

--- Insert Table 2 about here ---

--- Insert Figure 1 about here ---

Psychological accounts and forms of participation

Many scholars have focused their research on the psychological accounts of individual investors, arguing that investors will classify different assets into different types of accounts according to the return and risk perception of different assets (Thaler, 1990), for example, Shefrin and Statman (1994) believe that investors will divide their investments into two categories: low-risk, safe investments to avoid destitution, and high-risk, high-return investments to become wealthy. The basic principle of conservation of resource theory is that humans have an incentive to conserve existing resources. The established defensive practices in organizations were originally formed as actions or policies that prevent individuals or organizational departments from experiencing embarrassment or

threats, with the purpose of resource conservation. Then in order to break such a defensive practice, it is necessary to use a lot of psychological resources and meet the purpose of greater benefits than losses.

In the three focal events selected for this study, the starting point for the breakthrough of organizational defense practices is either the individual's resources are threatened by significant losses, and the individual must take action to prevent further losses, or employees perceive the existence of high-risk investments with high returns and seek resource benefits.

In focal event 1, by categorizing and discussing the responses of employees in the case company to obsolete defensive routines in the evaluation system, it is possible to conclude that those who face significant resource losses will actively challenge the organizational defense to safeguard their resources. However, the majority of those who do not or do not lose resources are more inclined to engage in this risky behavior to acquire more resources.

In focal event 2, only the poster must risk questioning organizational defense during the enterprise's institutional transformation. The poster's suggestion to alter the general manager's title as the institutional reform nears completion appears to call the leader's authority into doubt, but it does not because the time is right now. Employees are motivated and outfitted to challenge authority in the workplace.

In focal event 3, the enterprise's new business promoting strategy exposed organizational defense to each employee. Thus, people must face organizational defense against a limited and nonrenewable resource. During resource investment, people feel they can utilize other resources to restart goal pursuit (Zeelenberg et al., 2000; Latham & Locke, 2007). Therefore, employees are more inclined to contribute if they can complement their resources by criticizing defensive behaviors,

taking on identity roles to fix them, or bringing about new methods. In this level, participation spans from individual to full staff dependent on problem-solving event distribution.

Resource loss aversion

The first principle of conservation of resource theory is that the impact of resource loss on individuals is significantly more important than resource acquisition. In Kahneman and Tversky's (1996) psychological study of investors, it was discovered that people are more averse to the presence of losses than they are to the presence of returns when both are of equal magnitude.

During the three focal events, employees' efforts to challenge organizational defense were motivated by both loss aversion and investment of resources. According to Kermer and his colleagues (2006), loss aversion causes more negative impact than the loss itself. In situations where preserving individual resources in the organizational defense appears unattainable, a minority of employees may experience significant resource loss, while the majority may develop a heightened sense of loss aversion due to the perceived impending loss of resources. Therefore, more people may join the opposition movement against the defensive practice. The conservation of resource theory states that employees who have lost a lot of resources are about to be in a resource depletion status, which might lead to violent and irrational behavior as a defense strategy.

The enterprise's goal is to give employees enough resource supplements to offset resource depletion caused by the organizational defense. Therefore, employees' perceived activity that challenges organizational defense might result in a higher resource gain than resource loss, motivating more people to engage and producing a social promotion impact.

The breakthrough in defense depends on the antecedent attributes

Based on the above analysis, the antecedent attributes of organizational defense can be summarized according to the characteristics of defensiveness and the form of employee participation.

This study presented three sorts of organizational defense attributes, which are organizational defense that is generated by others, originated from organizational structure, and formed by personal defensive reasoning.

In focal event 1, the participation of employees in challenging the organizational defense of the institution was initiated by a few individuals confronting resource loss; the majority of those who joined were attracted by the acquisition of additional resources and chose to participate. However, the form reason for the organizational defense of the institution is that the initial setting of the formulator is unreasonable or the environmental development is not matched, so many employees do not need to be accountable for the emergence of this organizational defense or face the loss of resources when they participate, that is, the antecedent attribute of organizational defense in the focal event 1 is generated by others.

In focal event 2, one of the primary causes of organizational defense is the bureaucratic structure of the enterprise (Argyris, 1996), and excessive structure can also limit the flexibility of dealing with problems on time (Brown & Eisenhardt, 1997). Therefore, the antecedent attribute of organizational defense within the organizational structure originated from the organization itself.

In focal event 3, despite their support for breaking the organizational defense, some people reply with harmless echoes or recommendations that are not innocuous. The enterprise's new business promotion strategy forces every employee to passively bear the drawbacks of organizational defense, thus forcing everyone to initiate proactive challenges. Organizational defense in this stage is characterized by a deficiency in risk-taking behavior, as individuals tend to prioritize short-term rewards for themselves, therefore, the antecedent attribute is formed by personal defensive reasoning.

Contribution and Limitations

This study makes three theoretical contributions: First, supplements the antecedent attributes of the organizational defense, which helps to better understand why individuals react differently when facing different forms of organizational defense. Based on a review of existing literature, there is a lack of comprehensive research and categorization of the attribute sources of organizational defense. This study is grounded in the conservation of resource theory and utilizes case studies to examine the behavior of individual resource loss acquisition flow in challenging organizational defense when facing prohibited defensive routines.

Second, explains the relationship between resources in breaking through organizational defense processes, enriches the theoretical connotation between the resource perspective and organizational defense. Based on the findings, it can be concluded that the perceived changes in resource loss and acquisition for individuals are influenced by an evaluation of the surroundings and various strategies are implemented accordingly.

Third, in order to explain the process by which enterprises overcome organizational defense, this research makes use of the notion of the conservation of resource theory, providing an illustration that depicts this process in action.

This study has some limitations. This study's single-case enterprises are illustrative and representative, thus the concepts and findings that overcome the organizational defense process are directly tied to their setting. A large sample size is needed to test the results' universality. The research sample's unpredictable behavioral reactions to management interventions make management guidance unreplicable. Leaders must assess their situations and choose the best management methods.

Implications

Based on the analysis of this research case, it can be concluded that the process of

overcoming organizational defense mechanisms in enterprises is often contingent upon the management ideas of the leaders. Leaders who possess an open mind and a forward-looking vision can establish a more innovative and transparent enterprise system, which can help to minimize the occurrence of organizational defense. Organizations can attain a mutually beneficial outcome by fostering their employees' capacity to engage in long-term investment, thereby expanding their perspective beyond immediate investment returns. By providing adequate support to employees in shaping their long-term vision, enterprises can achieve this goal.

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Appendix

Table 1 Descriptions of Breakthrough Organizational Defense Event Categories

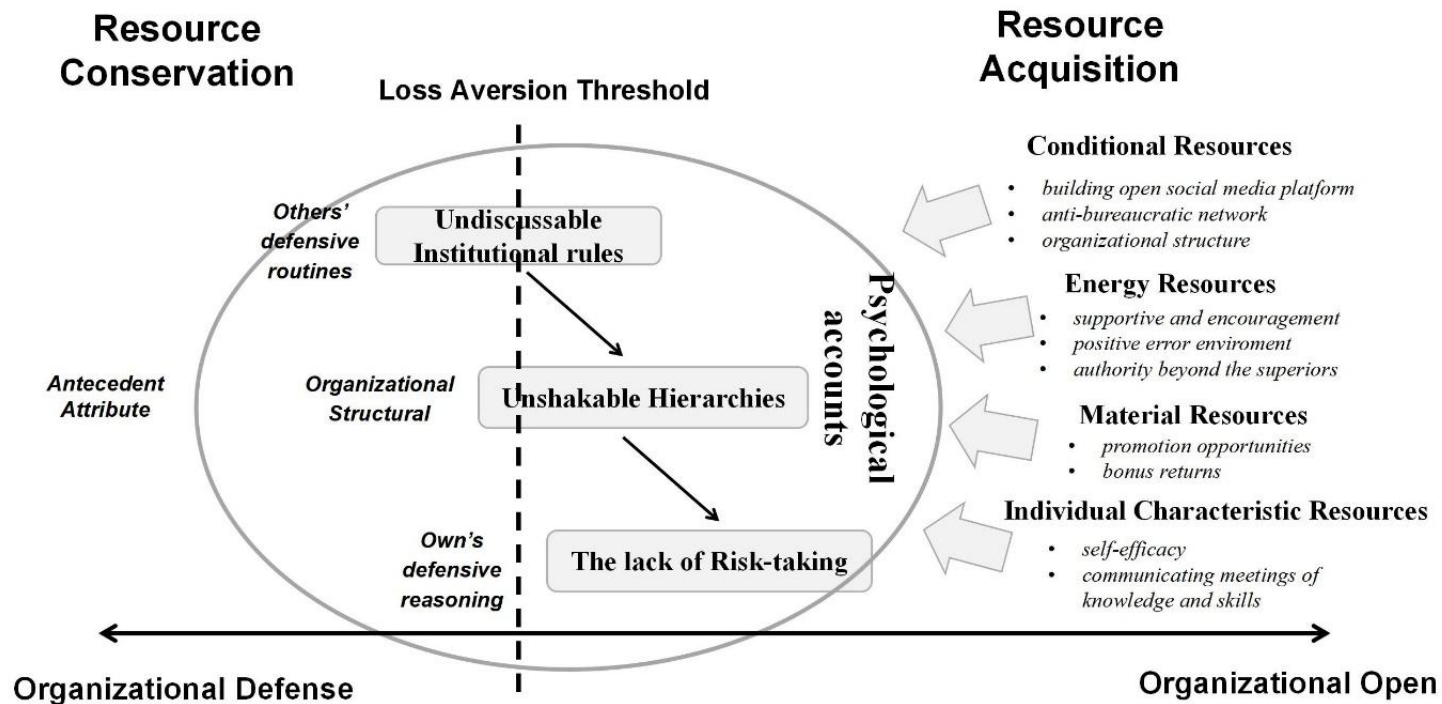
| Feature | Focal event of breakthrough defensive reasoning | | | Outcome |
|--|---|---------------|--|---|
| | Event node | Date | Detailed description | |
| Stage 1: Breaking through seemingly undiscussable institutional rules | The crisis of supervisor elimination causes the challenge and upgrade of the current evaluation management system | November 2018 | The supervisor is faced with the crisis of dismissal due to the unsatisfactory performance evaluation, which leads to the discussion of the current management system concept by employees, and then promotes the rapid updating of the system rules | The Organizational defense in evaluation management system is defeated |
| Stage 2: Break through unshakable hierarchies | The change of the title of "General Manager" in the process of environmental system reform | February 2019 | Employees questioned the title of "General Manager" on the enterprise's social media platform, which was not in line with the current corporate values, resulting in changes in the hierarchical structure and the complete removal of bureaucracy to achieve environmental system | The bureaucratic structure of the case enterprise is replaced by a new networked hierarchical structure |
| Stage 3: Break through the lack of risk-taking caused by short-term rewards | A new business model with independent management by employees | January 2019 | Under the new business model, employees and enterprises form a new type of employment relationship to achieve a win-win cooperation model, to encourage employees | Employees of case enterprises willing to break through their boundaries to challenge the unknown and problems |

to establish a spirit of
adventure that dare to
challenge

Table 2 Exhaustive Analysis Table of Breakthrough Organizational Defense Components

| Feature | The antecedent attribute | Resource loss/acquisition situation | Type of fuse | Initiator | Participate in the form | Impetus |
|--|---|--|------------------------|------------|-----------------------------------|--|
| Stage 1: Breaking through seemingly undiscussable institutional rules | Organizational defense generated by others | A few people's resources are harmed, while the majority can acquire more resources through this challenging opportunity | Interruptive events | Supervisor | The majority follow the few | The development needs of the small number of staff; Organizational climate; The controller |
| Stage 2: Breaking through unshakable hierarchies | Organizational defense originated from organizational structure | Only the initiator carries the risk of resource loss, but the entire staff may obtain additional resources when the challenging behavior is imitated | Development mismatch | Supervisor | The initiator leads all the staff | Organizational climate; The determination to break the hierarchy |
| Stage 3: Breaking through the lack of risk-taking caused by short-term rewards | Organizational defense formed by personal defensive reasoning | Personal resources appear to be acquired but are actually damaged. Only by reversing the situation can they maintain or acquire additional resources | Resource loss aversion | Staff | Dispersion from individual to all | Organizational climate; Interest pursuit and development needs |

Figure 1 The Mechanism for Overcoming the Organizational Defense Process



6. Leadership, Governance and Strategy

Implications of Capabilities Spillovers in Vertical Linkages for Heterogeneity in Firm Capabilities

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Implications of Capabilities Spillovers in Vertical Linkages for Heterogeneity in Firm Capabilities

ABSTRACT: *We describe a new mechanism of firms acquiring capabilities through spillovers in vertical inter-industry networks of an economy. These spillovers have significant implications. Emerging economies are characterized by the presence of many less capable firms along with a select few high-capabilities (frontier) firms. We argue that one source of this persistence in heterogeneity is the variation in firms' dependence on capabilities spillovers. Using firm-level data of Indian firms for the period 1989-2019, we estimate firm capabilities and identify vertical linkages at the industry level using Input-Output tables. Our findings demonstrate that capability spillovers from vertical linkages are significant and heterogeneous, providing a rationale for the presence of firm-level heterogeneity in capabilities.*

Keywords: Capabilities spillovers; vertical linkages; firm capabilities; emerging economies; firm heterogeneity;

An important premise of the field of strategy is that firm capabilities are distributed heterogeneously among firms (Penrose, 1959), resulting in variations in firm performance (Barney, 1991). Gulati et al. (2000) and Kotabe et al. (2003) found that firms acquire capabilities through their networks and vertical relationships in value chains, respectively. Through mechanisms such as information sharing, trust, and the transfer of tacit knowledge through joint problem-solving, such capabilities are acquired (McEvily & Marcus, 2005). However, other aspects of buyer-supplier relationships are relatively neglected. Only key suppliers and buyers are involved in the relationship. The argument that capabilities flow through relationships is unsuitable to transactional ties. A leading firm like Toyota has the resources to engage with its supply chain partners, whereas other companies may not (Dyer & Nobeoka, 2000). Although firms have control over the ties they form with buyers and suppliers, not all ties result from this control.

Due to its industry membership, every firm is embedded in an exogenous higher-order inter-industry supply network (Carvalho & Voigtlander, 2014), which translates firm-specific disturbances into economy-wide volatility (Acemoglu et al., 2012). Inter-industry networks influence the interdependencies and profitability of companies (Lenox et al., 2010). In our study, we examine the effects of supply network on a firm's capabilities (Refer to Figure 1). We concentrate on cross-industry capability spillovers and investigate which firms benefit from capability spillovers through their embedded industry ties.

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Spillovers to a firm are knowledge transfers that occur without formal mechanisms for knowledge transfer (Eapen, 2012). Spillovers can have substantial implications for comprehending the heterogeneity of the firm's capabilities. There are firms on the frontier with high capabilities and firms outside the frontier with lower capabilities. Although heterogeneity in firm capabilities is expected, this heterogeneity is expected to decrease over time due to selection (less capable firms are forced to exit) and imitation (low capability firms imitate the capabilities of high capability firms). In emerging economies, however, capability heterogeneity has been observed to increase over time (refer to Figure 2), a phenomenon that remains puzzling. Spillovers, on the other hand, are the unintended benefits a firm receives from its surroundings. These unintended benefits can enhance the capabilities of frontier firms or provide much-needed capabilities to non-frontier firms. Therefore, the magnitude and directionality of spillovers can have a substantial effect on the heterogeneity of firms' capabilities.

Previous research has measured capabilities via surveys (McEvily & Marcus, 2005), firm experience as a proxy for capabilities (Brahm & Tarzijan, 2014), or productivity (Kafourous & Aliyev, 2016). Our study employs the third method and calculates firms' Total-Factor Productivity (TFP) to measure their capabilities. A benefit of using TFP to estimate productivity is that the measure incorporates inputs and achieved objectives, making it a good fit with the definition of capabilities (Vandaie & Zaheer, 2015). We measure the productivity of 29,744 Indian companies from 1989 to 2019 at the firm level. As our dataset has a large panel structure, we employ a semi-parametric method to reduce the simultaneity bias that exists when firms' input choices correlate with output levels. We use the Akerberg-Caves-Frazer (ACF) method (Akerberg et al., 2015) to estimate productivity because it is the most recent semi-parametric method.

We find that the capabilities of frontier upstream firms influence the capabilities of firms in the focal industry. In less competitive industries, the influence of frontier upstream firms' capabilities on the capabilities of the focal firm is greater. The degree to which a focal firm relies on the capabilities of upstream firms varies significantly based on the type of firm ownership. Standalone domestic firms rely on the capabilities of frontier upstream firms more than firms belonging to business groups, foreign firms, or

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the government. The level of the focal firm's capabilities also influences the degree of reliance on the capabilities of frontier downstream firms. Only frontier firms in the focal industry receive capability spillovers from frontier firms in the downstream industry.

THEORY AND HYPOTHESES

Distribution of Capabilities

Capabilities represent the ability of an organisation to deploy resources to achieve desired outcomes (Amit & Schoemaker, 1993). The definition implies that a wide range of organizational routines can be labeled as capabilities. From a company's basic operation of converting inputs to outputs to complex activities such as product development and managing relationships with external stakeholders, a vast array of activities can be categorised as firm capabilities. Thus, while some previous studies have focused on specific capabilities, such as R&D capability, we use the term 'firm capabilities' to broadly describe the operational effectiveness of a firm.

It is well known that firms differ in terms of their capabilities. Given that firms' strategies and scopes of operations vary, it is likely that firms' capabilities also vary. Even if the business scope is comparable, firms pursue different strategies based on their perception of the institutional and competitive environment (Jacobides & Winter, 2012). Divergent paths cause firms' accumulated experiences to vary, resulting in heterogeneous capabilities. Frequently, the heterogeneity of capabilities is also intentional and is not necessarily a consequence of path-dependence. (Zollo & Winter, 2002) Businesses can establish structures and processes and make substantial investments to enhance their capabilities. Consequently, heterogeneity in firm capabilities results from diverse initial decisions, firms' accumulated production experience, and firm-specific investments in capability enhancement. Given that capabilities influence firm performance, heterogeneity in capabilities reflects variation in firm performance.

External Sources of Capabilities

Gulati (2000) argues that a firm's incorporation into inter-organizational networks facilitates a more efficient transfer of capabilities. As these ties are characterized by information sharing, trust, and joint problem solving, they can facilitate the transfer of difficult-to-codify and complex knowledge (McEvily &

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Marcus, 2005). However, the effectiveness of such ties is contingent upon strong managerial skills and processes for assimilating internal and external knowledge (Dyer & Nobeoka, 2000). The capability of managing inter-organizational networks is unique (Lorenzoni & Lipparini, 1999). Consequently, heterogeneity in capabilities also stems from firms' varying abilities to leverage their inter-organizational ties.

Among inter-firm ties, buyer-supplier and vertical (downstream-upstream) linkages are among the most studied types. The flow of goods, services, and knowledge between upstream and downstream firms characterizes vertical linkages. The connections between upstream and downstream production processes offer opportunities for collaborative problem-solving (McEvily & Marcus, 2005). The product linkages also make vertical linkages a crucial source for acquiring R&D and manufacturing capabilities (Mahmood et al., 2011; Alcacer and Oxley, 2014). Within vertical linkages, numerous downstream businesses have long-standing relationships with their upstream partners. According to Kotabe et al. (2003), the longer the duration of ties, the greater the trust between partners, and consequently, the better the acquisition of capabilities.

Vertical linkages are not automatically beneficial. Unless downstream firms take the lead in establishing knowledge-sharing routines with upstream firms, there will be no benefits (Lipparini et al., 2014). Consequently, the benefits of vertical linkages depend on an organization's capacity to establish relationships with other vertically linked companies. According to Dyer and Nobeoka (2000), Toyota's superior engagement with its upstream partners is responsible for its superior capabilities compared to other U.S. automakers.

Capabilities spillovers in vertical linkages

While we are aware of how firms benefit from their supplier-customer relationships, is it possible for capability to flow through vertically linked firms due to their inter-industry network integration? As firms strive to build relationships in order to acquire capabilities and gain a competitive advantage, there is a chance that some of the lessons learned, and benefits accrue to third parties (Lavie, 2006). Spillovers are much less studied in the context of vertical relationships, with the majority of prior research focusing on

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the benefits of vertical relationships. Our research focuses on the magnitude of spillovers from upstream or downstream firms to the focal firm, regardless of the focal firm's relationship to these firms. In Table 1, we list the potential mechanisms of capabilities spillovers, accompanied by examples and references to previous research.

| Insert Table 1 about here |

Following previous research on knowledge spillovers and productivity spillovers, Table 1 lists some likely mechanisms. As there are important connections between capabilities, productivity, and knowledge, we contend that it is necessary to integrate arguments from these distinct research streams. Capabilities of a business are a collection of routines for reliably carrying out a variety of tasks. The company's stock of routines is also included in its knowledge stock. Capabilities are therefore a form of knowledge. The concepts of firm capabilities and productivity are quite similar (Dutta et al., 2005). Productivity describes the efficiency with which a company converts inputs into outputs (Syverson, 2011). A firm is more productive than other firms if a larger proportion of its output variation cannot be explained by variation in observable inputs. The fewer common inputs such as material expenses explain the firm's output, the greater the proportion of firm-specific factors such as its capabilities. External and internal factors impact the productivity of an organisation. Productivity spillovers (i.e., a firm's productivity increasing due to improvements in other firms) are prominent among external factors.

To examine spillovers, we examine the relationship between the capabilities of the focal firm and its vertically linked partners. Any observed positive relationship between these capabilities is known as a capability spillover. Past research has not captured these spillovers because many studies have focused on vertical linkages within a single firm (Dyer & Nobeoka, 2000; Dyer & Hatch, 2006). To avoid the endogeneity of specific ties (Serpa & Krishnan, 2018), we concentrate on the capability spillover from frontier upstream and downstream firms to a firm.

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In addition, surveys of leading firms in a particular industry or group of industries (Weigelt, 2013; Ethiraj et al., 2005) and supply networks constructed from firm disclosures of their major customers (e.g., firms in the United States are required to disclose customers who contribute more than 10% of their sales) are used as data sources in prior research. In comparison to the general population, the majority of these leading organisations are already exceptionally capable. A capable customer is likely to increase a supplier's capabilities, and downstream companies frequently choose an upstream company with comparable capabilities (Koufteros et al., 2012). Consequently, the samples from previous studies have less variation in firm capabilities and do not focus on the causes of heterogeneity in firm capabilities.

In the following section, we will first compare and contrast the nature of upstream and downstream capability spillovers. Then, we identify the factors that may increase the impact of vertically-linked firms' capabilities on a focal firm. We examine the role of competition and ownership structures in particular. While competition influences the incentives for firms to acquire capabilities, ownership structures (such as domestic versus foreign, stand-alone versus business group affiliate) influence the need for capability spillovers between upstream and downstream industries.

Asymmetry in upstream and downstream spillovers

A majority of the past research establishes the presence of capability spillovers from upstream firms but finds no evidence for spillovers from downstream firms (Crespi et al., 2008). These differences in upstream and downstream spillovers exist for specific reasons. First, a firm's joint problem-solving to acquire capabilities is more effective if undertaken through an upstream firm as there exists greater flexibility in implementation (McEvily & Marcus, 2005). Second, it is in the upstream firm's interest that they are not locked onto a single downstream such that their capabilities are redeployable across many downstream firms (Mesquita et al., 2008). Third, there is mechanical effect from upstream to downstream as the materials flow in that direction. Hence, spillovers from upstream firms are effective to the focal firm, and upstream capabilities are redeployable across many firms. Our hypothesis focuses on spillovers from frontier firms or firms situated at the top levels of capabilities. Hence, we hypothesize that,

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Hypothesis 1: The aggregate capabilities of frontier supplier firms positively influences the focal firm's capabilities.

Often, a downstream firm take the lead in setting up knowledge transfer efforts with upstream firms (Lipparini et al., 2014), incurring high costs. Hence, the downstream firms will seek to minimize the knowledge leakage through the upstream firms to its competitors. It does so by ensuring that a particular capability does not entirely lie with the upstream firm but can only be exercised in collaboration with itself (Mesquita et al., 2008). This makes spillovers from downstream firms selective (Alcacer & Oxley, 2014) and less redeployable across other firms. Hence, we expect that capability spillovers from downstream firms do not occur, except for a few firms as discussed later.

Firm ownership structure

The motivation and skills of managers to improve capabilities can vary with the firm's ownership structure (Hill & Snell, 1989). In an emerging market context, the relevant ownership structures are domestic vs. foreign owned, business group vs. independent, and government-owned vs. private. We expect a lower influence of upstream firms' capabilities on a firm's capabilities if most of its capabilities are driven by within-firm knowledge. An extensive literature on FDI spillovers highlights the high capabilities of foreign-owned firms and how their capabilities spill over to domestic firms (Javorcik, 2004). Business group firms have access to internal markets for inputs allowing them to overcome institutional voids (Khanna & Rivkin, 2001). Government-owned firms are likelier to be driven by non-economic motivations as they are subject to political influence (Majumdar, 1998). Thus, these three types of firms are less likely to be influenced by the capabilities of their suppliers. In contrast, domestic firms that are not affiliated to business groups or owned by the government (i.e., standalone domestic firms) are more in need of knowledge from elsewhere.

Hypothesis 2: The positive influence of frontier supplier firms' aggregate capabilities on focal firm's capabilities is higher for standalone domestic firms.

Market Competitiveness

Past studies argue greater competition increases firm capabilities, which in turn influences the impact of spillovers. Beyond this direct effect of competition on a firm's capabilities, there is an indirect effect through the exit of less capable firms from the market (Syverson, 2011; Backus, 2020). The role of

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competition is also highlighted by researchers focusing on the asymmetric nature of buyer-supplier relationships. Firms in more concentrated industries are more powerful than firms in less concentrated industries, and these firms often use their power advantage to squeeze value from upstream firms (Gulati & Sytch, 2007). Firms in less concentrated industries are less likely to engage in within-firm capability-building efforts and are more likely to be demanding of their upstream firms. Hence, we hypothesize,

Hypothesis 3: The positive influence of frontier supplier firms' aggregate capabilities on the focal firm's capabilities is higher for firms that belong to less competitive industries.

Highly capable firms and spillover benefits

Prior research has established that absorptive capacity—a firm's ability to identify, assimilate, and exploit knowledge from the external environment (Cohen & Levinthal, 1989)—mediates the extent of knowledge absorption from external sources. This applies to acquiring knowledge through vertical linkages as well (Saenz et al., 2014). The assimilation of a vertically linked firm's capabilities with the focal firm's capabilities is only successful when the focal firm has similar or higher level of capabilities (Weigelt, 2013). Hence, capability spillovers from frontier upstream and downstream firms are more likely to be pronounced for frontier focal firms.

Upstream spillovers are in the direction of material flows; hence, a greater transformation of inputs by firms with within-firm sources of knowledge may reduce the influence of upstream spillovers on such firms. The direction of downstream spillovers is opposite to the flow of materials. Thus, the extent of input transformation is not likely to influence spillovers from downstream firms. Hence, we hypothesize the direct effect of high capability only for spillovers from frontier customer firms.

Hypothesis 4: The aggregate capabilities of frontier customer firms positively influence the focal firm's capabilities only if it is highly capable.

METHODS

We utilize Input-Output (I-O) Tables as the context of vertical relationships. The ability of any single firm to shape an inter-industry network as captured by I-O Tables is low (Carvalho & Voigtlander, 2014). An I-O Table is an $N \times N$ matrix that maps producing-consuming linkages of an economy. In the I-O Table, rows are the supplying sectors, and columns are the consuming sectors. Every firm in our sample is mapped to a

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particular sector of the I-O table, and I-O sectors are primarily at the 2-digit classification level. The model used to test the hypotheses is as follows.

$$Firm\ Capabilities_t = \alpha_0 + \alpha_1 * Firm\ capabilities_{t-1} + \alpha_2 * Aggregate\ upstream\ capabilities_{t-1} + \alpha_3 * Aggregate\ downstream\ capabilities_{t-1} + Controls_{t-1} + Error\ term$$

We utilize the dynamic panel estimation method that includes lag values of capabilities as an explanatory variable (Vandaie & Zaheer, 2015). The explanatory variables are at the '*t-1*' period, and the outcome variable is at the time '*t*'.

Data

Our study is set in India, a context that is characterized by the presence of several low-capability firms (Bloom & Van Reenen, 2010). We obtain firm-level observations for the period 1988-2019 from the Centre for Monitoring Indian Economy (CMIE) Prowess database. For every firm in the Prowess database, we record sales, gross fixed assets, material expenses, packing material expenses, compensation to employees, power, fuel, and water charge, sales and distribution expenses, research & development (R&D) expenses, import intensity, debt to equity ratio, incorporation year and the type of ownership structure. I-O tables are not published annually but once every few years by the Ministry of Statistics, Planning, and Implementation, Government of India. We use I-O tables published in 1993-94, 1998-99, 2003-04, 2007-08, and 2013-14 to capture vertical networks in our study. Firm level observations from different years are matched to the most appropriate IO Table.

Measures

We measure capabilities by calculating the multi-factor productivity of firms (Jacobides & Hitt, 2005). Multi-factor productivity uses multiple inputs and a single output to estimate the efficiency with which inputs are converted to outputs (Syverson, 2011). Productivity estimation can be done through multiple methods. These include frontier methods where technological progress and efficiency improvements are separately estimated (Dutta et al., 2005; Vandaie & Zaheer, 2015) and proxy variable methods that estimate productivity as the residual that is obtained by regressing firm output on a set of firm inputs over many years. Proxy variable methods are suitable for panel data sets since they account for simultaneity bias and

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temporal effects (Del Gatto et al., 2011). We therefore used the Akerberg-Caves-Frazer (ACF) method (Akerberg et al., 2015), a widely used proxy variable method (Topalova & Khandelwal, 2011) for our estimation.

Aggregate upstream capabilities (Frontier/Non-Frontier) are calculated by aggregating upstream firms’ capabilities to the industry sector level using firm output as weights. It is the weighted average of capabilities of all supplying sectors, excluding the focal sector (the IO table captures the inputs that a sector supplies to itself). The weights for each focal sector are the percentage of inputs supplied by other sectors to that sector. For calculating the aggregate capabilities of only frontier upstream firms, the productivity of only those firms that lie at or above the 90th percentile is aggregated at the industry sector level. The capabilities of the other firms are aggregated and are treated as non-Frontier.

Aggregate downstream capabilities (Frontier/Non-Frontier) are calculated in a similar way as above using the capabilities of downstream firms. *Frontier firm dummy* is a dummy variable that takes on a value of 1 if a firm’s capabilities lie at or above the 90th percentile in its industry for a particular year and 0, otherwise. We control for several factors that influence a firm’s capability. These include *R&D intensity*, *Industry concentration*, *import intensity*, *firm age*, *firm market share*, *slack*, *aggregate capabilities of competitors*, and *standalone domestic firms*.

RESULTS

| |
|--------------------------------|
| Insert Table 2a, 2b about here |
|--------------------------------|

The results from the regression models are presented in Table 3. Model 1 in Table 3 has only controls. In Model 1, we see that lagged firm capabilities has a significant effect, confirming the persistence of firm capabilities. In Model 2 of Table 3, we introduced the upstream firms' capabilities and found a positive influence of frontier upstream firms’ capabilities on the focal firm's capabilities. Thus, we found support for Hypothesis 1. In Model 3, we included the downstream firms' capabilities and found a negative influence of frontier downstream firms' capabilities on the focal firm's capabilities. The negative coefficient signifies

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that downstream firms and upstream firms' capabilities do not always move in a similar direction; hence, positive spillovers from downstream frontier firms are not available for all the upstream firms. In Model 4, we see that spillovers from upstream capable firms are higher for standalone domestic firms, supporting Hypothesis 2. In Model 5, we see significant upstream spillovers from frontier firms to focal firms in a less competitive industry. Thus, Model 5 supports Hypothesis 3. In Model 6, we checked the influence of frontier downstream firms on frontier firms in the focal industry. We found a significant positive coefficient for the interaction of frontier firm dummy with frontier downstream firms' capabilities, supporting Hypothesis 4. Hence, all capable firms get spillovers from frontier downstream firms, irrespective of their own type. Downstream spillovers are of pull type, as it is a direction opposite to the flow of materials. Model 7 has all the variables and controls, and results remain the same.

Robustness

Segmenting Industries

As upstream spillovers are more general than downstream spillovers, we aggregated firm capabilities at the industry level and then interacted upstream spillover terms with specific industry dummies. We divide industries into those where the magnitude of upstream spillover is above the mean and those where it is below the mean. Table 4 confirms that spillovers are greatest in industries with a high degree of capabilities heterogeneity. Even greater disparity exists between the 90th and 10th percentiles in industries with significant upstream spillovers.

DISCUSSION

In this study, we attempt to introduce the concept of capabilities spillovers, thus expanding the sources of firm capabilities to three: internal development, external sources, and capabilities spillovers. Reliance on spillovers is not uniform across firms, which can explain significant differences in firm capabilities. Spillovers enable the firm to remain competitive even if it is not actively pursuing capability development. In addition, we investigate the economic implications of embeddedness (Uzzi, 1996) by analysing the capability spillovers that a firm gains through its extended economy-wide higher order supply network.

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We observed that the capabilities of frontier upstream firms influence the capabilities of every downstream firm. Thus, the capability levels of upstream firms have implications for the entire economy. Absence of competition can reduce levels of capability; consequently, the majority of upstream industries must be competitive. Despite the fact that firms in less competitive industries are less capable and have significant market power, they are also the most susceptible to negative shocks in their upstream industries. The degree to which a focal firm relies on the capabilities of upstream firms varies significantly based on the type of firm ownership. Independent domestic firms rely on the capabilities of upstream firms more than firms affiliated with business groups, foreign firms, and government-owned firms. Consequently, firms affiliated with business groups, foreign firms, and government-owned firms are more insulated from spillovers and shocks that affect the entire economy. In contrast, domestic firms that operate independently are more reliant on the health of the economy.

In addition to their direct effect on performance, greater capabilities facilitate access to spillovers. Greater capabilities translate to greater absorptive capacity, resulting in a greater influence of the capabilities of vertical firms on the capabilities of the focal firm. Only frontier firms benefit from spillovers from downstream frontier firms. Since downstream spillovers are in the opposite direction of the flow of materials, the nature of these spillovers is likely to involve knowledge flows and not just mechanical effects.

The processes demonstrate that capability spillovers are major drivers of capability gains for firms. However, the distribution of these gains is not uniform. Frontier firms, stand-alone firms, firms in more concentrated industries, and firms linked to upstream industries with greater capabilities are more likely to experience greater capability spillover gains. The less capable firms can ride the wave of capability improvements in their upstream industries, while frontier firms have exclusive access to the capabilities of downstream firms, resulting in highly heterogeneous capabilities.

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FIGURE 1
Conceptual overview of spillovers from vertical linkages

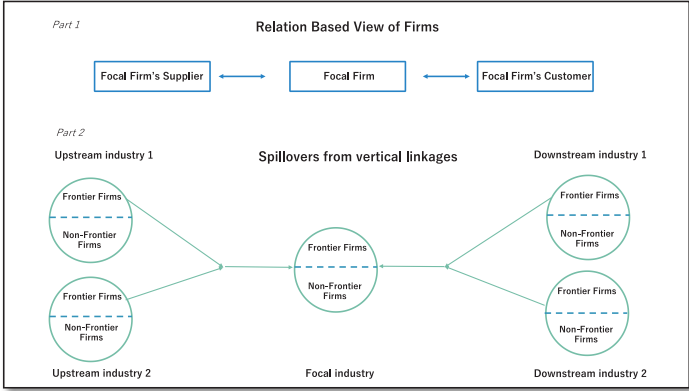
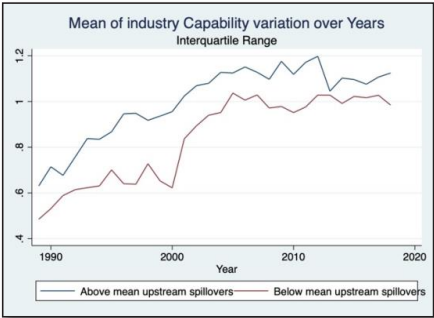


FIGURE 2
Capabilities heterogeneity among firms segmented by spillovers



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TABLE 1
Sources of Capabilities spillovers

| Mechanism | Sub-type | Examples | Important Articles |
|--------------------|---|---|--|
| Knowledge Transfer | Informal Transfer of knowledge between firms | Spread of Vendor Managed Inventory Practice across firms | Isaksson et al., 2016 Lavie 2006 |
| | Foreign Direct Investment (FDI) spill overs between foreign firms and domestic firms | Multiple studies establish a link between liberalization and rise in average productivity of firms | Javorcik, 2004 Kee, 2015 |
| | Autonomous R&D by supplying firms may spillover as knowledge embodied within products. Price elasticity limitations may result in only partial reflection of technology development costs in prices. | Delphi, a renowned automotive component supplier, enhances fuel efficiency in cars through its expertise in fuel technology patented innovations. | Todo et al., 2016 Koufteros et al., 2012 |
| | Specialized engineering consulting firms facilitate capabilities spillover by focusing on niche areas and offering their expertise as a service to other firms. | Lonza offers niche drug development capabilities and API manufacturing capabilities to other pharmaceutical firms | Arora et al., 2001 |
| | Industries adopt performance benchmarks and standards. These benefits then extend to their buyers in the form of higher quality inputs. | Asian Paints, a Indian paints manufacturer, actively promotes the mechanization of the painting process by selling painting tools to individual painters. | Tassey, 2000 Peng and Hong, 2013 |
| | Imitation of a competitor's products or processes through mobility of employees, patent application disclosures, open innovation paradigms | Patent infringement dispute between Apple and Samsung | Mansfield, 1985 Bloom et al., 2013 Agarwal et al., 2009 Corredoira and RosenKopf, 2010 Awate and Makhija, 2022 |
| Mechanical Effect | Changes in input prices or quality that impact consuming industries. Firm-specific shocks propagate to other firms through inter-industry supply networks | The semiconductor supply crunch influencing the ability of car manufacturers to fulfil customer demand | Barrot and Sauvagnat, 2016 |

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TABLE 2a
Descriptive Statistics (N=221,494)

| Variable | Mean | Std. Dev. | Min | Max |
|--|------|-----------|-------|------|
| Firm capabilities | .14 | 1.25 | -4.05 | 4.92 |
| Lagged Firm capabilities | .14 | 1.25 | -4.05 | 4.92 |
| Aggregate capabilities of competitors | 1.1 | 2.16 | -1.39 | 7.06 |
| Firm Import Intensity | .07 | .18 | 0 | .92 |
| Firm R&D Intensity | 0 | 0 | 0 | .03 |
| Industry Concentration | .08 | .08 | .01 | .45 |
| Firm Age | 2.83 | .81 | 0 | 5.04 |
| Debt to equity ratio | 2.45 | 1.52 | -.58 | 7.62 |
| Firm market share | .01 | .06 | 0 | 1 |
| Aggregate upstream industry capabilities (Only Frontier Firms) | .7 | .38 | .16 | 1.84 |
| Aggregate upstream industry capabilities (Only Non-Frontier Firms) | -.04 | .24 | -.9 | .52 |
| Aggregate downstream industry capabilities (Only Frontier Firms) | .44 | .41 | .05 | 2.69 |
| Aggregate downstream industry capabilities (Only Non-Frontier Firms) | -.01 | .3 | -1.55 | .61 |

Table 2b
Matrix of Correlations

| Variables | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|------|
| (1) Firm capabilities | 1.00 | | | | | | | | | | | | | | |
| (2) Lagged Firm capabilities | 0.89 | 1.00 | | | | | | | | | | | | | |
| (3) Aggregate capabilities of competitors | 0.19 | 0.18 | 1.00 | | | | | | | | | | | | |
| (4) Firm Import Intensity | -0.01 | -0.01 | -0.13 | 1.00 | | | | | | | | | | | |
| (5) Firm R&D Intensity | -0.02 | -0.02 | -0.08 | 0.14 | 1.00 | | | | | | | | | | |
| (6) Industry Concentration | -0.03 | -0.03 | -0.07 | 0.06 | 0.01 | 1.00 | | | | | | | | | |
| (7) Standalone domestic firm | -0.04 | -0.03 | 0.10 | -0.07 | -0.09 | -0.09 | 1.00 | | | | | | | | |
| (8) Firm Age | -0.04 | -0.02 | -0.07 | 0.07 | 0.09 | 0.05 | -0.14 | 1.00 | | | | | | | |
| (9) Debt to equity ratio | 0.20 | 0.21 | -0.00 | 0.06 | 0.08 | -0.05 | -0.09 | 0.17 | 1.00 | | | | | | |
| (10) Firm market share | 0.02 | 0.03 | -0.10 | 0.07 | 0.06 | 0.35 | -0.17 | 0.12 | 0.10 | 1.00 | | | | | |
| (11) Aggregate upstream industry capabilities (Only Frontier Firms) | -0.09 | -0.09 | -0.46 | 0.02 | 0.01 | 0.03 | -0.04 | 0.07 | -0.06 | 0.06 | 1.00 | | | | |
| (12) Aggregate upstream industry capabilities (Only Non-Frontier Firms) | 0.01 | 0.02 | -0.31 | -0.06 | 0.00 | 0.05 | -0.06 | 0.01 | 0.06 | 0.05 | 0.23 | 1.00 | | | |
| (13) Aggregate downstream industry capabilities (Only Frontier Firms) | -0.02 | -0.01 | -0.11 | -0.03 | -0.03 | 0.06 | -0.06 | -0.03 | 0.00 | 0.02 | 0.03 | 0.13 | 1.00 | | |
| (14) Aggregate downstream industry capabilities (Only Non-Frontier Firms) | 0.03 | 0.03 | -0.04 | -0.02 | 0.02 | -0.09 | -0.00 | 0.00 | 0.06 | 0.03 | 0.03 | 0.11 | 0.05 | 1.00 | |
| (15) Frontier Firm dummy | 0.46 | 0.40 | 0.00 | -0.00 | -0.03 | 0.03 | -0.04 | -0.02 | 0.06 | 0.08 | -0.00 | -0.00 | -0.00 | 0.00 | 1.00 |

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TABLE 3
Estimation of capability spillovers

| VARIABLES (DV- Firm Capabilities) | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---------|-------------------|--------------------|-------------------|-------------------|-------------------|--------------------|
| Standalone domestic firm*Aggregate upstream industry capabilities (Only Frontier Firms) | | | | 0.06*** (0.01) | | | 0.07*** (0.01) |
| Aggregate upstream industry capabilities (Only Frontier firms) | | 0.03*** (0.00) | | -0.02* (0.01) | 0.01* (0.01) | 0.02*** (0.00) | -0.04*** (0.01) |
| Aggregate upstream industry capabilities (Only Non-Frontier firms) | | -0.01 (0.01) | | -0.01 (0.010) | -0.01 (0.010) | 0.03** (0.01) | 0.03** (0.01) |
| Aggregate downstream industry capabilities (Only Frontier firms) | | | -0.01*** (0.00) | -0.01** (0.00) | -0.01** (0.00) | -0.01** (0.00) | -0.01*** (0.00) |
| Aggregate downstream industry capabilities (Only Non-Frontier firms) | | | 0.01+ (0.00) | 0.00 (0.00) | 0.00 (0.00) | 0.01** (0.00) | 0.01** (0.00) |
| Industry Concentration*Aggregate upstream industry capabilities (Only Frontier Firms) | | | | | 0.15*** (0.04) | | 0.20*** (0.05) |
| Frontier firm dummy*Aggregate downstream industry capabilities (Only Frontier Firms) | | | | | | 0.04* (0.02) | 0.04* (0.02) |
| Observations | 221,494 | 221,494 | 221,494 | 221,494 | 221,494 | 221,494 | 221,494 |
| Number of firms | 21,377 | 21,377 | 21,377 | 21,377 | 21,377 | 21,377 | 21,377 |
| Time dummies | YES | YES | YES | YES | YES | YES | YES |
| Controls | YES | YES | YES | YES | YES | YES | YES |
| AR (2) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.07 | 0.07 |
| AR (3) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.20 | 0.20 |
| Hansen | 0.50 | 0.50 | 0.50 | 0.50 | 0.49 | 0.58 | 0.58 |
| Sargan | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.19 | 0.19 |
| Number of Instruments | 42 | 44 | 44 | 47 | 47 | 48 | 50 |

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Note – The Regression models are for Firm-Year observations. All the models are GMM regressions implementing the Arellano-Bond estimator. The lags of the dependent variable are used as the instrument. Hansen test values confirm the validity of the instruments. The test of autocorrelation specifies the usage of deeper lags as instruments. The explanatory variables are at the t-1 period, and the dependent variable is at time t. Time dummies control for year effects, and GMM transformations control for time-invariant firm effects. The firms in our model belong to all the industry sectors of the Indian economy. Frontier firm is a dummy variable indicating if the firm's capability is at or over the 90th percentile in its industry for a particular year.

Robust standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

TABLE 4
Capabilities heterogeneity and upstream spillovers

| VARIABLES | (1) Interquartile Range of firm capabilities | (2) Difference in 90th and 10th percentile firm capabilities |
|---|---|---|
| Spillover dummy 1- represents above mean upstream spillover influence | 1.30*** (0.15) | 2.96*** (0.25) |
| Industry Concentration (Herfindahl) | -0.17* (0.08) | -1.25*** (0.14) |
| Number of firms in the industry | 0.00 (0.00) | -0.00 (0.00) |
| Standalone firms output share | -0.38*** (0.08) | -0.62*** (0.13) |
| Industry Import intensity | -0.17* (0.08) | -0.19 (0.14) |
| Industry R&D intensity | 4.38* (2.20) | -0.54 (3.69) |
| Constant | 0.80*** (0.12) | 1.60*** (0.20) |
| Observations | 3,037 | 3,037 |
| R-squared | 0.81 | 0.82 |
| Year FE | YES | YES |
| Industry FE | YES | YES |

Note – The regressions are at industry-year level. The spillover dummy takes the value of 1 if the value of the coefficient of upstream spillover variable is above mean in an industry level regression of model 2 of Table 1 for each industry in our sample.

Standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

9. Health Management and Organisation

Learning from a COVID Response Team to enhance and guide the development of multidisciplinary health partnerships.

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Learning from a COVID Response Team to enhance and guide the development of multidisciplinary health partnerships.

ABSTRACT: *Healthcare partnerships are critical to delivering effective and efficient health service. During the COVID-19 pandemic, health organisations were required to develop new services in response to the emerging health crisis. A Local Health District in New South Wales Australia played a critical role in the delivery of health and psychosocial care to COVID-19 positive patients who were self-isolating at home. This care was delivered by multidisciplinary healthcare staff who were part of a COVID Response Team. This study explores the clinician experiences that led to the success of the response service. It also presents a framework noting the factors required to establish health partnerships, internal and external to the organisation.*

Keywords: Healthcare Partnerships, Multidisciplinary Relationships, Health Service Delivery, COVID-19.

Overview:

The development of healthcare partnerships is critical to effective and efficient health service delivery. During the COVID-19 pandemic, healthcare organisations were required to develop new services in response to the emerging health crisis. COVID Response Teams played a critical role in the delivery of health care to COVID-19 positive patients who were self-isolating at home.

Established COVID Response Teams provided health and psychosocial care for the management of COVID-19 positive patients at home (Australian Government Department of Health, 2023). The team consisted of multidisciplinary members from medical, allied health, nursing, and administration staff. This team provided virtual and face to face care to COVID positive patients, who resided within the boundaries of the local health district.

During the rapid development phase of the Response Team, it was identified that there was limited documented guidelines or frameworks for the health district to follow to formulate new partnerships amongst multidisciplinary staff and consumers. This lack of partnership guidelines and frameworks impacted service development (Haldane et al., 2020), because it created delays in healthcare delivery for COVID-19 patients in home quarantine. Delays in service delivery placed further pressure on the healthcare system (Rockwell & Gilroy, 2020).

This paper explores the clinician's experiences within the multidisciplinary COVID Response Team and identifies the factors that led to success of the service. These experiences informed the development of a Multidisciplinary Health Partnership Framework which can enhance partnership arrangements for future health services development. The framework is also expected to be useful to guide the coordination of services, internal and external to health organisations. This can help to produce more responsive, integrated services which are key for the delivery safe and high quality patient care (Kelly & Young, 2017).

Current understanding:

A small number of publications in the literature describe how healthcare teams worked during the pandemic. No single framework was found in the literature to address the needs of establishing new teams during the pandemic (Anjara et al., 2021; Hiller et al., 2022; Wang et al., 2021). An analysis of the limited publications specifically related to COVID-19 and health care coordination identified themes such as professional relationships, the importance of teamwork, communication, and leadership (Anjara et al., 2021; Hiller et al., 2022; Wang et al., 2021). Given the limited literature specific to COVID-19 and partnerships, and the limited evidence available to inform and enhance service delivery, this research is viewed as foundational, providing the opportunity to produce new knowledge to inform and enhance the coordination of healthcare for organisations into the future.

Professional relationships was the most frequent theme represented in the literature. Collaboration between multidisciplinary teams to support professional relationships is viewed as essential to the development of health service delivery (Victoria Department of Health, 2021). Published studies identify the importance of reducing disciplinary silos in order to promote multidisciplinary team collaboration, but fall short on providing practical solutions and strategies to reduce silos in healthcare teams and enhance service coordination (King & Shaw, 2022).

The theme of teamwork is highlighted and moves healthcare towards a collaborative approach to service delivery as opposed to working in isolation (Victoria Department of Health, 2021). The development of teams, resource sharing and a sense of shared responsibility are key sub themes

frequently mentioned in the literature in the context of partnership development. (Johnson, 2017; Karlsson et al., 2020; Van Dongen et al., 2016). The development of multidisciplinary partnerships is supported- as the healthcare system becomes increasing complex, the need to partner will become essential for service delivery (Johnson, 2017). Practical strategies and resources to support teams to work in partnership is limited in the literature (Victoria Department of Health, 2021).

Communication was a further theme identified. The literature emphasises the importance of communication in service development and within teams (Alves et al., 2021; Clausen et al., 2017). The use of communication tools for effective healthcare coordination between teams featured in the current literature (Altabbaa et al., 2019; Rowan et al., 2022). Communication specific to multidisciplinary teams and what constitutes effective communication to enhance service delivery was not specifically addressed.

The final theme identified is leadership. Pandemic leadership featured in literature, where healthcare workers described what effective COVID-19 leadership looks like (Wang et al., 2021). Literature was from studies outside of Australia, with no literature found specific to pandemic leadership within the Australian context. A gap in research investigating pandemic leadership to develop healthcare partnerships in the Australian context identifies a gap in knowledge.

Research Question:

The study's research question is: How can COVID partnerships inform and enhance the coordination of services in healthcare organisations?

Research Approach:

The study adopted a parallel mixed method approach (Schoonenboom & Johnson, 2017). Data for the mixed method study was collected over a 6-week period simultaneously.

The primary source of data collection was qualitative. Two online focus groups were conducted to obtain data from the multidisciplinary team members. Focus groups were chosen, as it was anticipated that focus group data would provide rich, in-depth data of the perspectives of partnerships and service

delivery (O.Nyumba et al., 2018). The study was able to recruit its intended sample size as per the research protocol. A total of 14 participants were recruited, with good representation of the multidisciplinary team members of the Covid Response Team inclusive of: Senior Nurses (N) (n=4), Allied Health staff (AH) (n=3), Nurse Managers (NM) (n=3), Allied Health Managers (AHM) (n=3) and Senior Administration staff (A) (n=2).

Focus group questions (4) were developed from previous studies that addressed interprofessional collaboration in teams for service development within primary health care settings (Setiadi et al., 2017; Van Dongen et al., 2016). Qualitative data was analysed using thematic analysis. Themes and subthemes that enhance or diminish health partnerships and service delivery from a multidisciplinary perspective were developed (Flynn et al., 2018; Neuendorf, 2018).

Quantitative data formed the secondary data collection. Data collected was inclusive of patient demographics, admission characteristics, discharge characteristics, COVID-19 symptoms, and psychosocial needs. The quantitative data was obtained via an audit of 50 randomly selected high risk patients who had a registered encounter with the COVID Response Team during the delta wave in October 2021 (Capon et al., 2021). Fifty complete sets of data were obtained from the Electronic Medical Record (EMR) across 20 data points. This included items such as: patient demographics, admission characteristics, discharge characteristics, COVID-19 symptoms, and psychosocial needs.

The research was conducted after the ethics protocol and site-specific approval was obtained.

Descriptive statistics were generated to analyse the quantitative data. Data collected from the EMR was entered manually into an excel spreadsheet. The quantitative data was cleaned to ensure it was accurate, complete, free of errors for the descriptive analysis (Ilyas & Chu, 2019). Nominal, ordinal and interval data was analysed. Descriptive statistics to represent features of the patient data and partnership activity within the patient EMR was developed into tables and graphs for further analysis in combination with the qualitative data results.

Findings:

Five themes and twenty-two subthemes were identified from the focus group data. These themes have informed the development of a Multidisciplinary Health Partnership Framework which can guide partnership arrangements for future health services development. This framework is presented in Table 1, below.

Table 1: Multidisciplinary Health Partnership Framework

| Themes/Meaning | Subthemes | Focus group responses |
|--|--|---|
| Governance Structures <i>The importance of clear governance structures in the development of teams and services.</i> | <ul style="list-style-type: none"> Management structures Complex processes and governance (red tape) Organisational goals Transparency | <p><i>"I think we really shifted gears when we got a nursing management structure. ...when we stood up the Primary Community Health Emergency Operations Centre was also a big gear shift" AHM2.</i></p> <p><i>"Losing some of that red tapeallowing a bit more autonomy [for the COVID Response Team executive] to make decisions would have been beneficial because they [COVID Response Team executive] were in the thick of things. AHM2</i></p> <p><i>"Once we also settled on the same direction and goal, I think that change made all difference... we all got on the same page. We knew what the whole game was, and that made a difference." N2</i></p> <p><i>"We had no clue what was going on. There was no transparency. It just made everybody anxious -whereas if you could see it, you could do something about it [service</i></p> |

| | | |
|--|--|--|
| | <ul style="list-style-type: none"> • Escalation pathways • Roles and responsibilities | <p><i>delivery] and you knew what was going on” NM2.</i></p> <p>“In my experience, I never had trouble getting hold of either one of you [nurses] to escalate care concerns. And I was one of those non clinical people that needed that extra bit of direction, and it really made a huge, huge, huge difference knowing I had someone medical that was always there to touch base with”. AH2</p> <p>“It needed to be recognised that you needed certain health staff to be doing certain roles to get things moving along and the recognition around, you know, those key players I think was important to facilitate success” NM2</p> |
| <p>Communication</p> <p><i>The exchange of information to support the service and team members.</i></p> | <ul style="list-style-type: none"> • Timely communication • Poor communication/poor messaging • Complex messaging (needs to be clear and concise) | <p><i>“I think clear, concise communication is vital...when messaging wasn't very clear it made our lives 10 times difficult” N1</i></p> <p><i>“I was getting no communication, nothing- in some of the big meetings where they were making decisions in regard to admin processes or what admin should be doing, we weren't consulted”. A1</i></p> <p><i>“So it was like so what are we doing now?..... that's why clear</i></p> |

| | | |
|--|---|--|
| | <ul style="list-style-type: none"> • Modes of communication (risk huddles/MS Teams) • Two-way communication | <p><i>communication is so important because here we are we are the ones that are actually delivering the care, and if we don't get the right messaging, then of course we'll be filtering the wrong information to our clients in the community" N1</i></p> <p><i>"In regards to communication, risk huddles and being able to communicate in real time, the, you know, the MS Teams platform definitely was a bit of a game changer as far as that we were concerned" NM2</i></p> <p><i>"It was important to have that communication going two ways, so, information being distributed to staff, but also staff being able to communicate back if they felt they had something to input or if they felt like something wasn't clear or they had questions". AH2</i></p> |
| Managerial Attributes <i>The demonstrated qualities of effective managers.</i> | <ul style="list-style-type: none"> • Supportive relationships with staff • Strong leadership | <p><i>"So, we had a really supportive relationship with [the manager] and she implemented little team debriefing sessions in the afternoons where we all supported each other through some of the really tough things that we went through" AH1</i></p> <p><i>"We had really strong leadership.[the manager] provided</i></p> |

| | | |
|--|--|--|
| | | <i>incredibly strong and supportive leadership for us as a team. And [the manager] I think that really made the difference for us.” AH1</i> |
| Professional Relationships <i>The essential relationships for service development.</i> | <ul style="list-style-type: none"> • Intergovernmental relationships (police, ambulance, Resilience NSW) • Multidisciplinary relationships (nursing, allied health, administration) • Integrated care partnerships (interpreters, multicultural health) • Trusting relationships • Manager autonomy (to reduce delays in decision making) | <p><i>“When we couldn't contact people and we would send through referrals and you know, get them [police] to go and knock on doors.....they were able to contact people and then we knew that they were safe.” NM2</i></p> <p><i>“I do think I could speak for all the Allied Health team here that you (nurses) were really, really helpful and are a really calming support to us all. So thank you.” AH3</i></p> <p><i>“I think that partnership with them [interpreters] was really critical for the clinical staff..... having easy access to interpreters really impacts good clinical care.”NM3</i></p> <p><i>“Having that trust from your managers that you're doing something because they know you can do it. I think that was one of the really beneficial things for me”.NM3</i></p> <p><i>“I think if there was a little bit more autonomy given to....., who was managing this, to go, we are making this decision, this is why, instead of</i></p> |

| | | |
|--|---|---|
| | | having to go back to executive and then having to go to the CE, then waiting for it to bounce back. We could lose precious hours and days at times.” NM2 |
| Information and Communications Technology (ICT) <i>The systems and tools necessary for effective service delivery.</i> | <ul style="list-style-type: none"> • ICT support • Development of ICT tools • Use of pulse oximetry (medical technology) | <p>“The evolution of that EMR tracking list and the speed at which it was developed and in partnership with whoever these amazing IT EMR gurus were-was a bit of a game changer.” NM1</p> <p>“Pulse oximetry added a lot to the coordination of clinical care. I know when I talked to the doctors, they had... a different level of confidence about getting the right patient in an ambulance” AHM2</p> |

Data collected from the 20 data points within the EMR analysed the demographic information, trends and evidence of health partnerships that may have been present between patients who received care from the service.

The total number of health professionals engaged, and partnerships formed with patients vastly varied with no trend noticed in the data collected from the EMR audit. This could be associated with the varying reported COVID risk factors and varying age range of patients who were classified as “high risk”. On average, patients received a mean score of 18.4 health professionals involved per patient per admission.

38% (n=19) of patients expressed the need for additional support to access food, finance and in home support during their quarantine period. 22% (n=11) required additional mental health support whilst isolating. Obtaining these additional services required the multidisciplinary team to engage and refer to healthcare colleagues within the district and external agencies such as police, ambulance, and non-

government organisations. These referrals required the development of partnerships to deliver health and social care needs for patients.

Contribution and Limitations

The research provides knowledge on requirements for health partnerships in Australia, inclusive of the experience of multidisciplinary teams. The research provides knowledge on what multidisciplinary teams view as essential structures, resources, and relationships to support the rapid development of new services to support patient care in the community setting.

One strength of the study is the inclusivity of the multidisciplinary team members in the research. Representation from management, allied health and administration was present in the focus group discussions. The inclusion of the multidisciplinary team members ensures that the perspectives of each profession can be analysed to ensure the results yield answers to addressing the complexity of healthcare partnerships. Furthermore, inclusion of multidisciplinary team members can lead to discoveries in healthcare team functioning that would not otherwise be achieved (Proctor, 2019).

A second strength is the use of patient data in the study. Research into healthcare partnerships and service delivery to date has not been inclusive of patient data, focusing only upon data from health professionals (Karam et al., 2018; Karlsson et al., 2020; LaMothe et al., 2021; Van Dongen et al., 2016; Wang et al., 2021). Patient data provides valuable insights about complexities of the patient's needs. Utilising data from both the clinician and patient can support future recommendations that can improve service deliver and decision making (Kriegova et al., 2021).

Two limitations were identified in the study. The lack of medical professionals able to be recruited to the study and the small sample size. Rationales for the inability to recruit medical professionals to the study is believed to be associated with the significant workload demands placed upon clinicians and the health system and the imposed timeframes for data collection for the study. Future research should consider innovative ways to ensure inclusion of medical professionals in multidisciplinary research. This will ensure key perspectives of all health professionals are considered in future service delivery decisions (Australian Medical Association, 2018).

A small sample size was included in the study. Whilst representation of both patients and multidisciplinary team members was a strength of the study, and a complete set of quantitative data was obtained along with focus groups conducted until data saturation was observed, the size of the study may impact the generalisability of the results (Vasileiou et al., 2018). The study provides a research protocol that could be replicated to further support generalisability of the research findings.

Implications

The results identify the need for further development of intergovernmental partnerships to support health service delivery. Partnerships with ambulance and police were identified as having a significant impact on care delivery for the management of patient care in the community.

This paper presented a framework to aid the establishment of new partnerships and services for healthcare organisations. The Multidisciplinary Health Partnership Framework is expected to provide a helpful structure to support organisations who are required to rapidly develop and deliver new services inclusive of the development of new partnerships internal and external to the organisation. Key factors important for enhancing the coordination of health service include: governance development, communication processes, managerial attributes for service development, building professional relationships and ICT development.

The development of ICT tools is a significant element to support seamless transfers of clinical information. The ICT developments allowed clinicians to have visibility of patient data and supported effective communication across the multidisciplinary team. Health service organisations are encouraged to consider the establishment of working parties in partnership with the information technology (IT) team, clinicians, and managers to develop EMR literacy, capabilities, and tools. This would ensure that the system supports clinical innovation and generates data to enhance care coordination. The Multidisciplinary Health Partnership Framework is expected to support health managers to coordinate more responsive, integrated health services and partnerships more effectively. This is essential for the delivery of safe and high-quality care.

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**Talent definitions and barriers to entry. A demand side perspective of
graduate recruitment.**

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Talent definitions and barriers to entry. A demand side perspective of graduate recruitment.

ABSTRACT:

In graduate recruitment, competition for students is ubiquitous; top employers want to hire top graduates and the 'war for talent' is real. A degree alone does not automatically confer the labour market advantage it once did, and employers look for other ways to select the 'best'. Despite recruitment and selection processes using criteria that appears to be objective, privileged students achieve higher rates of success in gaining access to graduate roles. Through a qualitative field study, this research explores the ways organisations define talent and how their recruitment and selection processes create barriers to those from less affluent social backgrounds. The research found students from low SES backgrounds encounter barriers and are less likely to gain positional advantage in graduate recruitment.

Keywords:

Graduate employment, social background, recruitment, selection, graduate programs.

OVERVIEW AND LITERATURE REVIEW

Against a backdrop of government initiatives to widen participation in higher education, students from low socio-economic status (SES) backgrounds are enrolling in and completing university at higher rates than ever before (Universities Australia, 2021). However, students from low SES backgrounds continue to be poorly represented in occupations that pay the highest salaries (Pitman et al., 2019) including management and professional roles (Tomaszewski, Perales & Xiang 2021; Productivity Commission, 2019).

This research aims to shed light on the Australian graduate recruitment industry, an area that is currently under-researched. Specifically, the research looks at the recruitment and selection processes used in the highly selective, structured graduate programs of Australia's top employers. This qualitative study focuses on the way talent is defined across the industry and how recruitment and selection processes may be unintentionally preferencing some students while creating a barrier to others. Overall, the research aims to illuminate the Australian context of graduate recruitment with the intersection of social background.

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There is an established body of evidence that social background impacts upon all stages of a person's life and career (Bourdieu, 1990), including the choice and attainment of an occupation (Brown & Lent, 2016), knowledge about the workforce (Greenbank, 2009), as well as university participation rates and grades (Wakeling & Mateos-González 2022; Andrewartha & Harvey, 2017). Social background can impact upon an individual's ability gain access to competitive fields of work (Rivera, 2012; Wakeling & Savage, 2015), to progress into senior roles (the 'class ceiling') and even salary (the 'class pay-gap') (Friedman & Laurison, 2020). Research shows socio-economic status impacts well into employment, something Lareau (2015) refers to as the 'long shadow' cast by class background. However, despite social background having such a profound influence, it is rarely considered as a diversity characteristic in Australia (Brown et al., 2020) and the concept is missing from important debates regarding graduate employability.

In the contemporary view of employability, the emphasis is on the individual and the acquisition of human capital (Tholen, 2015). The rise of personal agency, where individuals are seen as responsible for constructing their careers, is reflected in current career theories and underpins employability research in Australia (Bridgstock, 2009). This definition of employability asserts that obtaining employability skills (credentials and professional networks for example) will confer labour market advantage. However, this view does not consider the resources required to acquire these skills and ignores important relational and contextual components of employability (Clarke, 2018; Goldthorpe, 2013). Tomlinson (2017) argues it is necessary to view employability in a wider context (i.e. to consider the role of employers) and Sultana et al., (2017) argue strongly for the focus to remain on employment as the term 'employability' can be seen as "a deficit in and of the individual, rather than of the labour market" (p.19).

As early as 2004, Brown et al., described the way elite graduate employers recruit and select candidates and warned of a situation where, even with increasing numbers of graduates entering a market, graduate employers will fail to see the "wealth of talent" available (p. 9). More recently,

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Cappelli (2017) and Athwal (2022) suggest that if employers experience difficulty finding exactly what they are after then it is more likely to be the narrow way they are recruiting and selecting, rather than a shortage of talent.

Looking specifically at competitive graduate programs, research from the UK shows employers are more likely to recruit private school educated and elite university graduates (Ingram & Allen, 2019; Okay-Somerville & Scholarios, 2017). There is limited academic research regarding graduate programs in Australia, however industry reports show a similar trend. Most graduates hired into selective graduate programs come from private schools and most attended one of the ‘Group of 8’ (Go8) universities (AAGE, 2020,2022), this is despite most Australian students being educated in the state school system (ABS, 2021)

In a market with high numbers of graduates holding similar credentials, employers discern between applicants using several criteria, over and above a qualification (Anderson & Tomlinson, 2020). Recognising that ‘a degree alone is not enough’ (Bathmaker et al., 2013; Tomlinson, 2008), employers construct the ‘ideal graduate’ using criteria such as internships and involvement in extra-curricular activities (Ingram & Allen, 2019), or embodiments of cultural capital, such as ‘polish’, confidence, and dress (Ashley & Empson, 2017). This construct can create a ‘hidden barrier’ (Acker, 2012) to those from low socio-economic backgrounds as they are often unaware of, and therefore less likely to take part in, activities that could enhance their graduate employment prospects (Burke et al, 2020). Additionally, these students lack the resources (capital) to be able to participate in extra-curricular activities (Hjalmarsson, 2022), attend internships (Rivera & Tilcsik, 2016), or join study-abroad programs (Simon & Ainsworth, 2012). Lastly, Ashley and Empson (2017) found that graduate recruitment practices ‘exacerbate social exclusion’, by mirroring each other’s hiring methods they creating an inescapable ‘best-practice’ wall across the industry.

An individual’s ability to accumulate capital is strongly influenced by their socio-economic background (Bourdieu, 1984). As such Bourdieu’s core concepts of capital, habitus and field (1984,

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1990, 1996) and symbolic capital (Bourdieu & Wacquant, 2013) are particularly relevant to the current study. The nature of capital is therefore important to understanding ‘who gets in’ and how social background barriers can be created.

Employers may insist that they are hiring based on merit (Tatli & Ozbilgin, 2012) however their assumptions of the ‘ideal graduate’, the expectation for demonstrations of skills and experiences over and above a degree and socio-cultural preferences mean that students from low SES backgrounds may not be able to compete on a level playing field. Despite the strategic importance of graduate employability and outcomes in Australian higher education (Bridgstock & Jackson, 2019), very few studies consider structural barriers to social background in graduate employment and there is a dearth of research within Australia.

Research question

This research aims to remedy the gap in the literature by responding to the following research question: “In the Australian graduate recruitment industry, how do employers recruit and select talent and could this create a barrier for students from low socio-economic backgrounds?”

Sub Questions

- 1 How is talent, including the characteristics of talent, defined in the Australian graduate recruitment industry?
- 2 How is the talent definition interpreted in practice, including the type of capital that is recognised/valued in the criteria of talent? For example, does ‘fit’, imply any social background?
- 3 Are recruitment and selection processes, including definitions of talent, likely to preference more privileged students, how?
- 4 Is the student context, including demographic information including SES data, considered when making hiring decisions?

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METHODS

A constructivist paradigm was selected as the most appropriate to explore the research question (Denzin & Lincoln, 2013). Consequently, the research adopted a qualitative stance using a field-study methodology. The research used in-depth interviews with two groups of participants consisting of graduate employers and graduate applicants. Interviews were conducted on-line at the participants' convenience. The target was to reach saturation.

Data Collection and Sample

The employer group, referred to as Early Career Professionals (ECPs), were selected using pre-determined criteria: directly recruiting and selecting graduates within an identified organisation (having a selective graduate program, be a member of the AAGE employer association, and/or appear in the Australian Financial Review Top 100 employers). Participants were selected via convenience sampling, followed by snowball sampling and contacted via LinkedIn and email using existing professional networks. Interviews followed a structured format using an interview guide and pre-set questions, exploring in-detail how recruitment decisions were made and the strategy underpinning the recruitment and selection process.

Data Analysis

Data was analysed following the steps of a qualitative thematic analysis. Interviews were recorded and transcribed using a combination of an authorised automated tool and manual adjustments. Transcripts were read and emergent ideas and significant phrases or pertinent examples were recorded. To enhance credibility, two coders were used with the option of a third (Lincoln and Guba, 1985). Analysis occurred with a manual review then passed through NVivo. To define the terms of 'privilege', markers, generated from existing research were used (Table 1, pg.13).

Reflexivity and Potential Bias

Conscious efforts have been made to mitigate potential biases through the diligent application of reflexivity. To enhance transparency and minimize any potential impacts, the researcher continuously reflected on personal beliefs, maintained a reflexive journal and debriefed regularly with supervisors.

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FINDINGS

Interviews with employers (n=26) have been conducted. Information about the employers appears in Table 2 (p.14) and information about typical selection stages appears in Table 3 (p.15). Five themes have been identified from the interviews with employers. They are, 1) The organisation's strategic purpose for graduate programs, 2) Selection criteria and talent definition, 3) Awareness of barriers, 4) The role of the ECP and lastly 5) Understanding low SES students.

Key Themes

1. Organisational strategy

The purpose of a graduate program is to generate a pool of suitable employees, who will ideally fast-track into leadership positions. Graduate programs are crucial for feeding the talent pipeline and as such graduate recruitment strategies are closely aligned with the broader organisational talent management strategy. ECPs said that without a suitable talent pipeline, damaging talent shortages could occur. The following quote summarises the issue when graduate programs were cancelled (due to COVID):

*"...it left a big gap in the talent pipeline for engineers, because a lot left the industry...
(Participant 9, Engineering)*

In addition to building a talent pipeline, other strategic aims of graduate programs include increasing brand awareness, generating a high volume of applicants and ensuring candidates had a positive candidate experience:

"...at the end of the day, you have to give them a good experience, even if they make it or not, because if not, they will tell their friends about it..." (Participant 12, Professional Services)

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It was acknowledged that brand awareness had been negatively impacted during the COVID years, when students were on-line and campus events were limited. ECPs noted that student networks were instrumental in increasing application numbers and the informal conversations that occur between students was critical to raise awareness about graduate programs.

2. Selection criteria and the talent definition

There was a high degree of similarity in the ways employers describe talent and the methods they employ to attract and select students. Employers said students who are extroverted and active in university clubs/societies and who participate in several extra-curricular activities are typical of those who progress. Additionally, organisations preference students who have undertaken an internship at either their own, or similar, organisations, as summarised in the following quote about successful applicants:

“...they are more likely to be extroverted than introverted. They are more likely to have done an internship prior to a graduate position either with us or with another firm. They're also then more likely to have participated in a suite of extracurricular activities outside of their direct academic study.” (Participant 4, Engineering)

Attracting and recruiting students earlier in their degrees (during their first and second year as opposed to final year) was frequently mentioned as a new strategic focus, likely to increase in prominence in the future. Internships were seen as the ideal pipeline into graduate programs to the extent that employers would not recruit graduates at all if they had hired enough interns:

“Internships or vacation student conversion into graduate programs, is probably the biggest and best talent pipeline to a graduate program” (Rohan Holland)

Once through the initial selection stage, ECPs look for students who can demonstrate passion and who exhibit high-level communication skills. Passion was demonstrated by students' ability to articulate their reasons for applying and knowledge of the organisation. Learning agility was also

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mentioned as a key selection criterion, measured by an applicant's attainment of additional qualifications or courses in addition to their degree, such as any micro-credentials or virtual learning programs.

“some will also undertake virtual internships and micro credentials...and that's particularly important for our organisation”. (Participant 19, Banking and Finance)

With the exception of highly technical roles, employers were typically selecting students who were able to communicate at a high level and who were demonstrably extroverted and confident.

“I remember hearing partners walk out of interviews and be so impressed with a person if they came in confidently.” (Participant 16, Banking, Financial Services or Insurance)

For the highly technical roles, employers prioritised technical expertise above all other criteria. As such, selection processes for technical roles involved problem solving activities including maths and programming. The technical employers also placed more emphasis on grades attained and participation in academic competitions. In contrast, employers who expected their graduates to work with clients placed more emphasis on verbal communication and collaboration skills.

Hiring sufficient diversity from the applicant pool emerged as a key priority for graduate employers, with most organisations adopting strategies for gender (identifying as female) and Aboriginal and Torres Strait Islander students. There were several measures taken to ensure females were represented equally, including ensuring a 50/50 gender split at each stage of the selection process and modifying selection methods (particularly for technical positions).

Most organisations had targets in place to hire Aboriginal and Torres Strait Islander students, however many were struggling to meet those targets. While this was an issue across the board, those organisations who were required to report on Indigenous hires (to gain lucrative government contracts) placed more emphasis on ensuring targets were met.

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“..there's a financial benefit to having a diverse workforce ..because if they don't show that they've got these diversity factors they won't win the work essentially.” (Participant 9, Engineering)

Organisations adopted different strategies to increase the number of Indigenous student hires, such as working with external partners (Career Trackers), working closely with university Indigenous units, Indigenous scholarships and having specific entry pathways for Indigenous applicants.

3. Awareness of barriers

There was a broad acknowledgement that barriers exist throughout the recruitment and selection processes and that their design preferences highly confident and extroverted people. Experienced ECPs were aware that barriers exist and they often ‘work around the system’ to ensure certain students are not disadvantaged. For example, in assessment centres, the quieter students are encouraged to speak up more:

“I notice the quiet ones are always challenged in the group activity because other people are talking over them. I give them a tip and say you have to speak up” (Participant 12, Professional Services)

One ECP noted that some candidates won’t be able to make it through a recruitment process as the emphasis on overt confidence is particularly problematic for applicants who come from diverse backgrounds, as summarised in the following quote:

“Perfect unicorn candidates will never have that diverse element as well.” (Participant 5, Professional Services)

Barriers were also noted when students from universities outside the Go8 applied for roles. One participant said, if students from other (non Go8) universities apply:

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“...it's never an outright no, but I think it's not an even playing field sometimes. (Participant 17, Professional Services)

4. The role of the ECP

One of most interesting and important findings concerns the pivotal role played by ECPs, who often mediate business demands with a broader, more inclusive recruitment strategy and ‘push back’ against unreasonable requests. For example, line managers will often ask to only see students from particular universities, or even particular high schools:

"There's definitely some managers who will openly say that they think there are better students from X University.... (Participant 10, Engineering)

In order to control for this, ECPs use a number of strategies to protect students’ backgrounds such as withholding school and university information and removing identifying material from resumes.

“We don't share any candidate information with our leaders until a certain time.”
(Participant 1, Banking and Financial Services). And

“I don't share the CVs with our hiring managers” (Participant 13, Property and Investment)

ECPs can also recognise when recruitment systems are failing to produce suitable candidates and modify processes to ensure the people they want are able to progress. This ability to recognise system failures was seen to be important when working with third party suppliers, in particular those who manage the psychometric testing assessments.

Understanding low SES implications

There appeared to be low awareness about the disadvantages faced by students from low SES backgrounds, including their limited ability to take part in extra-curricular activities or participate in

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internships, even if they are paid. The following quote reveals the perception of a management team who could not understand why a student needed to work during the semester:

“We had a student who actually ended up in quite a difficult financial circumstance, because she gave up her job to do the internship...a lot of the higher-ups were like, ‘Why is she even working during semester? ..they should be focused on their studies during the semester.’”
(Participant 9, Engineering)

Lastly, there was limited awareness around recruitment tools, such as contextual recruitment, that are used routinely in graduate recruitment in the UK to assist with recruiting students from low SES backgrounds. Having presented the themes which emerged from the employer interviews, the next section will present a discussion of these considering the literature, the limitations of the research and future research recommendations.

DISCUSSION AND LIMITATIONS

This research answers the research question and sub-questions by finding that the Australian graduate industry defines talent by involvement in extra-curricular activities, undertaking further learning (in addition to a degree), participation in clubs and societies (ideally holding a leadership position), completion of an internship in a relevant organisation, additional part-time work, involvement in community (volunteering) and sport whilst maintaining reasonable grades. This finding extends the work of Tomlinson and Anderson (2020) by providing the element of context and the perspective of employers.

The talent definition interpreted in practice suggests that graduates should present themselves confidently and with a high level of communication ability, have well-articulated knowledge of the organisation to which they are applying and a well-thought-out rationale (motivation). They should be able to complete a series of assessment tasks at short notice and attend selection events in-person in their state’s capital city. This definition therefore creates barriers for students because as noted in the

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work of Ashley and Empson (2017) and Ingram and Allen (2019) most of what constitutes talent, is not an option for many low SES students.

It was found that recruitment and selection processes in Australia, including definitions of talent, were indeed likely to preference more privileged students as found by Burke et al, (2020) reinforcing the status quo of barriers to entry and ultimate outcomes as raised by Tomaszewski et al., (2021) and the breadth of similarity in processes across industries supported the concept of the ‘invisible wall’ found by Ashley and Empson (2017). The research found the student context including demographic information, other than gender or Indigenous status, was not considered when making hiring decisions.

It is therefore likely students from lower socio-economic backgrounds would face numerous barriers in the recruitment and selection processes used for graduate roles. This finding supports existing research from Donnelly and Gamsu (2020) showing students from low SES backgrounds are at a disadvantage compared to others and less able to gain a positional advantage in competitive graduate recruitment. This finding extends research by Ingram and Allen (2019) to consider the specific criteria by which students are assessed and adds contextual nuance by considering the Australian landscape. The research also responds to calls from Tomlinson (2017) and Sultana et al., (2017) to consider more deeply the role of the employer in creating equitable employment outcomes.

Conclusion

When recruiting and selecting candidates, assessment criteria should be inclusive and, as much as practicable, free of barriers. Furthermore, it should be ensured that, like gender, SES is considered a criterion by which organisational success is measured. One potential limitation is that this research cannot say whether the recruitment methods directly impact students from low SES backgrounds, only if they are *likely* to impact. Additional limitations include those frequently associated with qualitative research. Finally, this study does not include the voice of graduates. Future research should both explore the outcomes for students and organisations who adopt proactive strategies to recruit low SES graduates. Importantly, future research should also include the student voice to better capture lived experience.

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Table 1 – Defining Privilege

In order to demonstrate the distinct advantages some students will have in the graduate labour market, this research uses the term ‘privilege’ to distinguish advantaged students from others. Social background affects the economic, social and cultural capital that an individual possesses (Bourdieu, 1986). However, for the particular combination of capital to provide an advantage, it has to be valued in the environment or context in which it operates (the concept of the field). To determine if a graduate has an advantage in the field of competitive graduate programs, existing, recent research was examined and summarised in the table below.

| Markers of privilege in the field of competitive graduate programs | Relevant Research |
|---|---|
| Attending private school | Donnelly & Gamsu (2020), Reeves et al (2017), Cook et al (2012) |
| Access to additional private tutoring | Friedman & Laurison (2020) |
| Living in a metropolitan area | Wakeling & Savage (2015) |
| Attending an ‘elite’ university (Ivy League in the USA, Russell Group in the UK, or Go8 in Australia) | Ashley & Empson (2017), Wakeling & Savage (2015), Rivera (2012 and 2016), Tomlinson (2018), Cook et al, 2012 |
| Middle class disposition/Cultural Capital (including ‘polish’, confidence in professional environments, dress, speech and values) | Belmi et al (2020), Friedman and Laurison (2020), Stephens et al, (2019), Ingram & Allen (2019), Ashley & Empson (2017), Kraus & Park (2014), Piff & Moskowitz (2018), James & Amato (2013), Rivera (2012), |
| Overseas travel or international study | Simon & Ainsworth (2012), |
| Knowledge of employers and employer expectations | Burke, Scurry & Blenkinsopp (2020), Anderson & Tomlinson, (2020), Harvey et al (2020), Caldwell & Cattermole, (2014), Greenbank (2009) |
| Ability to attend assessments and interviews in person | Tatli & Ozbiglin (2012), Bradley et al (2022) |
| Perform assessments to a high standard | Pollard et al (2015) |
| Able to relocate | Bradley et al (2022), Harvey et al (2020), |
| Ability to undertake internships (or multiple internships) | Hunt & Scott (2023), Crawford & Wang (2019), Rivera & Tilcski (2016), Friedman, O'Brien & Laurison (2016) |
| Ability to undertake additional courses/credentials | Wakeling & Gonzalez (2021), Wakeling & Laurison (2017) |
| Ability to participate in extra-curricular activities | Bradley et al (2022) Harvey 2021, Anderson & Tomlinson (2020) |
| Relevant social networks/Social Capital | Anderson & Tomlinson (2020), Tomlinson (2017), Macmillan et al, (2015) |

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Table 2. Employer Participants, Industry and Number of Graduates hired.

| <i>Participant number</i> | <i>Size of Org</i> | <i>Industry</i> | <i>Typical Number of Grads Hired Per Year</i> |
|---------------------------|--------------------|--|---|
| 1 | Large | Banking, financial services or insurance | 101+ |
| 2 | Large | Engineering | 101+ |
| 3 | Medium | Health | 21-50 |
| 4 | Large | Engineering | 101+ |
| 5 | Large | Professional Services | 101+ |
| 6 | Small | Supplier | n/a |
| 7 | Large | Professional Services | 101+ |
| 8 | Small | Supplier | n/a |
| 9 | Large | Engineering | 101+ |
| 10 | Large | Engineering | 101+ |
| 11 | Small | Supplier | n/a |
| 12 | Large | Professional Services | 101+ |
| 13 | Large | Property and Investment | 101+ |
| 14 | Medium | Law | 21-50 |
| 15 | Large | Manufacturing | 21-50 |
| 16 | Small | Banking, financial services or insurance | 21-50 |
| 17 | Large | Professional Services | 101+ |
| 18 | Large | Government/Finance | 101+ |
| 19 | Large | Banking, financial services or insurance | 101+ |
| 20 | Large | Professional Services | 101+ |
| 21 | Large | Technology | 101+ |
| 22 | Large | Professional Services | 101+ |
| 23 | Large | Professional Services | 101+ |
| 24 | Large | Professional Services | 101+ |
| 25 | Medium | Engineering | 21-50 |
| 26 | Medium | Health | 21-50 |

Key

| <i>Organisation size</i> | <i>Number of employees</i> |
|--------------------------|----------------------------|
| Small | 0-1000 |
| Medium | 1001 - 5000 |
| Large | 5001 + |

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Table 3. Selection Stages and Applicant Numbers

Due to the high number of applications to graduate programs (frequently in the thousands), multi-stage processes are used to reduce the number of applicants to a more manageable level. Typical stages and assessment criteria are outlined in Table 2 below. The process commences around 12 months prior to the graduate beginning their first day on the job. To provide an indication of the level of competition, industry-wide figures show approximately 4% of applicants are offered a graduate role (AAGE, 2022).

| Stage | Selection Criteria | Applicant Numbers - Total Industry Numbers (AAGE, 2022) |
|------------------------------|--|---|
| 1. Initial Application | On-line application, usually completing a pre-set application form. Some organisations also request a resume and/or copy of academic record. Criteria assesses work rights, eligibility, date of graduation and relevant degree. Some forms have a short response section looking for involvement in extracurricular activities, part-time work, leadership roles and team participation. Some ask about motivation for application (“Why are you applying for this role?”). | 245,000 Total Number of Applicants. 114,000 (46%) will progress to the next stage. |
| 2. On-line Assessments | On-line assessments are used routinely after the initial application and consist of psychometric assessments – situational judgement, verbal and numeric reasoning are common and the tests are administered by an external organisation. Some organisations gamify the assessment, however they are still assessing the same criteria. Previous year’s graduate cohort inform the benchmark pass rates. | Only those eligible to proceed to the next stage will be provided the links to the on-line assessments. Numbers unavailable. |
| 3. Interview (video or call) | Assuming applicants receive the required grade, they progress to the interview stage. The interview is either a video recorded response to pre-set questions, or a video call (using software like MS Teams) with an ECP. The criteria of verbal communication skills, range of experiences, leadership roles, responding to challenges and motivation for applying are assessed at this stage. | Depending on the results of the on-line assessments, applicants will proceed to the interview stage. Numbers unavailable. |
| 4. Assessment Center | Following the interview, successful candidates will be invited to attend an assessment center. During Covid, assessment centers were held on-line but most organisations have transitioned back to in-person events (or can be offered in a hybrid format). Assessment centers are usually held in city locations (organisations office or hired function rooms) and are half or full-day events assessing collaboration, presentation, confidence and communication skills. | Assessments centers are time intensive and costly. People invited to an assessment have a high chance of receiving an offer. Numbers unavailable. |
| 5. Final Interview | Final interviews often happen on the same day as the assessment center and are typically less formal meetings with the line/business manager. This interview is often referred to as the ‘cultural fit’ assessment. | 22,000 invited to final stage (19%) |
| 6. Job Offer | | 10, 000 offered a graduate role (4% of original applicants) |

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Stream 6
Leadership, Governance, and
Strategy
Abstract Only in Program

Unveiling the Truth: Women Leaders in Gendered Organisational Dynamics

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Unveiling the Truth: Women Leaders in Gendered Organisational Dynamics

ABSTRACT

This study delves into the mechanisms that sustain the glass ceiling in gendered organisations where one gender dominates. The study integrates interpretations of inclusiveness at a leadership level and legitimacy perspective to provide a comprehensive understanding of women's leadership in the gendered workplace. By conducting 50 interviews with women in management positions in law enforcement agencies in Australia and the US, this research takes a progressive approach to uncover how women perceive gender stereotypes in a gendered organisation, how they may ascend the corporate ladder, and the inclusive consequences that follow.

Keywords: Women leadership, gendered organisations, law enforcement, legitimacy theory

OVERVIEW

This study focuses on women in management positions at gendered organisations. We aim to examine the experiences of women occupying management positions within law enforcement. We look at perceived gender bias at individual, team and organisational levels to find the root of barriers to women leadership.

CURRENT UNDERSTANDING

The research findings indicate that despite significant efforts made by American and Australian law enforcement to promote the inclusion of women in leadership roles, the representation of women in senior positions remains low (Geiger, 2017). In 2021, the representation of women in law enforcement was meagre, with women accounting for 8.3% of police chiefs and less than 13% of all law enforcement officers in the United States (Gumbo, 2023). The corporate data reveals a similar pattern; despite comprising 58.4% of the US workforce as of September 2022, women continue to face a substantial gender leadership gap in the corporate realm, occupying merely 35% of senior leadership positions (Ariella, 2023). Similarly, as of March 2023, the representation of women in the Australian Federal Police's sworn workforce, including police officers and public service officers, stood at a mere 23.9% (AFP, 2023)

Inclusion within an organisation goes beyond statistical representation and encompasses an individual or subgroup's sense of value and true belonging (Bernstein & Bilimoria, 2013). While diversity and inclusion are often associated, diversity tends to be a superficial grouping based on gender, race, and other characteristics, which emphasises on tokenistic approaches that may prevail. On the other hand, achieving true inclusion requires extensive efforts to align all diversity efforts, create a sense of belonging and welcoming, and ensure that norms and values of inclusion are ingrained throughout the organisation (Sparkman, 2019). Superficial efforts can undermine the authenticity and impact of inclusion, potentially leading to negative experiences for individuals (Crisp & Turner, 2011). Entering and progressing through a male-dominated organisation is an uphill battle for women, particularly when reaching the upper echelons, which often function as exclusive fraternities. Britton (2000) argues that policies within these organisations are designed based on male attributes, effectively placing women in subordinate positions. Other researchers (i.e., Billing, 2011; Glass & Cook, 2020; Priola & Brannan, 2009) have observed similar patterns where the dominant male traits perpetuate the gendered hierarchy. The legitimacy perspective can explain gender bias in law enforcement.

RESEARCH QUESTION

1. How do women in leadership roles perceive and navigate gender bias within gendered organisations?
2. What are the contributing factors that perpetuate gender dominance within gendered organisations?

RESEARCH APPROACH

This study adopted a qualitative approach. Data was collected from 50 policewomen from Australia and the United States, consisting of 25 law enforcement officers each from Australia and the United States. The respondents had similarities, as they were mid to top-level women with managerial and leadership experience. They were on the cusp of career mobility, and their lived experience was a particular interest of this study. The respondents would have insights into the barriers and challenges they face in career

mobility. It was difficult to access respondents as policing remains a closed organisation, and snowballing sampling was applied to reach the respondents who volunteered to be part of the research. Semi-structured interviews were conducted with the respondents in their settings. The interviews were recorded to ensure accuracy, and where there was a query, the interviewer played back the recordings to ensure validity. The respondents were asked about their career perspective and their *place* in a gendered organisation. The recordings were transcribed professionally, and we used NVIVO software to categorise and organise the data for analysis.

Sample

Secondary data was collected through a questionnaire, which provided the demographic profile of the 50 respondents. As shown in Table 1, 92 per cent of interviewees had a university degree, and 92 per cent were above 40 years of age. 80 per cent of the participants had over 20 years of work experience in law enforcement, and 92 per cent were acting in a top management position.

Table 1. Demographic data

| Factors | Description |
|----------------------------|--|
| Education | <ul style="list-style-type: none"> • 17 respondents have a Post Graduate qualification. • 10 respondents have a Post degree Diploma. • 18 respondents have a Bachelor's qualification. • 1 respondent has a Graduate Certificate • 4 respondents have a Diploma |
| Policing Experience | <ul style="list-style-type: none"> • 40 respondents have more than 20 years. • 6 respondents have more than 15 years. • 4 respondents have more than 10 years. |
| Acting Capacity | <ul style="list-style-type: none"> • 4 respondents didn't have any higher-level duties exposure. • 46 respondents had higher-level duties in acting positions |
| Age | <ul style="list-style-type: none"> • 35 respondents aged between 40 – 49 years. • 11 respondents were above 50 years. • 4 respondents were between 30 -39 years. |

FINDINGS

The thematic analysis revealed that our participants perceived inclusion differently at individual and organisational levels. At the individual level, most interviewees reported a sense of belonging as their work was valued within a team environment. For instance, one interviewee working in American law enforcement stated, *“As long as you have things to offer, I believe you are a good asset.”*. Another example came from an Australian interviewee: *“You [as a woman] do a lot of things like running the field division and everything else. The tasks are divided up between you and your [male] counterpart.”*.

On the contrary, at the organisational level, interviewees were not comfortable with the perception of inclusion, and gender bias was an issue that they felt. One high-ranking officer put it in words: *“It is definitely more males at higher levels [leadership positions]; whether that is fair or not, I do not know. It is as it is over the years of watching”*. Another interviewee from the US who was a supervisor at a department expressed her frustration: *“Yes, you are the field supervisor; but you are not dealing with the agents yourself... I think some of it is that women are not seen as technical as men”*. Some interviewees suggested the gender-biased issue is nothing to do with the number of women in law enforcement. The source of the issue is the legitimacy perspective. For example, an interviewee from Australia reported, *“It is definitely men getting the promotions; it could be that there are a lot more male agents? I do not think so. There is nothing for women.”*. Similar statements were reported by American interviewees: *“They [leaders] feel they need to move the male around to fill the position [leadership position] rather than the women taking the lead.”*. Similarly, one reported: *“I am just tired, tired of not being a member of the club; I would have to start all over again; I kind of did that and carved out a place here. But it still is a boys’ club.”*

The analysis also revealed that women dealing with legitimacy issues would eventually seek alternative careers rather than pursuing their dreams in law enforcement.

CONTRIBUTION AND LIMITATIONS

This study contributes to the existing literature by providing a comprehensive understanding of gender bias within gendered organisations and investigating the perspectives of women

who have achieved top management positions at individual, team, and organisational levels. The findings indicate that gender bias is not overtly evident at the individual and team levels. Women in management perceived that they were respected and valued by their colleagues and immediate work groups. However, a more nuanced picture emerges as the analysis delves deeper into the organisational level.

At the organisational level, gender bias takes on a different form, transforming into a legitimacy issue. Despite individual successes and contributions, women encounter systemic barriers that impede their progress and prevent them from fully realising their potential. This legitimacy issue stems from deeply ingrained gender norms and preconceived notions about the suitability of women in leadership roles within traditionally male-dominated sectors (Lonsway et al., 2003). Legitimacy operates based on institutional logic, where social norms are unquestionably accepted and widely shared (Green & Li, 2011; Suddaby & Greenwood, 2005). Institutional theory validates organisational actions and decisions constructed by society (DiMaggio & Powell, 1983). In gendered organisations, bias becomes embedded over time, creating a normative framework shaped by historical patterns and a fraternity-like structure (Anthony, 2016; Acker, 2012; Edeltraud, 2012). Thus, in such workplaces, it becomes challenging for individuals and groups to foster diversity and inclusion or fully participate in organisational development and investment.

Our findings are consistent with Bernstein et al.'s (2013) discussion that explains the multilevel nature of inclusion, highlighting how individual attributes, such as race or gender, can influence deeper-level attributes and shape individual or group perspectives. At the macro level, this finding underscores the importance of managing diversity policies in organisations. Thus, achieving inclusion in organisations requires a multilevel and asymmetrical approach, considering various attributes and perspectives. Only through this comprehensive understanding can organisations foster more profound levels of inclusion, sustainability, and genuine appreciation of diversity.

There are limitations to this study as it only looks at policing - a para-military organisation and the

generalisation of the findings may, therefore, not necessarily apply to other gendered organisations. The 50 interviewees were selected through a snowballing method, often used in a challenging environment, and does not necessarily represent the wider population. Furthermore, there is no comparative context employed nor a cross-cultural examination between the United States and Australia, which remains beyond the scope of this study.

IMPLICATIONS

This study reports women's thoughts, experiences, and decision-making processes dealing with gender bias in law enforcement. While our results confirmed barriers women faced decades ago in gendered organisations, we found a relative change in the phenomenon. The recurring key theme that the respondents widely recognised was that the decision-makers must acknowledge the existence of legitimacy issues and accept the responsibility to shift the organisational subculture that legitimised male domination at the top. Our respondents also highlighted the underlying issue, which lies in the organisational systems, where the organisation did not clearly articulate how to promote staff; thus, the onus remained on the individual to seek development and progression, which makes it much harder for women to deal individually with legitimacy issues. In addition, recruiting more women will not necessarily solve the legitimacy and inclusion issue if the norms do not change. To resolve the legitimacy issue, decision-makers need to review and revise organisational policies to ensure they are gender-inclusive and provide equal opportunities for career advancement. This includes promoting transparent hiring and promotion processes that are free from biases.

Furthermore, creating official and formal mentorship programs that pair women leaders with the organisation's influential individuals can provide guidance, support, and advocacy for women's career development, helping to overcome the legitimacy issue. Another strategy to shift the male-dominant sub-culture includes forming supportive networks and affinity

groups within the organisation to provide women with a platform to share experiences, seek advice, and build professional connections. These networks can provide a sense of belonging at the organisational level and help overcome the isolation often associated with the legitimacy issue.

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Stream 2. Organisational Behaviour

An Organizational Aesthetics Approach to Fun in the Workplace

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An Organizational Aesthetics Approach to Fun in the Workplace

ABSTRACT: *The topic of fun in the workplace has captured the attention of managers and organizational scholars alike, not to mention working individuals around the world. However, most discussions of fun in the workplace tend to fall into the predominant rationalist perspective, focusing on employment engagement, organizational efficiency, and other outcomes that are argued to enhance organizational performance. In contrast, we embrace an organizational aesthetics-based perspective to explore “fun” and its epistemological significance, how it serves as a judgement criterion, its role in building connections, and the pursuit of fun as an aesthetic category for its own sake. We begin a conceptual discussion and propose a program of empirical research to better understand fun.*

Keywords: aesthetics, culture, fun, organizational aesthetics, organizational culture

Overview

The 1980s saw the emergence of an approach and associated scholarship around organizational aesthetics, contrasting the dominant positivist rationalist approach that focuses on maximizing organizational performance (Gagliardi, 2007; Strati, 1992). Organizational aesthetics entails the exploration of a fundamental part of the human experience of the organization, including “the way we perceive and feel reality and the sensory experience, giving rise to attraction and repulsion, pleasure and disgust, suffering and joy” (Gagliardi, 2007, p. 332). Since the introduction of this approach into organizational studies, scholars have examined aesthetic elements of a range of organizations, from call centers (e.g., Alferoff & Knights, 2003) to railway conglomerates (e.g., Kato, 2022a).

As will be discussed below, organizational scholarship that discusses fun in the workplace has largely followed the rationalist tradition. We acknowledge the legitimacy and importance of workplace fun as identified in performance-focused research, but we note that “fun” is a potentially important part of the human experience, particularly considering its conceptual link to terms in the definition quoted above (i.e., “pleasure” and “joy”). We therefore embrace the organizational aesthetics approach to explore the aesthetic value of fun to organizations, the people that comprise them, and society more generally.

Current understanding

In their discussion of the organizational aesthetics approach, Taylor and Hansen (2005) identified four conceptualizations of aesthetics as epistemology, criteria for judgements, connection, and categories. Aesthetics as epistemology focuses on sensing and feeling as a way of knowing, pointing to the idea of tacit (versus explicit) knowledge in organizational life. Aesthetics as criteria for judgements enables people to assign value to attributes, as is the case when one describes efficiency in organizational processes as “beautiful.” Aesthetics as connection comprises the idea that artistic endeavors and aesthetic qualities help individuals to express themselves as belonging to a social group (Taylor & Hansen, 2005). Professional or organizational language and particular work practices can fill this role in organizations (Taylor, 2020). Finally, people often think of the “beautiful” when discussing aesthetics. However, when considering aesthetics as categories, it is important to note that “beauty” is just one category of many (Taylor & Hansen, 2005), including the “sublime,” the “ugly,” the “sacred,” and others (Strati, 1992). Whereas rationalists in organizations have pursued efficiency and performance, aesthetics as categories motivates the pursuit of the beautiful, the sacred, etc., for their own sake (Taylor & Hansen, 2005).

Building on its anthropological and cultural roots, the identification, description, and analysis of artifacts is key to organizational aesthetics research (Gagliardi, 2006; Kato, 2022b). An artifact is “(a) a *product* of human action which exists independently of its creator, (b) *intentional*, it aims, that is, at solving a problem or satisfying a need, (c) *perceived by the senses*, in that it is endowed with its own corporality or physicality” (Gagliardi, 1990, p. 3; emphasis in original). Or, as Schein (1999, p. 15) more colloquially explained, artifacts are comprised of “what you see, hear, and feel as you hang around.” Thus, an organizational aesthetics approach, which explicitly embraces the human experience of the organization, must necessarily consider artifacts such as physical space, status differentiation, technology, furniture, office artwork and architecture, and policies and procedures (Bonavia, 2006; Gagliardi, 1990; Kato, 2022b; Schein, 1985).

While “fun” may be considered by many to be an important part of the human experience, organizational scholars have generally approached these constructs within the arguably narrow confines of a rationalist approach. Researchers have generally presented fun as a motivational force that increases engagement and performance (e.g., Becker & Tews, 2016; Georganta & Montgomery,

2022; Liu, 2019; Pisano, 2019; Tews et al., 2013, 2014; Tsaor et al., 2019). Furthermore, much of the scholarship on workplace fun has focused on the hospitality industry. Nevertheless, rationalist research provides important perspectives on what a fun workplace might entail and, toward an aesthetics-based approach, what artifacts might be important to consider.

For example, Xu and colleagues (2020) observe that hospitality employees who participated in their study report that social interactions with other employees, as well as workplace celebrations, tend to see their workplaces as being more fun. Tews and colleagues' (2015) survey study of hospitality workers similarly finds that social interactions and fun activities like office celebrations comprise fun, as do job responsibilities that individuals find enjoyable and managers who support fun. Others have suggested that fun work environments tend to feature not only celebrations and social events of various kinds, but also a long list of activities and elements, including games, friendly competitions, personal development opportunities, entertainment, and humor (Ford et al., 2003).

Research question

An aesthetics-based approach reveals a number of research questions around fun in organizational contexts. Most fundamentally, what is “fun” in the workplace? How do people know an experience to be fun? What artifacts signal and/or inspire such experiences? How do people make judgements about what is fun and what is not? What is the significance of fun to people, and how does fun connect individuals to each other, their organizations, and potentially other stakeholders of their organizations? Finally, acknowledging the extant literature on workplace fun and recognizing that the rationalist approach is a legitimate epistemological approach in its own right, how might these bodies of scholarship relate to and/or inform one another?

Research approach

In our research, we aim to explore fun as an aesthetic and examine workplaces that are considered to be fun. Our work to date is conceptual, and we intend to further our understanding through empirical research. This paper contains a discussion of our conceptual work. Any empirical work that we undertake will build upon this, but as a starting point, we intend to identify workplaces

that employees and outsiders generally consider to be “fun” and explore them through qualitative observation and interviews. Importantly, our work aims to focus on fun *workplaces*, which may or may not entail fun *work* or fun *jobs*, since managers and employees likely have more agency in creating and maintaining the former rather than the latter. To better understand this distinction and potentially complicated matters around workplace fun within our larger proposed research program, we hope to include a study of individuals and organizations involved in law enforcement, military emergency medical response, fire and rescue, and/or other work settings that are at times characterized by tragedy and other elements that lie in direct contradiction to what most would consider to be “fun.”

Findings

Our research program is still in its conceptual stages, so we do not yet have empirical findings to report. We expect that a thematic analysis of our observations and interviews will reveal underlying factors that both reflect and drive the human experience of fun in the workplace.

Contribution and Limitations

The idea of “fun” as an aesthetic category that holds value in its own right is consistent with what Rokeach (1973) describes as a terminal value, or a desirable end-state. This is in contrast to viewing “fun” as an instrumental value, or a *means* to a desirable end-state (Rokeach, 1973), as is the case in the positivist rationalist research described above. Regardless of the aesthetician’s desire to challenge the positivist rationalist paradigm, it remains dominant within management practice and drives a significant amount of management scholarship. However, the two views are not incompatible. As summarized above, rationalist approaches will note that fun workplaces can indeed be leveraged toward favorable organizational outcomes such as innovation and employee engagement. In order to translate to such outcomes, “fun” elements like psychological safety and an openness to experimentation and failure must be accompanied by such elements as employee competence and psychological capital, accountability, strong leadership, and trust (Georganta & Montgomery, 2022; Pisano, 2019; Tsaor et al., 2019), but these elements do not necessarily detract from the fun aesthetic,

and are even intertwined with fun itself in some conceptualizations (e.g., Tsaor et al., 2019). It is therefore entirely possible that the rationalist and the organizational aesthetician can simultaneously be satisfied, embracing “fun” as both a terminal *and* an instrumental value.

We also echo the point we previously made about the necessity in making a distinction between fun *workplaces* and fun *work* or *jobs*. For example, understanding that individuals in a unit of emergency medical technicians (EMTs) are likely to have a great sense of dignity, responsibility, and pride in their jobs and themselves, would they consider their work to be “fun?” And if individuals in that setting or any other do not find their work to be fun, can they nonetheless experience elements of a fun *workplace*? A program of research on fun in the workplace must therefore take care in answering such questions, untangling potentially complex feelings and experiences and treating all individuals, organizations, and work with the dignity and respect they deserve.

Implications

The organizational aesthetics perspective was largely established in response to the predominant rationalist approaches in both organizational practice and scholarship, and it seems that scholarship on fun in the workplace may follow this broader pattern. Drawing on Taylor and Hansen’s (2005) conceptualizations of aesthetics and adopting an organizational aesthetics approach can build on extant positivist research into workplace fun to reveal potential benefits for organizations beyond enhanced engagement and performance. If fun is intrinsically valuable, it may motivate the pursuit of fun workplaces, potentially enhancing human connections to one another, to their organizations, and to their work. Furthermore, embracing fun could be good for employees’ well-being, as evidenced by rationalist research suggesting that employees in fun workplaces feel less work-family conflict. This research hints at the aesthetic value of fun; fun enriches people’s lives in some way (Xu et al., 2020). In conclusion, to reiterate the likely compatibility of the rationalist and aesthetic approaches, we quote Taylor and Hansen (2005, p. 1216), who explain that “aesthetics for the sake of aesthetics (rather than in the service of instrumental goals) may be hugely important in the long run.” The pursuit of fun may indeed lead people to experience fun, satisfying the aesthetician; and the long-term consequences of this are likely to appeal to the rationalist.

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Stream 1. Human Resource Management

Quiet Quitting: Can it be Measured and What are the Antecedents?

Abstract: *Since the COVID-19 pandemic, there has been wide-ranging media attention on the phenomena of quiet quitting. This paper explores what quiet quitting is using organisational citizenship behaviours theory, how researchers might capture quiet quitting, and determining antecedents. Using a sample of 791 employees and 229 managers from New Zealand, antecedents include perceived organisational support (POS), organizational-based self-esteem (OBSE), work-life balance (WLB), meaningful work (MFW), and pay satisfaction. We find that quiet quitting can be captured and that it occurs towards both individuals and organisations and all antecedents are significantly correlated with quiet quitting. However, regression analysis shows that OBSE, POS and WLB are key for employees but MFW and pay satisfaction are key for managers. We discuss the implications.*

Keywords: Quiet quitting; perceived organisational support; organizational-based self-esteem; work-life balance; meaningful work; pay satisfaction.

Overview

Workplace quiet quitting is a phenomenon where an individual “does not literally quit one’s job, but rather simply does the work that is expected of the position, without going above and beyond what is expected” (Scheyett, 2022, p. 5). Quiet quitting has gained attention through social media since 2021 due to the increased use of social media (Khan, 2022) amidst the COVID-19 pandemic (Hamouche et al., 2023). The dynamic nature of COVID-19 (Díaz-Carri et al., 2020) has highlighted the notion of quiet quitting, which will likely have significant effects in the time to come (Formica & Sfodera, 2022). According to recent research, the phenomenon of quiet quitting is not a unique factor experienced by individuals (Formica & Sfodera, 2022). Previously, quiet quitting has also been referred to as *acting their wage* which encapsulates what efforts employees’ input into their work reflects what they expect will be given back to them (Kaplan, 2022). Quiet quitting is also explained in terms of psychological dimensions suggesting that employees stay at work and fulfil their job descriptions but do not psychologically engage at work and in turn detach themselves from this work by limiting their efforts (Constantz, 2022).

We argue that quiet quitting can be understood through organisational citizenship behaviours (OCBs) (Organ, 1988). Given quiet quitting relates to giving less or only what is expected in the job, this represents workers engaging in fewer OCBs than previously. Theoretically, under the Conservation of Resources (COR) theory (Hobfoll et al., 2018) this represents workers having fewer resources to manage workplace challenges, leading to fewer OCBs (i.e., quiet quitting). What is driving quiet quitting is unknown although through COVID-19 lockdowns, some workers had a natural reduction in

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productivity, for example, hospitality and tourism (Gordon & Sayed, 2022; Khan et al., 2022). Other potential drivers include fast-paced working environments requiring increased efforts to satisfy customer demands (Kalargyrou et al., 2023) suggesting issues around workload and WLB (Haar, 2013). Further, relatively low pay (Mohsin et al., 2022) and failure to meet the current living cost crisis (Guan et al., 2023) represent resources under COR theory that can be likely drivers.

Current understanding

According to some, in June 2022, 50% of the workforce could be classified as ‘quiet quitters’ (Constantz, 2022). Reports from third-partner sources, suggest quiet quitter frequencies range from 26% of the workforce (ResumeBuilder, 2022) to 63% (Kelowna Now, 2022). However, these studies often ask simple questions like ‘Have you engaged in quiet quitting?’ without even defining the meaning. Further, little is known about the antecedents of quiet quitting, and we draw on several literatures to test potential effects on fewer OCBs. First, we explore POS (Kurtessis et al., 2017), which reflects employee perceptions of how much their organisation cares about their wellbeing, with strong meta-analytic support (Kurtessis et al., 2017). Next, OBSE is defined as “the degree to which organisational members believe that they can satisfy their needs by participating in roles within the context of an organisation” (Pierce et al., 1989, p. 625). High OBSE individuals have a positive attitude toward their work tasks and goals and consider themselves as valuable resources which positively reflects in their sense of citizenship (Rank et al., 2009). Positive relationships have been found between high OBSE and performance (Gardner et al., 2015) including OCBs (Haar & Brougham, 2016).

We also explore WLB because this is linked to balancing work and non-work roles (Haar, 2013) and this aligns with quiet quitting arguments around demanding work. Next, we suggest that MFW may play a role, whereby workers have purpose and freedom (Ghafoor & Haar, 2020) and thus might not actively engage in quiet quitting if they have greater MFW. Finally, an employee may disengage due to perceptions of lower pay, the links between pay and extra-role behaviours have been explored (e.g., Vandenberghe & Tremblay, 2008).

Our antecedents align with COR theory, defined as “a motivational theory that explains much of human behavior based on the evolutionary need to acquire and conserve resources for survival”

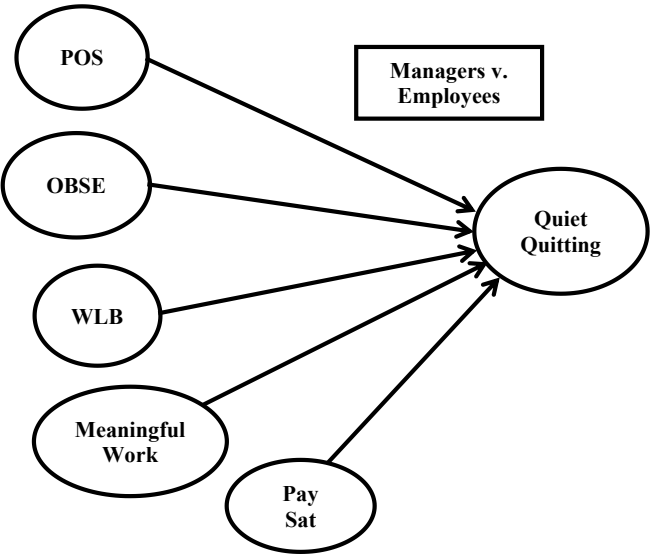
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(Hobfoll et al., 2018, p. 104). Principle 2, the resource investment principle suggests that employees “must invest resources in order to protect against resource loss, recover from losses, and gain resources” (p. 106). Thus, employees who “work to rule” and don’t take on extra burdens are conserving their resources, which might represent quiet quitting. Based on this, we offer the following hypotheses and study model noted in Figure 1.

Hypotheses

- Hypothesis 1. Perceived organizational support (POS) will be negatively related to quiet quitting.*
- Hypothesis 2. Organizational-based self-esteem (OBSE) will be negatively related to quiet quitting.*
- Hypothesis 3. Work-life balance (WLB) will be negatively related to quiet quitting.*
- Hypothesis 4. Meaningful work will be negatively related to quiet quitting.*
- Hypothesis 5. Pay satisfaction will be negatively related to quiet quitting.*

Figure 1. Study Model



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Research approach

Data were collected using a Qualtrics panel on a sample of 791 employees and 229 managers from New Zealand in late 2022. On average the participants were 66.8%/44.1% females (employees/managers), 38.4 years old (SD=8.5) employees and 40.1 years (SD=7.0) managers. By sector (employees/managers): 51.3%/56.8% private, 43.2%/38.9% government, and 5.4%/4.4% not-for-profit. Measures (employees/managers): POS (4-items, $\alpha=.92/.92$), OBSE (5-items, $\alpha=.87/.88$), WLB (3-items, $\alpha=.89/.90$), MFW (3-items, $\alpha=.92/.93$), and pay satisfaction (single-item). Quiet quitting was captured asking individuals whether they engaged in OCB items less, similar, or more, than the last year. We focus on those doing ‘a lot less’ or ‘a bit less’ to be quiet quitters. EFA for quiet quitting was found to split into individual and organizational dimensions (3-items, $\alpha=.84/.82$ individual dimension, 3-items, $\alpha=.72/.78$ organisational dimension). Overall CFA in AMOS found good properties (e.g., CFI=.95) and the metric invariance test showed the two samples did not vary. Analysis was hierarchical regression analysis in SPSS, controlling for age, gender, and income, with the IVs being POS, OBSE, WLB, MFW, and pay satisfaction, and quiet quitting individual and organization as DVs.

Findings

Quiet quitting targeting individuals is low at 12% for both employees and managers. But quiet quitting targeting the organization is more common: 31%/23% for employees/managers (significant different $p<.001$). Regression analysis found that for quiet quitting targeting individuals only MFW was significant for both employees and managers. Regression analysis found that quiet quitting targeting organisations for the employee sample, POS, WLB, and MFW were all significant. For the manager sample, only MFW and pay satisfaction were significant.

Contribution and Limitations

The present study seeks to investigate a recent phenomenon around quiet quitting, an area that has had limited research exploration despite strong popular discourse. We built our measure of quiet quitting on OCBs and found two distinct forms, with that targeting the individual quite rare (12%). Targeting the organisation, we find much more quiet quitting especially amongst employees (31%). Our study of

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antecedents aligns with OCBs (Organ, 1988) capturing quiet quitting, with workers simply ‘doing less’ of these extra work behaviours. Thus, roughly one-third of employees did engage in fewer helping behaviours in 2022 compared to 2021, although this was much low towards co-workers. Thus, an individual’s ability to ‘quietly quit’ is affected by the target. It appears that people more readily ‘switch off’ extra helping behaviours towards the organisation (e.g., representing the firm after hours) than refusing to help a co-worker with too much work to do. This suggests a ‘human element’ to quiet quitting, whereby it is easier to disengage with the business than a co-worker.

Only MFW was found to link negatively to quiet quitting individual, showing employees and managers with more resources (via MFW) appear best resourced to not engage with quiet quitting. Towards organisational quiet quitting, we find distinct antecedents between our samples. While again MFW is important for both groups, POS and WLB were also important for employees, while only pay satisfaction was additionally important for managers. Thus, the drivers of quiet quitting appear to differ. A research limitation might be fixed by conducting longitudinally to limit common method bias and capture the change in quiet quitting.

Implications

Organisations and leaders need to understand that positive workplaces (POS) help shape MFW which is the core antecedent for less quiet quitting irrespective of the target (individual versus organisation) for both employees and managers. Greater support can provide workforces with greater resources to fully engage in positive work behaviours.

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Stream 4. Gender, Diversity & Indigeneity

Tuakiri takitahi, takirua rānei? The prevalence and work-related outcomes of mono Māori versus dual Māori/Pākehā identities in Aotearoa workplaces

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Stream 4. Gender, Diversity & Indigeneity

Tuakiri takitahi, takirua rānei? The prevalence and work-related outcomes of mono Māori versus dual Māori/Pākehā identities in Aotearoa workplaces

Abstract: Despite growing attention to Māori employees' experiences, such research typically assumes that Māori and Pākehā are mutually exclusive ethnic identities, overlooking the fact that many Māori also identify as Pākehā. Currently, we lack answers to two key questions about Māori employee identities: (1) what is the prevalence of Māori who identify as only Māori (mono identifiers) versus both Māori and Pākehā (dual identifiers)? and (2) Do these groups differ on outcomes? Using panel data from 305 Māori employees, we find a roughly equal split in terms of mono and dual identity prevalence. In terms of work outcomes, mono identity Māori reported higher cultural wellbeing than dual identity Māori, but also higher perceived discrimination, job depression, and job stress.

Keywords: Māori; identity; work experiences; mono identifiers; dual identifiers.

Overview

There is growing attention to the workplace experiences of Māori employees in Aotearoa New Zealand, including their unique cultural demands (Haar & Martin, 2022) and leadership experiences (e.g., Spiller et al., 2020; Haar et al., 2019). Management scholars have further argued that Māori have different workplace experiences (e.g., Spiller et al., 2020; Haar & Martin, 2022), with empirical evidence backing these assertions (e.g., Haar & Brougham, 2016; Haar et al., 2014). These differences are often attributed to unique cultural values of Māori including the importance of *whakapapa* (genealogy) (O'Connor & MacFarlane, 2002) and having a collectivistic orientation (Haar et al., 2014, 2019; Brougham & Haar, 2013).

Across this research to date, however, the complexities surrounding Māori identity and its potential workplace implications are yet to be acknowledged, let alone thoroughly explored. Specifically, researchers commonly approach Māori employees in their empirical studies as a mutually exclusive (identity) group from Pākehā employees (i.e., New Zealanders of European descent) – an assumption that does not reflect the more complex reality. Indeed, in the most recent New Zealand census, just 46% of those who identified as ethnically Māori identified as *exclusively* Māori, with the remainder (i.e., over half) *also* identifying with at least one or more ethnic group other than Māori (Stats NZ, n.d.). To better account for this more complex reality, we set out to explore how identifying only as Māori (mono identity) might lead to different workplace experiences and downstream outcomes relative to identifying as both Māori and Pākehā (dual identity).

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Current understanding

Identity is a topic of enduring interest for management and organizational scholars (e.g., Ashforth & Mael, 1989; Ashforth, Harrison, & Corley, 2008). Within this literature, the workplace has long been acknowledged as both a source of identity (e.g., Sluss & Ashforth, 2007; Walker & Caprar, 2020), as well as an arena where people's established identities (e.g., gender, ethnic, and cultural identities) are enacted (Ramarajan & Reid, 2013), refined, threatened (Petriglieri, 2011), and sometimes even lost altogether (Conroy & O'Leary-Kelly, 2014). In terms of cultural identities specifically, much research over the past two decades has considered the many ways people negotiate multiple identities as part of being bi- or even multi-cultural individuals (e.g., Benet-Martínez & Haritatos, 2005; Vora et al., 2019), as well as the workplace implications of these cultural identities (e.g., Caprar, 2011). While cultural identity has been noted as central to many Māori (Greaves et al., 2015), and as potentially having significant workplace implications (e.g., Brougham & Haar, 2013), there has been surprisingly little research exploring these implications in a direct and substantive way.

How, then, might identifying only as Māori (mono identity) lead to different workplace outcomes relative to identifying as both Māori and Pākehā (dual identity)? We propose two theoretical mechanisms to answer this question, the first concerning *identity-verifying behaviour*, and the second concerning *identity visibility*. In terms of *identity-verifying behaviour*, self-verification theory holds as its central premise that individuals typically strive to behave in ways that confirm their identities, and/or elicit such confirmation from others (Swann, 2011). In relation to performance-based identities, for example, Walker and Caprar (2020) argue that individuals who identify as top performers will strive to confirm this identity by performing at high levels and seeking positive performance feedback from others. This aligns with previous research showing a link between identity centrality and self-verification behaviour (Swann & Pelham, 2002). We suggest that behavior aimed at verifying one's Māori identity will typically be more frequent and pronounced amongst mono relative to dual identifiers, by virtue of Māori identities being more central (on average) to mono identifiers' self-concept. In practical terms, this means that mono identifiers will tend to be more vocal about their Māori identities, as well as Māori issues, inequities, and perspectives in their workplaces – behaviours that can make their workplace experiences especially challenging. While perceived workplace

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discrimination of Māori generally has been found to be highly prevalent (e.g., Haar, 2023), we argue, that perversely, discrimination will be higher for mono identifiers, because their vocal assertion of their Māori identity is likely to make them a target for others. Such experiences will in-turn be psychologically draining and result in poorer mental health (i.e., higher job stress and job depression), and lower job satisfaction for mono identifiers.

We also suggest that differences in the *visibility* of Māori identity between mono and dual identifiers is helpful for understanding downstream differences in work outcomes. Owing to their Pākehā whakapapa and its impact on their physical appearance (e.g., lighter skin, European facial features), we suggest that dual identifiers as a group are both less likely to be seen as Māori by coworkers, and also have more scope than mono identifiers to choose if (or when) they disclose or express their Māori identities at work (see the notion of “passing” from the stigma literature (DeJordy, 2008)). We would expect this relatively lower (Māori) identity visibility to mean that, compared to mono identifiers, dual identifiers as a group experience less racism and discrimination in their workplace, as well as fewer Māori-related demands on their time and capacity (e.g., not being asked to facilitate whakatau or pōwhiri [traditional welcomes] for visitors, see Haar and Martin’s (2022) notion of *cultural double-shifts*), resulting in lower levels of job stress and job depression, and higher levels of job satisfaction. A potential drawback of the reduced visibility of dual identifiers’ Māori identity, however, is that, by virtue of others not knowing they are Māori, they are offered fewer opportunities for cultural connection and development within their workplaces (e.g., being overlooked for inclusion in Māori staff networks or wānanga), leading to lower cultural well-being relative to mono identifiers.

Research questions

What proportion of Māori employees identify as only Māori (mono identifiers) versus both Māori and Pākehā (dual identifiers)? Relative to dual identifiers, do mono identifiers experience more workplace discrimination, higher job depression and job stress, lower job satisfaction, but greater cultural wellbeing? What are the different demographic characteristics of mono and dual identifiers?

Research approach

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Using a Qualtrics panel, we sampled 305 Māori employees in 2022. Respondents came from a broadly representative spread of Aotearoa (geographically), with 64% females, average age 35.3 years ($SD=10.9$), 30% being managers, and well spread across sector: 49.5% private, 32.8% government, and 17.7% not-for-profit. Respondents were well spread across career stage, education, and firm size. We determined whether respondents identified as only Māori or both Māori and Pākehā via their self-reported ethnicity. Measures of dependent variables included perceived workplace discrimination (10-items, $\alpha=.94$), cultural wellbeing (4-items, $\alpha=.86$), job depression (3-items, $\alpha=.93$), job stress (single-item), and job satisfaction (3-items, $\alpha=.85$). Several demographic and organisational variables were also collected.

Analysis included t-tests to identify significant differences between mono and dual identifiers. Further, t-tests and ANOVA were conducted on mono vs. dual identifiers by gender, managerial position, sector, education, self-reported centrality of Māori culture, and career stage.

Findings

We find 45.9% of respondents in our sample identify themselves as mono identifiers (Māori only). Consistent with our predictions, this group report significantly higher ($t=3.332$, $p<.001$) perceived workplace discrimination ($M=2.51$ v. 2.15) compared to dual identifiers, as well as higher ($t=2.687$, $p=.008$) job depression ($M=2.04$ v. $M=1.70$) and job stress (60% v. 54%). Also consistent with our predictions, mono identifiers report higher ($t=3.659$, $p<.001$) cultural wellbeing than dual identifiers ($M=3.98$ v. 3.63). There is no difference in job satisfaction by identity.

Additional analysis found a significant effect from gender ($t=3.772$, $p<.001$) with male Māori (62%) more likely to be mono identifiers than female Māori (40%). Managers are significantly more likely ($t=3.068$, $p=.002$) to be mono identifiers (61%) compared to employees (42%). There was no significant difference across education or sector (both $p>.05$). The centrality of Māori culture is significantly different ($F=13.324$, $p<.001$) with those in agreement being more likely (59%) to identify as mono versus those who are neutral and disagree (20%). Finally, career stage is significantly different ($F=4.388$, $p<.001$) with early career stage significantly lower on mono identity (36%), compared to mid-career (53%) and late-career (56%).

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Contribution and Limitations

The present study sought to better account for the often-complex identities of Māori employees, specifically in terms of whether they identify only as Māori (mono identifiers), or as both Māori and Pākehā (dual identifiers). In near perfect alignment with the findings of the most recent New Zealand census (Stats NZ, n.d.), almost half the sample identified as Māori only, with the remainder identifying as both Māori and Pākehā. Importantly, we also developed and tested two initial theoretical mechanisms linking these different Māori identity configurations to downstream outcomes. The first of these mechanisms concerns differences in identity-verifying behaviour, which we broadly predicted would lead to mono identifiers experiencing more discrimination and workplace stress than dual identifiers, by virtue of having more central Māori identities. Our results generally support this prediction. The second mechanism concerns differences in identity visibility, which we broadly predicted would lead to dual identifiers encountering less discrimination and fewer Māori-related workplace demands (resulting in less work-related stress), but also fewer opportunities for cultural connection relative to mono identifiers. Our results also generally support this prediction.

Taken together, our theorizing and results provide important initial insights into the complexity of Māori employees' identities and their workplace implications. In doing so, they also highlight the more general importance of acknowledging and studying within-group variability amongst Māori employees, both in terms of their ethnic and cultural identities, but also potentially other factors as well (e.g., socioeconomic status, political views, spirituality). We encourage further empirical explorations in this respect.

Limitations are that data is single sourced, but given identity was self-reported and not likely to directly influence answers, we do not think arguments around common method variance apply here. We also used personal and firm demographic variables to assess levels of mono versus dual identity. Future research might extend this to use mono identity (versus dual identity) as a moderator to determine whether the detrimental effects of factors such as workplace discrimination on wellbeing differ across identity groups.

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Implications

Implications for Māori include the recognition that a mono identity might have a dual-edge effect, enhancing one's cultural wellbeing but at the risk of poorer mental health and greater discrimination. That said, a positive reaction for mono identity Māori might be to gather more Māori of a similar disposition (mono identity) to them to create stronger teams or broad workgroups that align similarly. This might offer additional benefits.

Organisational implications include highlighting the importance and potential detrimental effects of mono identity and thus organisation's need to be aware of this. In addition, aligned with the findings of Haar (2023), perceived discrimination is very common, with only 8.5% of all Māori reporting no discrimination at all. This did not differ by mono or dual identity. However, given over 90% of Māori report discrimination and the links are supported towards poorer wellbeing (see Haar, 2023) it is incumbent on organisation's to better support their Māori workers.

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Omnichannel Retailing: Analyzing the challenges and possible remedies

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Omnichannel Retailing: Analyzing the challenges and possible remedies

ABSTRACT: *The omnichannel retail model can provide an edge and act as a tool for survival in today's competitive market as it helps to respond to some of the challenges of a constantly evolving business environment. However, the execution of this model itself poses various other challenges due to the associated complexities. Thus, we have attempted to analyze studies on omnichannel retailing by using the SPAR-4-SLR method. A total of 252 articles from SCOPUS-indexed and ABDC-listed journals were used to ensure the quality of the review. We have developed a conceptual framework to provide a comprehensive view of omnichannel retailing and to guide future research studies.*

Keywords: Omnichannel retailing, customer behaviour, channel integration, technology, SPAR-4-SLR systematic literature review

INTRODUCTION

Several studies published over the preceding decade have suggested that retailers embrace an omnichannel business model to succeed in this ever-changing business environment (Hübner, Hense, & Dethlefs, 2022; A. Nguyen, McClelland, Hoang Thuan, & Hoang, 2022). With increased internet penetration and smartphone usage, the omnichannel model has matured in demand, especially after the COVID-19 pandemic. Being omnipresent allowed businesses to operate despite the global lockdown during COVID-19. It aided firms in adjusting to and functioning through Internet channels by routing merchandise from offline stores to meet online channel orders (Salvietti, Ziliani, Teller, Ieva, & Ranfagni, 2022). As a result, the omnichannel model gained more priority, compelling retailers to consider this seriously and invest faster to develop it.

However, increased competition, lower profit margins and decreased cash flow give rise to dilemmas while prioritizing a retailer's efforts and resources while embracing an omnichannel model (T. Li, Xie, & Zhong, 2022). This in-depth literature review facilitates an understanding of involved variables and identifies where retailers struggle to operate an omnichannel business model. Additionally, our comprehensive conceptual model of omnichannel retailing will guide researchers in undertaking future studies.

Abundant literature reviews can be found on omnichannel retailing; however, there has been an absence of a review paper focusing on the specific challenges for retailers due to embracing this business model (Asmare & Zewdie, 2022; Mishra, Singh, & Koles, 2020; Wolf & Steul-Fischer, 2022). However, a

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few researchers have discussed the challenges of omnichannel retailing from the supply chain perspective (de Borba, Magalhães, Filgueiras, & Bouzon, 2020; Taylor, Brockhaus, Knemeyer, & Murphy, 2019). Thus, two hundred fifty-two previously published studies on the critical components of the omnichannel retail model were aggregated, examined, and integrated using Scientific Procedures and Rationales for a systematic review (SPAR-4-SLR) (Paul, Lim, O'Cass, Hao, & Bresciani, 2021). It provides insights into challenges associated with omnichannel retailing and creates agendas for knowledge advancement.

OBJECTIVES OF RESEARCH

Though Rigby used the term "omnichannel" (2011), Brynjolfsson, E., Hu, Y. J., and Rahman, M. S. (2013) proposed an omnichannel approach to benefit from both online and offline markets. Moreover, omnichannel retailing gained more prominence in research during and after COVID-19, with businesses advised to shift away from the pure-play offline model to survive the challenging business environments. Thus, it will be interesting to look at how omnichannel retailing has evolved from its early days till date. It will also aid retailers in figuring out how to utilize the omnichannel model while maintaining the worth they've built for customers.

The following research objectives were identified for this study:

- To provide a comprehensive yet brief summary of the current state of research on omnichannel retailing
- To identify glaring research gaps in omnichannel retailing
- To propose a conceptual working framework for omnichannel retailing in order to provide direction to future studies

RESEARCH METHODOLOGY

This paper uses SPAR-4-SLR (Paul et al., 2021) to systematically review all relevant studies published after Brynjolfsson *et al.* (2013) highlighted the competition between online and offline stores and suggested ways in which technology could enable businesses to capitalize on both. The SPAR-4-SLR

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methodology was chosen to showcase observational results transparently and logically. In addition, it emphasizes pragmatic and logical considerations for determining future research agendas.

It consists of three stages: (i) *assembling* involves identifying and acquiring literature; (ii) *arranging* purifies the literature synthesis; and (iii) *assessing* includes evaluation and reporting the synthesized literature. Based on this, the methodology adopted for this study is visualized in Figure 1.

Insert Figure 1 Systematic literature review methodology adopting SPAR-4-SLR approach (Paul et al., 2021)

Assembling

Identification of literature

This study uses Paul and Criado's (2020) topic selection method. According to the technique, a literature review should emphasize the topic's relevance and freshness, be unpublished, and present new perspectives. There are many literature evaluations on omnichannel retailing, but none of them have focused on retailers' pre- and post-implementation issues that, too, a whole business model.

Acquisition of literature

Using the method depicted in Figure 1, we searched SCOPUS (the most extensive database) for articles containing the keywords "omni channel," OR "omni-channel," OR "omnichannel", OR "Omni channel," OR "Omni-channel," OR "Omnichannel" in connection with "retailing," OR "Retailing". This search identified 444 peer-reviewed journal articles, conference proceedings, book chapters, and lecture notes.

Arranging

Organizing

The bibliometrics of the 444 articles, including (journal articles, conference proceedings, book chapters, and lecture notes) was then organized to represent the articles' titles, year of publication, journal

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names, and keywords. Concurrently, Vos-viewer was applied to the bibliometric data of 444 articles to generate a keyword co-occurrence network (KCN) for knowledge mapping.

Figure 2 demonstrates that studies have concentrated on customer engagement, consumption behaviour, webrooming, showrooming, digital marketing, pickups, logistics, order fulfilment, and inventory control, emphasizing integration and service quality across multiple channels.

Insert Figure 2 Omnichannel retailing KCN map highlighting research hotspots

Purification

According to the exclusion and inclusion criteria illustrated in Figure 1, 252 English peer-reviewed journal articles indexed in SCOPUS and ranked by the ABDC journal quality list 2021 on omnichannel retailing in business management were selected for the study.

Assessing

Evaluation

The 252 publications were analyzed for crucial findings such as bibliometric information, research gaps, and directions for future study—subsequently, the antecedent-decision-outcome framework assisted in laying the groundwork for the omnichannel retail model's flow.

Reporting

In this stage, we analyzed the bibliometrics of these 252 peer-reviewed and ABDC-indexed journal articles to determine the state of knowledge regarding omnichannel retailing.

Peer-reviewed journals about Omnichannel retailing distributed across time

Figure 3 demonstrates that there has been continuous growth in the publication of studies in omnichannel retailing since 2011. The maximum number of articles published in omnichannel retailing was in 2022. The year 2023 represents the total number of articles published until May 2023.

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Insert Figure 3 Year-wise frequency distribution of articles

Peer-reviewed journals about Omnichannel retailing distributed ABDC journal quality list

Table I indicates the quality of journals, based on the ABDC list 2021, in which the 252 papers considered for this study have been published.

Insert Table 1 Categorization of Articles based on ABDC journal category

Journals of Publications

Articles on omnichannel retailing have been published in 70 different journals since 2013. Among these 70 journals, the International Journal of Retail and Distribution Management has published the most (31), followed by the Journal of Retailing and Consumer Services (25). Apart from this, the European Journal of Operational Research (11), the International Journal of Physical Distribution & Logistics Management (10) and the International Journal of Production Economics (10) have also provided significant scope for the publication of articles on omnichannel retailing.

Research Approach and Methods

Furthermore, Table 2 indicates that a significant number of quantitative studies are available in omnichannel retailing. However, mixed-method and qualitative studies are comparatively fewer in number.

Table 2 Distribution of articles according to research approach and methods

Theories applied

In the selected articles for this study, we found mention of more than a hundred theories. These theories helped researchers in explaining omnichannel customer behaviour, the effect of channel integration (Le & Nguyen-Le, 2020), randomized pricing or optimizing promotions (Blom, Lange, & Hess, 2017) or synchronized digital marketing tactics (Frishammar, Cenamor, Cavalli-Björkman, Hernell, & Carlsson, 2018; Fulgoni, 2014) on the consumers' final behavioural outcomes. Some of these theories also assisted

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researchers in examining the ecosystem of omnichannel supply chains (Davis-Sramek, Ishfaq, Gibson, & Defee, 2020; Galipoglu, Kotzab, Teller, Yumurtaci Hüseyinoglu, & Pöppelbuß, 2018).

Omnichannel retailing research has made extensive use of the "technology acceptance model" (Herrero-Crespo, Viejo-Fernández, Collado-Agudo, & Pérez, 2020; E. Kim, 2021; Schrage, Meißner, Schütte, & Kenning, 2022), "theory of reasoned action" (Xun Xu & Jackson, 2019; Yurova, Rippé, Weisfeld-Spolter, Sussan, & Arndt, 2017), "the stimulus, organism, and response framework" (Cheah, Lim, Ting, Liu, & Quach, 2022; Itani, Loureiro, & Ramadan, 2022; Lazaris, Vrechopoulos, Sarantopoulos, & Doukidis, 2022; Shankar, Gupta, Tiwari, & Behl, 2021; Sicilia & Palazón, 2023; Ürgüplü & Yumurtaci Hüseyinoglu, 2021), and "game theory" (Fang, Liu, Cai, & Tan, 2023; He, Xu, & Shao, 2021; He, Xu, & Wu, 2020; Jena, 2022; Jena & Meena, 2022b; Jin, Caliskan-Demirag, Chen, & Huang, 2020; Kusuda, 2022; L. Liu, Feng, Xu, & Deng, 2020; Wang, Nan, Kou, & Li, 2023; Wei & Li, 2020; Xiaoping Xu, He, & Fan, 2022; T. Zhang, Li, Cheng, & Shum, 2020; Z. Zhang & Wen, 2023).

HOW DID WE ANALYZE OMNICHANNEL RETAILING USING A CONCEPTUAL FRAMEWORK?

The antecedent, decisions, and outcomes framework inspired the development of the omnichannel business model's conceptual flow (Paul & Benito, 2018). It helped establish the impact of various antecedents (key factors and barriers) on decisions regarding implementing channel or service integration and achieving inventory optimization to increase sales, profitability, and consumers' propensity to purchase. Figure 4 demonstrates the process flow of the omnichannel retail model involving its various components, such as customers, channel integration, technology, supply chain and operations management. Variables of these components are the focal points which need attention to help create a successful omnichannel strategy.

Figure 4 Conceptual process flow of omnichannel retailing considering strategic decisions and outcomes

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Customer imperative

Customers are the omnichannel model's most unpredictable and central component, depicted in Figure 4. Today's customers are not concerned with the number of available channels (Chen, Yeh, Wu, & Deng, 2023); instead, they place a higher value on their experiences using those channels, whether about delivery (Natarajan, Ramanan, & Jayapal, 2023), after-sale service, or engagement with salespeople. A single negative interaction amplified by word of mouth on social media has the potential to substantially damage the reputation that the retailer has built up over the years (Flavian, Gurrea, & Orús, 2021; Kluge, Schmid, Silliman, & Villepelet, 2021). Thus, researchers must focus on understanding the various aspects of omnichannel experience (OCX) to meet the customers' expectations (Becker & Jaakkola, 2020; Gahler, Klein, & Paul, 2022).

Consumers no longer follow a linear path from product/service discovery to product/service delivery; thus, retailers/brands must take the time to understand their consumers' unique purchasing habits before designing an effective OCX (Kuehnl, Jozic, & Homburg, 2019). For instance, they can divide consumers into subsets based on the similarities in their purchasing journeys or identify the common ground where the two journeys diverge and concentrate on improving that area. Further, OCX can also be improved by designating service representatives based on the emotions elicited by multiple touchpoints (Sicilia & Palazón, 2023).

Moreover, businesses need a deep familiarity with their required level of personalization, platform synergies, the volume of customers completing comparable purchase journeys and situational factors (Massi, Piancatelli, & Vocino, 2023; Shi, Wang, Chen, & Zhang, 2020). Thus, future researchers should work on the following questions:

Q. How do product availability and quality assurance information affect the omnichannel shopping experience (Tran Xuan, Truong, & Vo Quang, 2023)?

Q. What do customers value most in an omnichannel experience (Salviotti et al., 2022)?

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Q. Analyse the challenges of providing an omnichannel customer service experience (Asmare & Zewdie, 2022).

Channel integration imperative

It is emphasized that channel integration (Figures 2 & 4) is crucial for retailers to provide a unified online-offline customer experience (Mirzabeiki & Saghiri, 2020; Yen, 2023). Retailers are required to integrate data across their websites, mobile apps, physical stores, and social media channels (Y. Li et al., 2018) to display available products, their delivery time, and offered prices (S. Kim, Connerton, & Park, 2022; Joonyong Park & Kim, 2019), and to provide customers with a wide variety of channel options to choose from while protecting their privacy (Cheah et al., 2022; Y. Li, Liu, Lee, & Huang, 2020; Quach, Barari, Moudrý, & Quach, 2020). It is also required to prevent sales from being lost to competitors (Chung, Oh, & Kim, 2022). Consequently, the efficiency of an omnichannel model may be gauged by how efficiently it coordinates its marketing, sales, order processing, shipping, and refunding operations (Marchet, Melacini, Perotti, Rasini, & Tappia, 2018).

For instance, studies have shown that in the absence of proper integration between offline and online channels, customers experience frustration and may eventually leave. This may increase retailers' losses (Song, Fan, Tang, & Xu, 2021). Thus, it has been recommended to put high service effort, using in-store salespeople to discuss issues and solve them effectively and quickly (Z. Li, Wang, Yang, & Jin, 2022). Furthermore, randomized pricing/promotion and price matching techniques have been advised to keep customers from shifting to other retailers (Jiang, Liu, & Lim, 2020).

In addition, researchers have advised that omnichannel retailers can reap the most benefits from integration if they strike a healthy balance between information and fulfilment integration, as certain stores are limited in their ability to adopt both types of integration (Fang, Liu, & Li, 2021). However, new findings from Gasparin et al's (2022) research have cast doubt on the widespread belief among academics that

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businesses should integrate customer touchpoints to provide a seamless experience. Consequently, we propose the following questions for future research.

Q. What level of integration is acceptable to customers across nations having different cultural backgrounds and other demographics (Gasparin et al., 2022)?

Q. What are the most crucial aspects of a successful channel integration strategy (Fang et al., 2021)?

Technology imperative

There are six main applications for technology in omnichannel retailing: i) channel integration (Saghiri & Mirzabeiki, 2021); ii) seamless customer experience (Chiang, Huang, & Chung, 2021); iii) data analytics (Chiu & Chuang, 2021; Larson & Ferrin, 2021); iv) automation (Moriuchi, Landers, Colton, & Hair, 2020; Tagashira, 2022); v) demand forecasting (Omar, Klibi, Babai, & Ducq, 2023; Qiu, Ma, & Sun, 2023); and vi) optimization of the supply chain, fulfilment, and inventory management (Morenza-Cinos, Casamayor-Pujol, & Pous, 2019) to reduce overall expenses and increase operational resilience.

Implementing these applications is not without its difficulties. For instance, real-time data processing has serious privacy and security problems, including meeting all applicable data protection rules, establishing strong authentication and encryption techniques, and protecting data integrity (Ameen, Hosany, & Paul, 2022; Cheah et al., 2022).

In addition, the ever-evolving nature of technical advancements and customers' expectations presents significant challenges for omnichannel retailers seeking to provide a superior customer experience (Hoffmann, Joerß, Mai, & Akbar, 2022; Hsu, Tsou, & Chen, 2021). More research is needed to determine what technology to prioritize depending on the focused areas of value creation. For example, future research can be undertaken to explore the utility of augmented reality (AR) and artificial intelligence (AI) (Sung, Bae, Han, & Kwon, 2021; Verhoef, 2021) to overcome the challenges of online shopping or to understand the importance of machine learning to fine-tune the supply chain or fulfilment optimization strategies (Jisoo

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Park, Dayarian, & Montreuil, 2020; Qiu et al., 2023; Tagashira, 2022) or to investigate the benefits of automation for enhancing warehouse or inventory visibility. This will give rise to further questions, which may need in-depth investigation. Two such research questions are mentioned below.

Q. Examine how consumers in different countries respond to artificial intelligence, virtual reality, and augmented reality (Ameen, Hosany, & Tarhini, 2021)?

Q. How can retailers ensure integrity, fairness, and responsible data use in targeted advertising, pricing, and recommendations (Cui et al., 2021)?

Supply chain and operations imperative

Challenges concerning omnichannel supply chain and operations relate to fulfilment site planning, allocation of customer orders, assortment and inventory planning (Hübner et al., 2022; Shao, Lai, & Ge, 2022), among others. In addition, there are different aspects of configuration (A. T. Van Nguyen, Halibas, McClelland, & Thuan, 2023), integration, and cooperation (Djofack, Nkene Ndeme, & Fosso Wamba, 2021) that need attention to identify the optimal resource allocation (Salmani & Partovi, 2021) and to mitigate the performance risks while meeting consumer expectations based on their preferences and lifestyles (Gauri et al., 2021; C. Zhang & You, 2020). Integration enables smooth information flow across channels, aiding accurate forecasting, efficient order fulfillment, and collaborative decisions. Meanwhile, coordination harmonizes channel efforts, enhancing customer experiences, enabling cross-channel promotions, and optimizing resource allocation based on strengths and preferences. This approach fosters agility, efficient resource use, prioritizes customer satisfaction, and adeptly addresses market shifts.

For instance, cross-channel fulfilment and pricing transparency allow inventory to be shared between channels, encouraging price-based channel substitution (Zhou, Zhang, Zhong, Cao, & Cheng, 2021). So, it becomes difficult for retailers to work on pricing optimization algorithms because of advanced interactions and cross-channel integration. Besides, administering a return channel (buy-online-return-in-store, i.e. BORS or returning to a physical store, i.e. BORP) is quite challenging for retailers because of

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product restocking, additional transportation costs, and poor communication (de Borba et al., 2020). Thus, researchers have suggested that businesses should only apply BORS when both the return penalty and rate of return are low. Only then it be beneficial to the retailer in terms of attracting new customers (Yang, Li, Xia, & Aneja, 2023).

Aside from that, another emerging issue is focused on creating sustainable and environment-friendly omnichannel supply chains (Jena & Meena, 2022a). Sustainable supply chain management involves orchestrating material, information, and capital flows across the supply chain, embracing sustainable development goals encompassing economic, environmental, and social dimensions, aligned with the expectations of both customers and stakeholders (Seuring & Müller, 2008). Within these sustainable supply chains, the fulfillment of environmental and social criteria becomes a prerequisite for supply chain members, harmonizing with the need to maintain competitiveness through economically viable practices catering to customer demands. This comprehensive framework amalgamates sustainability principles with supply chain management practices, while also accommodating the tenets of green/environmental supply chain management. Simultaneously, the ethos of Sustainable Supply Chain Management (SSCM) is marked by strategic, transparent integration of an organization's social, environmental, and economic aspirations (Carter & Rogers, 2008). This integration seamlessly extends to omnichannel supply chain operations, which have undergone a transformative journey – from identifying obstacles and establishing novel performance measurement frameworks based on sustainability, efficiency, effectiveness, responsiveness, and flexibility, to adopting a holistic perspective guiding triumphant strategies within omnichannel retail supply chains (Adivar, Hüseyinoğlu, & Christopher, 2019; Elias, Donadelli, Paiva, & Bacic Araujo, 2021). Additionally, the effect of cross-channel synergy on carbon reduction, production volume, manufacturers' revenues, and marketplace platforms has been investigated (Stojković, Dokić, Vlacic, & Silva, 2021). Notably, this approach has been pivotal in shaping omnichannel supply chains for pre-owned products, strategically captivating environmentally conscious consumers, fostering sustainable practices, and

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ultimately expanding market influence while maintaining a steadfast commitment to ecological responsibility (He et al., 2020).

Considering different scenarios and aspects of the omnichannel supply chain, we suggest further investigation to answer the following research questions:

Q. How does BORS affect competing online retailers with varying cost structures and return rates, considering the increase in demand and the inherent costs associated with returns or replenishing (Yang et al., 2023)?

Q. How would inventory fulfilment policies (such as no integration, partial integration, and full integration) impact the operations of omnichannel retailers (Wang et al., 2023)?

Q. How do discrepancies in product availability between offline and online channels impact retailers' deployment of BOPS strategy decisions (Ge & Zhu, 2023)?

CONCLUSION AND IMPLICATIONS

Existing businesses try to provide the hypothetical perfect omnichannel experience across various interaction points to satisfy their customers. Nevertheless, this outlook may be practically infeasible because of the increasing competition, limited resources and ever-increasing expectations of customers. Consequently, the retailers end up creating a fragmented experience due to internal conflicts, shifting objectives, delayed development, and increasing cost. However, retailers should first consider the value they want to provide to their various customer segments. They need to prioritize between the variety of products, delivery speed, and real-time inventory visibility across all channels (Kluge et al., 2021; McKinsey, 2021) when they embark on a journey to adopt omnichannel retailing. Accordingly, they must work on that single area to maintain their focus on value creation.

For instance, due to rising customer expectations, retailers are under increasing pressure to automate their processes. Customers expect next-day or same-day delivery, but this can't be rushed. Before investing

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in smart analytics and automation, businesses should thoroughly assess their IT capabilities and rearrange their IT infrastructure to take advantage of warehouse or inventory automation (Bosona, 2020).

This literature review provides a brief yet comprehensive summary of the articles on omnichannel retailing published since 2011 and, thus, derives necessary insight into this emerging business model. This should help academics identify existing research gaps and facilitate managers making strategies for omnichannel operations.

Future academics are encouraged to take a more pragmatic approach while studying omnichannel retailing. They need to evaluate the omnichannel models of different retailers and the respective stages at which they operate. This will help establish some benchmarking procedures and give retailers a clear image of where they stand, allowing them to improve customer service, inventory management, pricing, and more.

Thus, this review suggests that retailers should not rush into the omnichannel model without establishing a clear goal and strategy for creating value. It is necessary to develop robust technological infrastructure, improve the quality of integration across business processes, and train the appropriate stakeholders than emphasize faster delivery or different fulfilment models or the adoption of new technologies.

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Figure 1 Systematic literature review methodology adopting SPAR-4-SLR approach (Paul et al., 2021)

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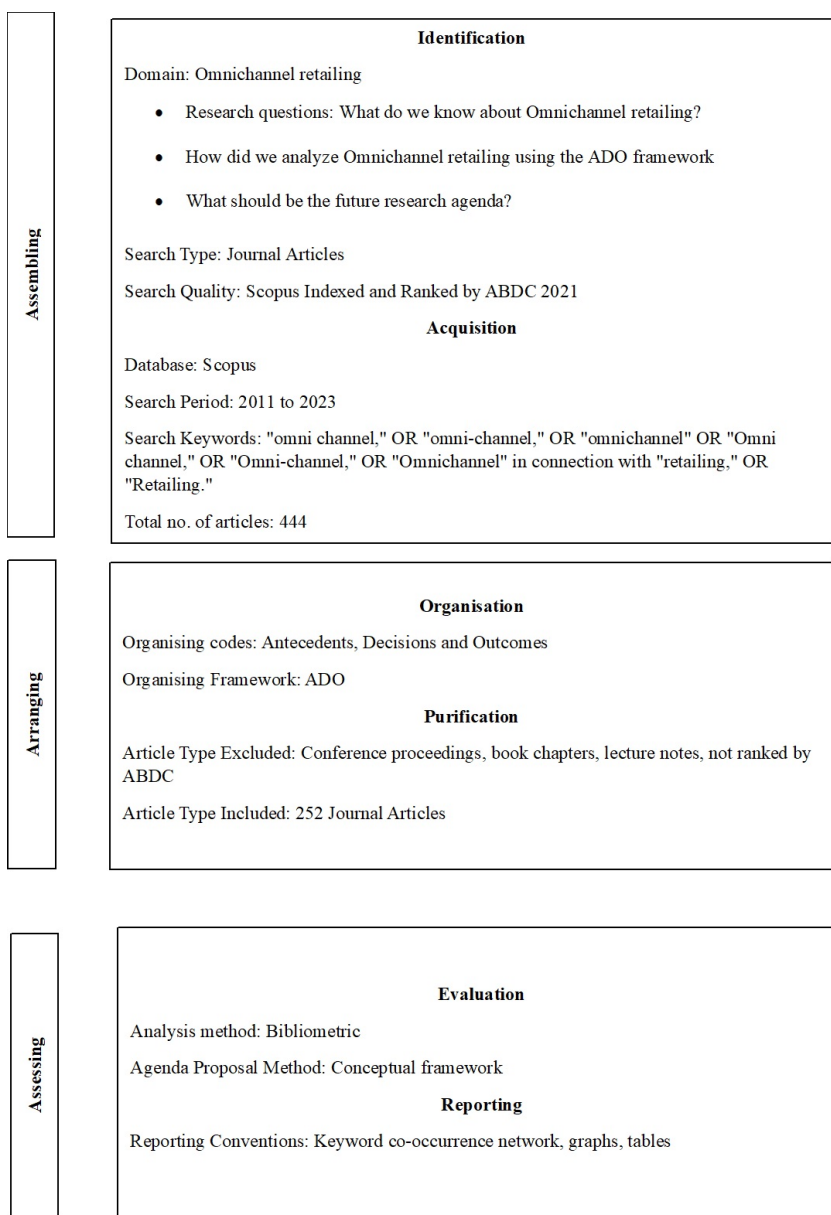


Figure 2 Omnichannel retailing KCN map highlighting research hotspots

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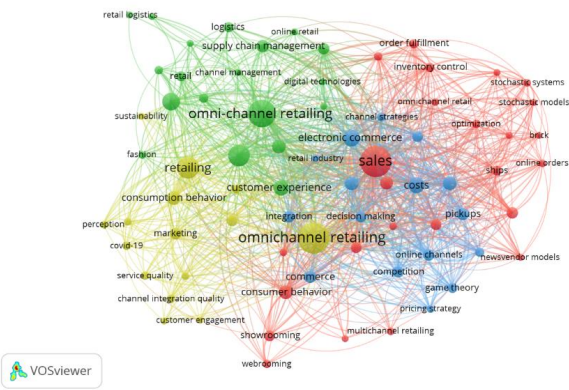
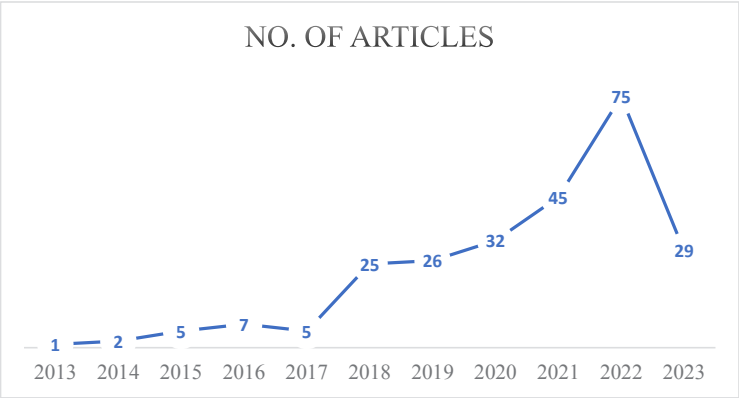
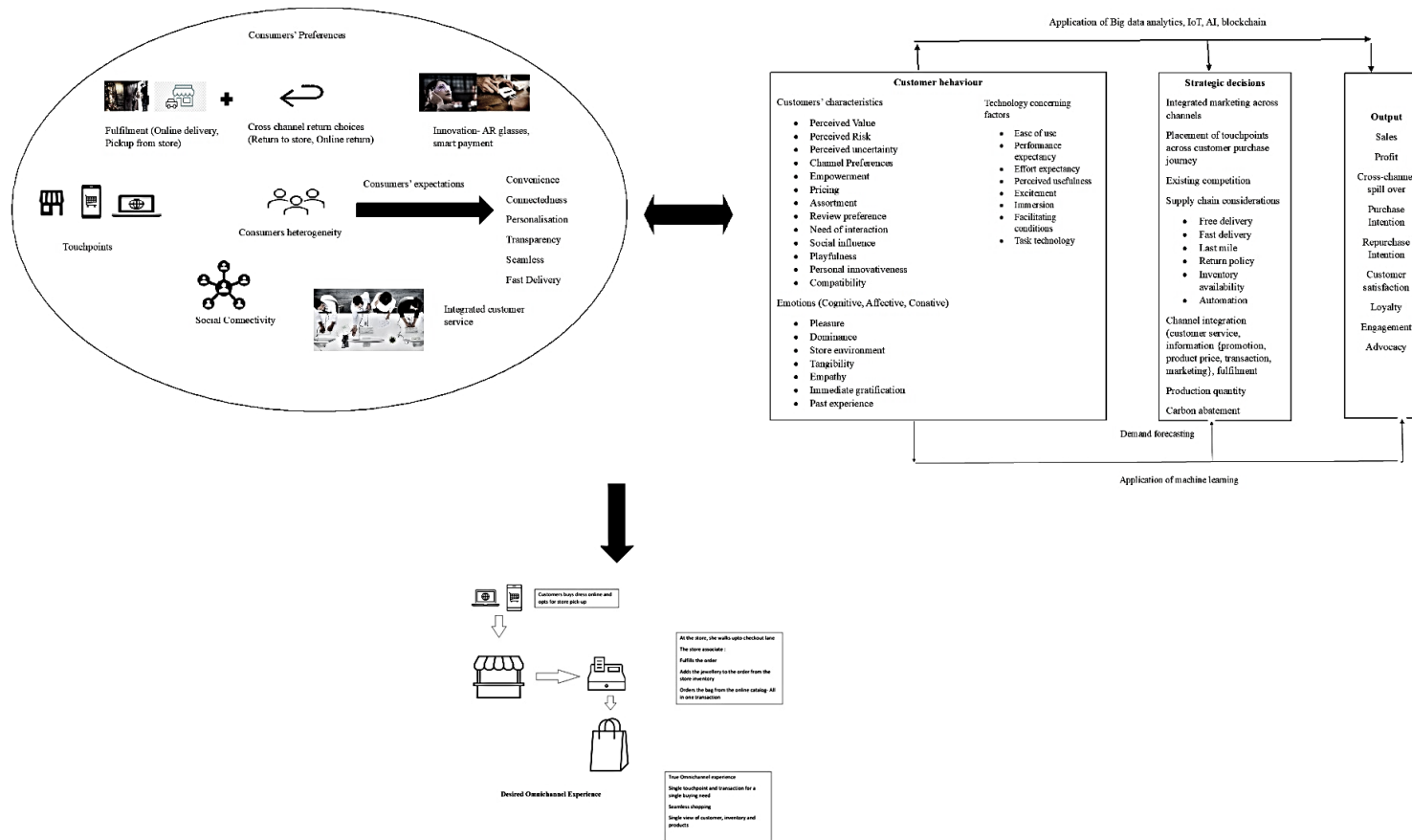


Figure 3 Year-wise frequency distribution of articles



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Figure 4 Conceptual process flow of omnichannel retailing considering strategic decisions and outcomes



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Table 1 Categorization of Articles based on ABDC journal category

| ABDC Quality List Category | No. of Articles |
|-------------------------------|-----------------|
| A | 142 |
| A* | 53 |
| B | 41 |
| C | 16 |
| Grand Total | 252 |

Table 2 Distribution of articles according to research approach and methods

| Research Approach | Conceptual | Empirical | Grand Total |
|-------------------|------------|-----------|-------------|
| Mixed method | 1 | 7 | 8 |
| Qualitative | 68 | - | 68 |
| Quantitative | - | 176 | 176 |
| Grand Total | 66 | 183 | 252 |

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Leading with Intellectual Humility

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ABSTRACT:

Abstract: The aim of this study was to expand the discourse in scholarly research on intellectual humility into the project management leadership decision making and the influence on the project manager's relationship with the sponsor and key stakeholders. The project sponsors concluded that some of the project managers were overconfident and unaware of their failings which negatively impacted their ability to build a collaborative trusting relationship. The study determined that there is a pressing need to support and educate project managers who exhibit low intellectual humility and emotional intelligence by improving their rational reasoning and critical thinking skills.

Keywords: project management, leadership, humility, intellectual humility, emotional intelligence, mastery goals

INTRODUCTION

The management of complex projects within Australian organisations has attracted the attention of researchers interested in the human elements of project management (Ali, Li, Khan, Shah, & Ullah, 2020; Lloyd-Walker & Walker, 2015). Research into understanding and incorporating the phenomenon of intellectual humility and its influence on leaders is slender within the project management discipline. M Leary (2018) posited that intellectual humility is cognitive and requires one to recognise that their beliefs, ideas, and viewpoints may be inaccurate and to be open to the experiences and knowledge of others. Intellectual humility as a psychological construct has not filtered into project leadership research. The aim of this study was to expand the discourse in scholarly research on intellectual humility in project management leadership.

Projects are temporary endeavours that operate in socially complex environments, they are inherently volatile, uncertain, complex, ambiguous systems, and project managers operate in this world of complexity bounded by episodic, path dependent, and systemic conditions. Projects represent an important expression of an organisation's strategic intent and an economic effort to renew the organisation or change its existing business operations (PMI, 2017) and as organisations experience greater change and the nature of a project environment becomes more volatile, uncertain, complex, and ambiguous (VUCA) the more effective leadership is required (Kotter, 1999; Lawrence, 2013; Mintzberg, 1994). The acronym VUCA introduced by the United States Army War College, it was used to describe unpredictable events happening outside an organisation that can impact an organisation in both negative or positive ways (Codreanu, 2016; Gerras et al., 2010; Murugan, Rajavel, Aggarwal, & Singh, 2020). The concept has gained relevance to characterise the current business environment inhabited by projects and the leadership required to successfully navigate it.

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Organisations cannot erect a firewall against the complex and dynamic nature of the VUCA environment which is influenced by the convergence of the six mega-trends of “globalisation, technology, digitization, individualization, demographic change and the environmental crisis” (Elkington, Van der Steege, Glick-Smith, & Breen, 2017 p. 254), the organisational environment incorporates cultural difficulties, politics, and interpersonal relationships, that are subject to an increasing tempo of change driven by globalisation and the accelerating advances in technology (Klein, 2012) forcing project managers to continuously and quickly react to the constant changes. Without acknowledging that both planned and unplanned changes are inevitable, a project managers cannot manage a project. Responding to the changes requires a project manager to be open to new knowledge, ideas, and viewpoints while striving to deliver a project in a challenging environment.

The success of a project is contingent upon the project management processes and prescriptions working in harmony with the human aspects of project leadership (Bhatti, Kiyani, Dust, & Zakariya, 2021; Coleman & Bourne, 2018). While hard skills such as technical or domain competencies are essential for managing and controlling a project, it is the project manager’s soft skills such as management of the interface boundary between the project environment, the organisation and its governing bodies, and the suppliers and clients that provides the most important contribution that a project manager brings to a project (Farnes, 2020; Langer, Slaughter, & Mukhopadhyay, 2008).

Emotional intelligence

Project leadership is the accomplishment of the project goals through communicating with and influencing others (DuBrin & Geerinck, 2015). Goleman (2004) claimed that emotional intelligence is the key attribute of an outstanding leader that distinguishes their performance from those whose performance is merely adequate. As a concept, emotional intelligence has been difficult to define and articulate with scholars variously describing it as an ability, a trait, or a blend of both (Foster et al., 2017; Snowden et al., 2015). Emotional intelligence involves the capacity for recognising our own feelings and those of others, for motivating ourselves, and for managing emotions in ourselves and in our relationships (Goleman, 1995; Salovey & Mayer, 1990). Mayer, Roberts, and Barsade (2008 p. 510) describe emotional intelligence as “Emotional intelligence concerns the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought”. Many researchers have shown that emotional

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intelligence influences a leader's effectiveness and their ability to work with others (Boyatzis, Goleman, & Rhee, 2000; Goleman, 1995; Goleman, Boyatzis, & McKee, 2002; Miller, 1999).

Humility

One increasingly studied aspect of emotional intelligence is humility, it is often described as a virtue associated with the gaining of new knowledge and the understanding of one's own limitations. Paraphrasing several authors, humility contributes to a project manager's ability to enact humble leadership, be non-judgmental, and to seek to acquire new knowledge from others (Caldwell, Ichiho, & Anderson, 2017; Oc, Daniels, Diefendorff, Bashshur, & Greguras, 2020; Owens & Hekman, 2016). Literature on humility is plentiful; however, a few distinguishing features and traits conceptualise many of the definitions of humility. Mark Leary and Banker (2019) in their critical examination of humility identified four predominant features: accurate self-views, awareness of one's limitations, modest self-presentation, and other-oriented interpersonal orientation.

Research by Ashton and Lee (2005, 2008) shows that very low levels of humility are heavily implicated in materialistic and exploitive tendencies and are manifested in a willingness to engage in unethical practices and social adroitness (Ashton, Lee, & Son, 2000). Humility can be considered in degrees and as low or moderate levels of humility are common it cannot be considered a potential source of an advantage for an individual. Conversely, high levels of humility manifested in the behaviour of the leaders has been associated with exceptional performance (Vera & Rodriguez-Lopez, 2004) and may provide a source of competitive advantage in that success built on humility is more sustainable than success built on arrogance. Mark Leary and Banker (2019) commented that those who are high in humility do not expect special treatment, whereas those low in humility do.

Humility as a virtue of is the opposite of hubris which makes individuals less attractive to others. Individuals with hubris unlike humble individuals, do not fully understand their strengths and weaknesses. They can be defined as someone having an exaggerated sense of self-confidence, pride or arrogance that increases the probability of making mistakes as they fail to recognize and acknowledging their errors. Hubris can cause exaggerated self-belief and contempt for the advice and criticism of others including short-sighted, irrational, or harmful behaviour, it is important to know the limits, where confidence turns into over-confidence, arrogance and hubris (Owen, 2006; Owen & Davidson, 2009; Russell, 2011).

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As suggested by researchers, the two main mechanisms that might underlie overconfidence are arrogance and hubris. A hubristic individual may overestimate their own problem-solving capabilities while underestimating the depth of the uncertainties being faced and the resources required to resolve the problem (Kahneman & Lovallo, 1993; Shane & Stuart, 2002) and as a consequence over-simplify the situation.

An important feature of humble leadership is the possession of a realistic self-view of one's idiosyncratic mannerisms, knowledge, and capabilities (Bharanitharan, Chen, Bahmannia, & Lowe, 2019; Chiu & Hung, 2022; Yang, Zhang, & Chen, 2019). An accurate self-view enables humble leaders to acknowledge their limitations, instill trust with others and creates an working environment open to the contributions (Yang et al., 2019), and by acknowledging their shortcomings and limitations contributes to a leader's ability to view competence accurately by recognising biases, limits, and prior mistakes (Owens, Yam, Bednar, Mao, & Hart, 2019), while decreasing concerns associated with the fear of failure or missteps by reducing anxiety related to complex tasks (Ren, Xu, Zhou, & Liu, 2020).

McClellan (2020); Sezer, Gino, and Norton (2018); and Van Tongeren, Davis, Hook, and Witvliet (2019) observed that humble bragging is a component of humility. Modest self-representation or humble bragging incorporates characteristics of humility with a focus on others; however, "humility is not thinking less of yourself; it is thinking of yourself less" (Warren, 2002, p. 148).

Learning requires having humility to realise one has something to learn, it means one has a calm demeanor and is not overly sensitive to threats to one's ego (Peterson & Seligman, 2004; Rowatt et al., 2006; Tangney, 2009). An individual who is open minded tends to be more conciliatory and less opinionated than those who express low self-esteem and exhibit close mindedness, they have a positive effect on those around them (Spiegel, 2012). Humble individuals express high self-esteem and do not tend to externalise problems like individuals with low self-esteem (Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005) and have better control of their reactions to failure (Brown & Dutton, 1995).

Chancellor and Lyubomirsky (2013) noted that researchers describe humility as occupying two broad domains that emphasise personal qualities such as "accurate self-knowledge" (Allport, 1937; Richards, 1992) and relational qualities, that is relating to others (Davis, Worthington Jr, & Hook, 2010; Tangney, 2000). Humble individuals are more open to outside opinions and are willing to admit when they've made a mistake.

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They're more inclined to self-reflection, which allows them to look at their interactions and pinpoint how they could have done a better job.

Some researchers have proposed that humility involves a prosocial orientation toward other people (Davis et al., 2013; McElroy et al., 2014; Van Tongeren, Davis, & Hook, 2014). Other researchers have proposed that individuals demonstrating humility exercise prosocial behaviours such as empathy and sympathy which correlate with helpfulness and being mindful (LaBouff, Rowatt, Johnson, Tsang, & Willerton, 2012) and behavioral generosity (Exline & Hill, 2012).

While general humility is defined by traits like sincerity, forgiveness, honesty, empathy, sympathy, and unselfishness, intellectual humility has to do with understanding the limits of one's knowledge. It is simply the recognition that the things you believe in, might in fact be wrong (M Leary, 2018), that you are open to new ideas, and have a willingness to be receptive to new sources of evidence. Intellectual humility is not about being a pushover; it's not about lacking confidence, or self-esteem or caving in every time your ideas and thoughts are challenged. It is instead a method of thinking, about being curious about your blind spots and entertaining the idea that you may be wrong and being receptive to new knowledge, learning from the experience of others. Krumrei-Mancuso and Rouse (2016) have described intellectual humility as the non-threatening awareness of one's own fallibility.

Although a number of scholars have explored intellectual humility (M Leary, 2018; Tanesini, 2018), the author has been unable to locate any studies specifically directed at the project management domain. Considering this gap, this study explores business executives and senior business managers perceptions of a competent project manager.

Intellectual humility

Reasoning is the art of drawing inferences or conclusions using logical reasoning, it is a process by which individuals, explore ideas, seek explanations, and revise their beliefs and understandings upon acquiring new facts. Rational reasoning is instrumental in an individual's development of their intellectual humility which develops throughout childhood, adolescence, and into adulthood. It is critically important for effective learning, confirmation of existing knowledge, and for explanations to become coherent (Gelman, Heyman, & Legare, 2007; Legare, 2017).

Research into humility as a psychological construct has resulted in there being plentiful research surrounding humility and humble leadership in the psychological disciplines, however, in the project

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management discipline there remains a gap in research on intellectual humility associated with leadership. In adults, intellectual humility involves both an accurate perception “of one’s knowledge, marked by openness to new ideas; and regulating arrogance, marked by the ability to present one’s ideas in a non-offensive manner and receive contrary ideas without taking offense, even when confronted with alternative viewpoints” (McElroy et al., 2014, p. 20).

Intellectual humility is fundamentally cognitive, and researchers generally include the view that intellectual humility involves recognising that one’s beliefs, ideas, and viewpoints could be wrong (Hopkin, Hoyle, & Toner, 2014; Hoyle, Davisson, Diebels, & Leary, 2016; Krumrei-Mancuso & Rouse, 2016; McElroy et al., 2014; Spiegel, 2012), it was defined by M. R. Leary et al. (2017, p. 793) as “recognizing that a particular personal belief may be fallible, accompanied by an appropriate attentiveness to limitations in the evidentiary basis of that belief and to one’s own limitations in obtaining and evaluating relevant information”.

Researchers have determined that intellectual humility improves an individual’s ability to evaluate information (Deffler, Leary, & Hoyle, 2016; Koetke, Schumann, & Porter, 2022; M. R. Leary et al., 2017), to discern the soundness of alternate viewpoints (Baehr, 2016; Krumrei-Mancuso, 2017; Porter, Schumann, Selmecky, & Trzesniewski, 2020) and make well thought out decisions (Baehr, 2016; Hoyle et al., 2016).

Research by Kardash and Scholes (1996) on the epistemological beliefs that an individual holds about knowledge demonstrated that individuals with low intellectual humility and who believe their knowledge is certain are threatened by their potential fallibility and are more likely to incorrectly interpret information, drawing definitive conclusions from ambiguous evidence by having a tendency to distort the information to fit their perceptions. Other research has demonstrated that in some circumstances and individual’s prior beliefs bias their reasoning (Stanovich & West, 1997) and that the individual will undervalue or ignore alternative ideas while showing over confidence, hindsight bias, and errors in belief updating (McKenzie, 1998). As noted previously, intellectual humility has been identified as a character virtue that allows individuals to recognize their own potential fallibility regarding their own knowledge (M Leary, 2018) and is therefore essential for avoiding confirmation biases when reasoning about evidence and evaluating beliefs (Zmigrod, Zmigrod, Rentfrow, & Robbins, 2019).

Individuals who have high intellectual humility are observed to be less egotistically focused on their own beliefs and opinions, engage in reflective thinking, and display a greater openness to the viewpoints of

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others and respond more positively toward other people and are more open to receiving new information (open minded) that may improve their knowledge, they exhibit less rigidity and conceit regarding their beliefs and opinions (Hopkin et al., 2014; Krumrei-Mancuso & Rouse, 2016; Porter & Schumann, 2018). Individuals with high intellectual humility demonstrate a healthy independence between their intellect and their ego, meaning the individual will not feel threatened by intellectual disagreements, will not be overconfident about their knowledge, will respect the viewpoints of others, and will be open to revising their viewpoints when warranted (Krumrei-Mancuso & Rouse, 2016), and are thought to have a better understanding of what they know or don't know about a particular subject (Baehr, 2016). M. R. Leary et al. (2017) and Porter and Schumann (2018) noted that individuals high in intellectual humility have clear interpersonal benefits due to their tolerance of views that differ from their own by exhibiting a range of interpersonal responses including gratitude, forgiveness, altruism, and empathy.

An individual with lower intellectual humility may hold a dogmatic or close-minded stance expressing an opinion as if it were fact. Hazlett (2012, p. 25) posits, “dogmatism is a vice that contrasts with intellectual humility”, this view is supported by other researchers who conclude that dogmatism correlates unfavorably with intellectual humility (Christen, Alfano, & Robinson, 2019; M Leary, 2018; M. R. Leary et al., 2017; Zmigrod et al., 2019).

Conversely, mastery behaviours are associated with higher intellectual humility in the context of overcoming challenges and learning (Porter et al., 2020). Mastery behaviors, a mastery-oriented response, “involves seeking challenging tasks and the maintenance of effective striving under failure” (Dweck & Leggett, 1988, p. 256). It is generally accepted and well documented that mastery goal orientation positively affects an individual's learning behavior and approach to challenges (Schweder, 2020). Managing a project can involve struggles that can lead to discouragement and disappointment, the development of mastery behaviours promotes problem solving, learning and performance (Mueller & Dweck, 1998) whereas a lack of mastery behaviours can lead a project manager to become anxious, stressed, depressed, or bored when they struggle with a problem, leading them to develop ineffective strategies and potentially giving up. Project managers are certain to encounter difficulties as the project advances, to achieve a successful outcome, they will need to embrace challenge and continue to strive despite setbacks.

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The Big Five and the HEXACO personality models include the general trait of openness (Gill & Berezina, 2019; Miralam, Nasir, & Vikram, 2020; Vera & Rodriguez-Lopez, 2004), and intellectual openness is a definitive trait of intellectual humility (Davis et al., 2016; Krumrei-Mancuso, 2017; Krumrei-Mancuso & Begin, 2022), and openness is recognized as valuable leadership trait (Baehr, 2016).

Prosocial values such as altruism, benevolence, compassion, empathy, forgiveness, gratitude, and open-mindedness are ascribed to Intellectual humility (Krumrei-Mancuso, 2017; McElroy et al., 2014; Porter & Schumann, 2018). Furthermore, people high in intellectual humility have a greater tolerance for differing views and are less likely to devalue people who disagree with them (Krumrei-Mancuso & Rouse, 2016; M. R. Leary et al., 2017; Porter & Schumann, 2018). In the HEXACO personality model prosocial behaviours are distinguished by honesty-humility, agreeableness and emotionality (Ashton & Lee, 2001).

METHODOLOGY

The study was conducted across twelve industry sectors engaging with thirty-six executives and senior business managers who were project sponsors within their respective organisations. This study was inspired by a previous study (Farnes, 2020) that inquired about the perceptions that executive management held concerning the competency of project managers. The principal objective of this study was to expand the discourse in scholarly research on intellectual humility into project management leadership and the influence on the project manager's relationship with the sponsor and key stakeholders.

Purposive sampling (Miles, Huberman, & Saldana, 2013) was used to ensure that participants came from a wide variety of industries, ranging from accounting, finance and banking, ICT and management consulting, logistics, through to education and health. Thirteen participants were female, eight of whom held senior executive positions and the remaining five worked in senior business management roles. All male participants were executives.

The author selected a social constructionist and interpretative approach to explore how project sponsors, perceived the communication and social skills, and the emotional capabilities of the project managers delivering their projects (Gergen, 1978, 2009; Lewis, Passmore, & Cantore, 2008; Whitney & Trosten-Bloom, 2003). Semi-structured interviews were deemed to be the most appropriate means of obtaining a detailed account of the participants' experiences and perceptions as the semi-structured interviews would enable the participants the freedom to describe their experiences and perceptions in a narrative style, a conversational

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partnership with the researcher. An abductive research approach and NVIVO was used to facilitate the thematic analysis of the data gathered.

Research limitation

This study is limited in that the qualitative data was collected from the self-reported experiences of the participants via interviews whereby the researcher may obtain only what the participants choose to reveal and what can be observed. In addition, human beings are limited by their ability to recall past events, and their perceptions, biases, and the situation's complexity influence responses. The study was limited to a single data collection method and the participant population was limited due to the availability of executive and senior business management to participate in the study. The fact that the participants were drawn from twelve different industries tends to lend some level of generalisation to the study.

DISCUSSION

In general, all participants recognised that a project manager cannot control every aspect of the project, but they noted that an experienced and competent project manager should be able to as one participant expressed “...*read the room and sense the mood and position*” of the group or individuals they are communicating with. A less experienced project manager were observed to not exhibit mastery behaviours and did not understand or appreciate what has caused an issue within the project or understand how it may be resolved, they attempted to cover up their lack of knowledge by continually quoting a particular project practice. They exhibited a cognitive bias as explained by Kruger and Dunning (1999) and Dunning (2011) in that they are under the illusion that they are highly skilled and competent, it could be said that they suffer from intellectual arrogance, more pointedly they are overconfident and unaware. As observed by the participants, an experienced and competent project manager demonstrated mastery behaviours and showed intellectual humility seeking input from others to resolve the issue.

The hubristic behaviour of some, but not all, less experienced project managers shows their ‘over self-belief’ in various ways including offering up answers with too much exactness and precision while referring to project management tomes (Moore & Healy, 2008). This is concerning as it opens up a darker side of project leadership and as expressed by several of the participants, creates organisational political and cultural issues and negatively impacts the project and the wider organisation. There is a pressing need to understand how to support and educate the lessor skilled and experienced project managers as they are likely to suffer

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from two important issues, firstly, their lack of knowledge and expertise leads them to make many errors and secondly their lack of maturity and humility prevents them from seeing some of their choices as errors, in short, they exhibit the attributes of low intellectual humility and poor emotional intelligence.

As noted by the participants, the less experienced and less competent project managers were not self-aware and had poor communication and reasoning skills, when questioned they became belligerent and intolerant of other people's views "*as soon as you get into that mushy land of ambiguity and uncertainty*" as observed by one participant. Their ability to explore ideas, seek explanations and engage in a constructive dialogue and draw inferences and new conclusions was clouded by their arrogance and defensiveness. As Gelman et al. (2007) and Legare (2017) noted, rational reasoning is instrumental in the development of intellectual humility. These less competent project managers showed poor rational reasoning skills. The participants concluded that the reason the project managers were self-biased is that they are unaware of or indifferent to their own bias's (Pennycook, Ross, Koehler, & Fugelsang, 2017).

As an explanation for the lack of communication skills and emotional intelligence in some project managers, one participant stated, "*I think that PMBOK is a reasonably good framework, when it comes to pure delivery, but it does not talk very much about people interpersonal skills*". The inference was that project managers were not taught soft skills or logical reasoning in their training and that was reflected in their singular focus on the technical aspects of a project to the detriment of building relationships with the key stakeholders, and their lack of understanding of the complexities within the business environment.

The project managers low in experience and low in intellectual humility were also perceived by the participants to be overly concerned about their fallibility and may have been burdened by a (psychological) need to be seen as intelligent and right in their thinking. The participants observed that a competent and experienced project manager exercised emotional maturity and intelligence, were interested in learning about the business, engaged in reflective thinking, admitted to mistakes and changed their viewpoint when warranted (Baehr, 2016; Elder & Paul, 2012) and were an effective transformational leader as they were able to influence and inspire individuals involved in the project to achieve the project's goals.

For the project managers who exhibit lower levels of intellectual humility, the job demands can lead to counterproductive work behaviours resulting in rash or reckless decision making. Humility, and by extension, intellectual humility has been shown to be a malleable attribute that can be developed through life-experiences

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(Owens, Wallace, & Waldman, 2015), this suggest that given the right guidance and provided with opportunities to gain experience, the lessor experienced project managers can dramatically increase their level of intellectual humility and emotional intelligence consequently tempering their tendency to arrogance and over self-confidence thereby improving their willingness to engage in difficult discussions.

Overall, the participants perceived that a project manager was a “businessperson” whose principal technical competencies and skills where in the project management domain and their project skills were to be complemented by some level of business knowledge and acumen, which goes some way to explaining why the participants were critical of the project managers who they perceived to be wilfully ignorant or blind to the needs of the business and the project’s objectives.

In recognising the emotional intelligence and intellectual humility exercised by a competent project manager the participants observed that “*project managers don't deliver projects, the team does, and they are people*”, they noted that their individual organisational cultures influenced the behaviours and attributes exhibited by the project managers (Tarba, Ahammad, Junni, Stokes, & Morag, 2019) but were adamant that the less experienced project managers had a laundry list of aberrant behaviours as shown in Figure 1 below when compare to a competent project manager exercising intellectual humility and emotional intelligence.

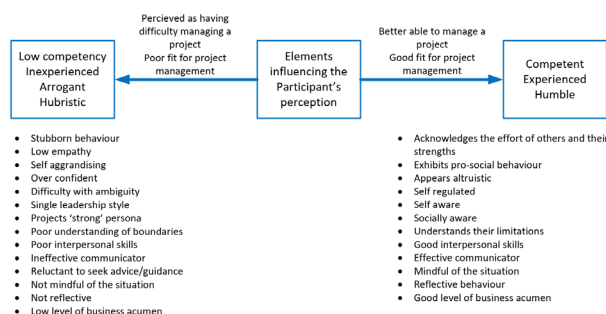


Figure 1-Attributes influencing the participants' perceptions.

Practical implications

For project Sponsors, these results have an important message. An intellectually humble project manager who exhibits a modest conduct will be a better fit to the project environment, will enhance project success, and build stronger relationships. They are more inclined to be reflective and are not afraid to seek assistance to gain a better understanding of the business needs. For project professionals, these results also have important practical implications. A project manager who has modest conduct is seen as being competent and humble rather than arrogant and possessing low skills. They can build stronger trustful relationships with

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the key stakeholders that result in openness and support for difficult decision making. Understanding your limitations and being open to the views and opinions of others and understanding the business environment and its impacts on the project is a key to success.

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5: Entrepreneurship & SMEs

**The practices of a family business and its management values designed to
create a sustainable future for all.**

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The practices of family businesses and their management values designed to create a sustainable future for all**ABSTRACT:**

Family businesses can make an important contribution to the attainment of the Sustainable Development Goals (SDGs). There is limited prior research on how family businesses use the SDGs in the creation and redefinition of their purpose and operations, however, this paper provides case studies that demonstrate how family businesses do this. Our global case studies reveal that family businesses that align their business purpose with the SDGs undergo a strategic process of reflection upon business purpose. We have found that SDGs provided external validation for strategic choice of the purpose of a family business's core activities and provided benchmarks from which family businesses could reflect on performance and plan future activities aligned with the SDGs.

Keywords: Global case studies, mission, purpose, operations, strategic process, reflection

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The world needs its residents to be aware of the decisions they make, from a personal, professional, and human perspective, and the implications and impacts arising from those decisions. The planet we are on is the only one we have. Climate change is happening – one cannot deny this. The United Nations (UN) initially set about doing something about the status of the world by introducing the Millennium Development Goals, which were replaced in 2015 by the Sustainable Development Goals (SDGs) (United Nations, 2021). 193 countries have adopted the SDGs to stimulate action for people, the planet, prosperity, peace, and partnership. The SDGs define global priorities for development up to the year 2030 and are pivotal for addressing the global economic, social, and environmental challenges faced by the communities (United Nations, n.d.). They promote a wide range of actions in the public and private sectors that can foster economic growth through new and innovative ways. They include a resolution to end poverty and hunger, build peaceful societies, empower women and girls, and protect the planet. Achieving these goals necessitates a move away from direct funding within the donor community towards an approach of empowering and enabling communities to help themselves. Within each of the SDGs, there are a series of targets and indicators and Appendix A outlines what these are (United Nations, 2021).

Research suggests that family businesses and the achievement of the SDGs are strongly aligned. Family businesses demonstrate greater resilience during economic downturns compared to non-family businesses (Amann and Jaussaud 2012; Kachaner et al 2012). They adopt a frugal mindset and are cautious with spending, which helps them weather recessions (Kachaner et al 2012). Family businesses also tend to have long-term visions, as evidenced by the fact that family businesses invest time, effort, and resources into sustaining the business for future generations (Haag et al 2023; Schuman et al 2010) and have a strong set of values and a unique culture that has been developed and nurtured over many years (Hall 2018). This cultural continuity is a sign of a long-term perspective. Family businesses practice patience in their decision-making processes compared to non-family businesses. They are often willing to forgo short-term gains in favour of strategies that will benefit the business in the long run (Gersick et al. 1997). Family businesses have a commitment to their local communities by allocating a portion of returns to improving their surroundings and community development (Digital 2023), and they advocate for responsible capitalism (Kachaner et al 2012).

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According to a report, many family offices prioritize climate protection, and in the Asia-Pacific region, sustainable investing is driven by the next-generation family business members who seek to make a meaningful impact with their wealth (CampdenFB 2022).

Family businesses play a crucial role in economies worldwide, generating a significant portion of the world's wealth. According to Robertsson (2023), the top 500 global family businesses collectively generated \$8.02 trillion in revenues and employed 24.5 million people. Many renowned global brands are operated by family businesses. For example, if you buy a Dior bag or a Louis Vuitton suitcase or a bottle of Moët, or put a pair of Birkenstocks on your feet, you are contributing to the revenues of LVMH, which made \$708 billion in revenues and has the world's richest man at its helm: Bernard Arnault (Armitage, 2023). Other notable examples include Walmart with revenues of \$572.8 billion (Ozbun, 2022) and the Porsche family, who own both Volkswagen and the Porsche brand, generating \$18.8 billion in sales in 2021 (Statista Mobility Market Insights, 2022). These figures highlight the significant economic impact and success of family businesses on a global scale.

There is a gap in terms of case studies that showcase family businesses that achieve the SDGs. Johansson et al. (2020) state that when articles, textbooks and course offerings are included in a doctoral program, it is a good indicator of the 'state of established knowledge in the field'. They have found that professors and authors do not publish research on family business and family business was not included in the examined curricula in their study, thus indicating a gap in the field. On reviewing the 76 products in the Harvard Business Publishing catalogue only one case study based on a family business (in India) is provided when you search for family businesses and the SDGs. The aim of this paper is to close this gap and provide some examples of how family businesses design their vision and strategies to address the SDGs, how they have invested in their sustainable values, and empowered their staff to embrace the SDGs.

RESEARCH APPROACH

The case studies that are presented here are mini versions of the case studies that have been prepared for a 17-book series called *Family Businesses on a Mission: Attaining the Sustainable Development Goals*. Each SDG has been given a single book to itself and the family businesses represented in the book series are truly global. Each contributor to the book series is furnished with a template that they

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write to and can incorporate primary and secondary research into the case study. In many cases, a member of the family business is a co-author of the case. In most cases, the methodological approach adopted by the author was to incorporate both secondary and primary research into the data collection, except for Badger, which was based solely on secondary, online data. Secondary data was gathered from the archives of the family businesses, online sources, and other internal sources. The primary research approach was an interview with members of the family business which was held online and/or face-to-face. Most interviews lasted between an hour and two hours. Table one provides a synopsis of the cases presented in this paper, along with the SDG it is aligned with and the collection method. The authors were directed by the editors of the book series to use the targets and indicators (see Appendix A) of the SDG as the means of analysing the family business to ensure alignment with the SDG and therefore appropriateness for inclusion in the book series.

Table One: Family businesses aligned with targets and indicators of the SDGs

| Family business | Country | SDG# | Target/Indicator |
|---|-----------|--|------------------------------------|
| Invergowrie Foundation (McPherson family) | Australia | 4: Quality Education | 4.3; 4.4; 4.5, 4.7 |
| Outland Denim (Bartle family) | Australia | 8: Decent work and economic growth | 8.2; 8.3; 8.4, 8.5; 8.6; 8.7; 8.8 |
| Creativhotel Luise Hotel, (Foertsch family) | Germany | 9: Industry, innovation & infrastructure | 9.1; 9.2, 9.4, 9.7 |
| Ishizaka Sangyo (Ishizaka family) | Japan | 9: Industry, innovation & infrastructure | 9.1, 9.2, 9.4, 9.5, 9.7 |
| Wolf Connection (Alfero family) | USA | 11: Sustainable cities and communities | 11.1, 11.4, 11.5, 11.6 |
| Bewley's Coffee (Bewley family) | Ireland | 12: Responsible consumption and production | 12.2, 12.5, 12.6, 12.7 |
| Atkinsons Coffee Roasters (Steel family) | UK | 12: Responsible consumption and production | 12.2, 12.4, 12.5, 12.6, 12.7, 12.9 |
| Badger (Whyte family) | USA | 13 – Climate action | 13.2; 13.3; 13.4 |

SUSTAINABLE DEVELOPMENT GOAL #4 (SDG#4) – QUALITY EDUCATION

The United Nations (n.d.) purports that having access to education is a way in which people can make their way out of poverty and provide them with a means of socioeconomic mobility, and this is in essence is what SDG#4 is trying to achieve. The overall goal of SDG#4 is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. An example of a family business that has a long history of providing access to education is the Invergowrie Foundation (Machirori, 2021). The Invergowrie Foundation was established in 1997 by the McPherson family in Melbourne, **Australia** and is dedicated to promoting the education of girls and women in Victoria. The McPherson family has had a long history of educating young women, as in 1929 the McPhersons

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gifted a hostel that was used for the training of young women. This demonstrates their commitment to education for almost a century (Machirori, 2021). The Invergowrie Foundation focuses on scholarships for young female students in Australia its initiatives have had a profound impact on advancing the education and empowerment of young girls and women in Australia. For example, the Homecraft Hostel, associated with the foundation, had already facilitated the training and education of around 2,000 young girls before its closure in 1973 (The Invergowrie Foundation, 2021). Since its establishment, the Invergowrie Foundation has provided approximately AUD\$10 million for various projects, significantly contributing to the education and empowerment of girls and young women in Victoria (The Invergowrie Foundation, 2021).

The strategic vision of the Invergowrie Foundation is to advance the education of girls and women within Victoria (The Invergowrie Foundation, n.d.). The vision was realigned to focus on advancing young girls and women into Science, Technology, Engineering and Maths (STEM) education as the Board behind the Invergowrie Foundation sees this as one of the fastest-growing occupations in Australia. They support programs targeting girls in primary and secondary school and provide postgraduate scholarships at the University of Melbourne (Australian Charities and Not-for-profits Commission, n.d.). This shows the alignment with SDG#4: Quality Education. The Foundation board of trustees still includes representatives from the McPherson family, ensuring the continuation of their tradition of supporting young women to access invaluable educational opportunities.

SUSTAINABLE DEVELOPMENT GOALS #8 – DECENT WORK AND ECONOMIC GROWTH

SDG#8 aims to promote decent work, increase employment whilst promoting social protection and improve employees' rights. One of the family businesses that is actively achieving this SDG is the business founded by James and Erica Bartle based in Queensland, **Australia**. The family business was established following a trip to the cinema! James and Erica went to see 'Taken' a film focusing on human trafficking (Barrett & Moores, 2022). Following extensive research and visits to Asia, James observed the need to establish career pathways for girls and women who are rescued and reintegrated into their families. This inspired him to establish Outland Denim in 2011, with the purpose of

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providing decent work and economic growth for vulnerable girls and women (Barrett & Moores, 2022).

Outland Denim does not just make denim pants – they have the vision of setting the highest standards in terms of sustainability and aim to ‘foster a future that is exploitation-free and promotes freedom, justice, and equity’ (Barrett & Moores, 2022: 55). They provide consistent developmental employment to formerly trafficked women such as helping them to develop personal and household budgets, they are encouraged to participate in Outland Denim business decisions; and they provide them with appropriate compensation (Barret & Moores, 2022). Outland Denim realigned its operations strategy when James and Erica recognized the damaging impact of traditional denim production on the environment. They took on the challenge of developing a better production process and learned the specialized craft of jeans-making from scratch. They used organic cotton, which requires less water and is farmed without the use of agrochemicals (Barrett & Moores, 2022). Overall, the Bartle family's approach to establishing Outland Denim as a socially responsible family enterprise involved a strong commitment to their social and environmental mission, a focus on creating decent work and economic opportunities, and a dedication to sustainable and ethical practices in the denim manufacturing industry.

SUSTAINABLE DEVELOPMENT GOAL #9 – INDUSTRY, INNOVATION AND INFRASTRUCTURE

Building resilient infrastructure which can lead to fostering innovation within an inclusive and sustainable industry is the focus behind SDG#9. *Creativhotel Luise*, located in Erlangen, **Germany**, is an award-winning environmentally conscious hotel and restaurant family business that has embraced a green philosophy in recent years (Pillmayer & Scherle, 2022). The third-generation owner, Ben Foertsch, combines the influences of his grandparents and parents to develop the hotel's green tradition and prove that sustainability and profitability can go hand in hand. The main pillars of the hotel's green practice are eco-efficiency and climate action, implemented through a progressive sustainability strategy. *Creativhotel Luise* is proud to be the first climate-positive certified hotel in Europe, contributing to SDG#9 through its cradle-to-grave approach to sustainability (Pillmayer & Scherle, 2022). The hotel has retrofitted its premises with new sustainable materials, enhancing

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efficiency and adding value to the client experience. They also value the "waste" from old materials by recycling them. All rooms are built using sustainable products, such as solid wood furniture, living plants to improve indoor air quality, and shielded electrical cables to minimize electrosmog (Pillmayer & Scherle, 2022). *Creativhotel Luise's* commitment to sustainability extends to its daily operations and consumables. The hotel embraces a cradle-to-grave approach by efficiently managing resources and minimizing waste. Additionally, the hotel has introduced free electric charging stations, which are included in the room rate, promoting sustainable transportation options. By incorporating innovative technologies and sustainable practices throughout its operations, *Creativhotel Luise* and the Foertsch family set an example for the hospitality industry, demonstrating that environmental consciousness and profitability can coexist (Pillmayer & Scherle, 2022).

Ishizaka Sangyo, a **Japanese** industrial waste treatment company, has undergone a remarkable evolution in its commitment to sustainable development, particularly in the context of SDG#9. The company's journey began with its predecessor, Ishizaka Gumi, founded in 1967 by Yoshio Ishizaka in Tokyo's Nerima-ku. Initially, Ishizaka Gumi operated as a sediment disposal business with a single dump truck. Despite its humble beginnings, this venture laid the foundation for what would eventually become Ishizaka Sangyo (Sasaki, 2022). Central to the company's transformation was Noriko Ishizaka, Yoshio's daughter. She joined Ishizaka Sangyo as a clerk at the age of 20, experiencing firsthand the challenges and societal significance of working in an industrial waste company. Despite facing low pay and derogatory treatment, Noriko developed a strong sense of pride in contributing to society through her work. Over time, her dedication and vision earned her the opportunity to lead the company (Sasaki, 2022).

Under Noriko's leadership, the company initiated several critical reforms. They closed their incineration plant and implemented indoor recycling of construction waste. Furthermore, they worked to improve the surrounding landscape, acquired environmental and quality management certifications, and introduced business schemes to optimize revenue (Sasaki, 2022). These changes faced resistance, resulting in a significant portion of employees leaving the company. Ishizaka Sangyo's key activities encompass the treatment and segregation of construction waste, utilizing both modern technology and skilled employees to process waste into valuable raw materials. Ishizaka Sangyo, once a small

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enterprise, had grown into a company with a turnover exceeding ¥6 billion and 180 employees. The company's recycling rate hovers around 98%, making it one of the industry's highest performers. The journey of Ishizaka Sangyo exemplifies the transformation of a waste treatment company into a sustainability-focused enterprise. Noriko's leadership, dedication, and strategic decisions have not only shaped the company's success but also made it a beloved and essential part of its local community.

SUSTAINABLE DEVELOPMENT GOAL #11 – SUSTAINABLE CITIES AND COMMUNITIES

The focus of SDG#11 is on making cities and human settlements inclusive, safe, resilient, and sustainable. Centred around this SDG is the focus on sustainable practices, sustainable infrastructures and the collaboration between industry and community on advancing the SDG. Wolf Connection is a family business run and operated by Teo and Renee Alfero in Acton, California, **USA**. Wolf Connection rescues and houses wolves and wolf dogs that have been abandoned, neglected and/or abused (Fuery and Fuery 2023). But it is not only the four-legged kind that is assisted at Wolf Connection as several programs are offered to women veterans and at-risk youth and women. Teo comes from a family of educators who have supported youth development in his native country. Embracing these values, Teo established Wolf Connection with his wife Renee to reach out to vulnerable youth in need of mentoring and guidance (Fuery & Fuery, 2023). Teo sees parallels between the rehabilitation of the wolves at the sanctuary and the programs offered to youth and vulnerable women as they ‘all have past experiences of trauma and abandonment and in search of a way to heal’ (Fuery & Fuery, 2023: 57). The vision of Wolf Connection is to provide therapy and well-being through human-wolf connections, and this is achieved through the ‘therapeutic programmes located in the natural surroundings. It is the spaces of the forest, the sounds of the streams, the sensorial attachment to the natural environment and the immersion into the wolf world that aligns with the sustainable development goal of fostering safe and inclusive spaces (SDG#11) (Fuery & Fuery, 2023: 57).

Wolf Connection preserves, protects, and conserves all cultural and natural heritage that is present on the land on which it occupies, which is aligned with SDG#11.4. Wolf Connection sees the

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natural heritage as being imperative to both mental and physical well-being. This is evident in the at-risk youth programme which involves taking students from very difficult and challenging home and school environments and working with them in the natural environment. In doing so, they gain an appreciation of the natural world and their role in preserving it.

Wolf Connections reflects the philosophy and vision of the family business particularly in terms of ‘engaging communities which have been marginalised, and individuals who have suffered traumas and hardship’ (Fuery & Fuery, 2023, 71). Plans for Wolf Connection include providing overnight stays and having a residential facility that will aid youth who are on the cusp of adulthood in learning how to transition into independent living. They plan to establish a retreat centre, and provide more teaching, and gathering areas outside in the natural environment. Lastly, Wolf Connection would like to add two more wolf compounds to deal with the growing demand to rehome wolves. These developments demonstrate how the sanctuary is effectively aligning its core business activities with environmental awareness and integrating sustainability goals into its programmes of well-being. This is particularly the case with issues of mental health, social justice and bettering the lives of those alienated and abandoned by much of society (Fuery & Fuery, 2023).

SUSTAINABLE DEVELOPMENT GOAL #12 – RESPONSIBLE CONSUMPTION AND PRODUCTION

SDG#12 focuses on sustainable consumption and production. The circular economy, a concept that has become quite popular recently, which stems from the framing of circularity within the neoliberal economic paradigm through the promise of decoupling economic growth from the consumption of finite resources is integral to SDG#12 (Hales and Birdthistle, 2023). Bewley's, an iconic **Irish** coffee and tea company, boasts a rich history that began in 1835 when Samuel and Charles Bewley, originally from Yorkshire, challenged the East India Company's tea trading monopoly by directly importing tea from Canton, China to Ireland (Ng, 2023). This bold move laid the foundation for a family business that has persisted for generations. Bewley's commitment to sustainability is deeply rooted in the Quaker beliefs of the founding Bewley family. These values emphasize community, equality, honesty, fairness, and integrity of character, all of which continue to influence the way the business is managed. The company's values reflect their commitment to

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respecting people, being enterprising and resourceful, doing what they say they will do, and making the planet a better place to be. This commitment to ethical values has led Bewley's to become the first Fairtrade-certified coffee in 1996, long before sustainability became a global concern (Ng, 2023).

Bewley's maintain long-term relationships with coffee growers, providing support to communities through projects like building schools, dental clinics, and promoting female empowerment in coffee-growing regions. In terms of sustainable consumption, Bewley's introduces healthier products and focuses on reducing waste and carbon emissions. They actively promote the use of reusable cups and have introduced 100% recyclable and compostable cups. The company constantly reviews packaging materials to ensure they are recyclable and environmentally friendly. Bewley's also addresses their carbon footprint through various initiatives, such as investing in renewable energy, planting trees for carbon sequestration, and reducing waste. They have offset their carbon emissions for the past decade, emphasizing their commitment to climate action. Their dedication to a circular economy is evident in their initiatives to recycle coffee grounds into useful products. In conclusion, Bewley's remarkable journey from a small tea trading business to a global coffee and tea brand is a testament to its commitment to quality, innovation, and sustainability. The company's values, deeply rooted in Quaker principles, have guided its responsible business practices for generations.

Atkinsons Coffee Roasters is a family business jointly run by the first and second generations of the Steel family based in the **United Kingdom**. Atkinsons Coffee Roasters, founded in 1837 by Thomas Atkinson as 'The Grasshopper Tea Warehouse,' has a rich history rooted in the sale of Tea, Coffee, Spices, Chocolate, and Refined Sugars (Steel & Cruz 2023). In 2004, the business came under the ownership of Ian and Sue Steel, who, along with their sons Maitland and Caspar and Sue's sister Mandy, continue to expand and enhance the company's operations. The Steel family's journey began when they decided to venture into the coffee industry after experiencing a downturn in their respective careers. They sold their dream home, downsized to a smaller residence, and invested in the coffee business, growing it by 1,000% in the first decade. The Steel family emphasize the importance of sustainability in business survival, despite occasional resistance to this mindset. To engage their staff and customers in sustainability initiatives, Atkinsons uses the '3 Tr's': Traceability, Transparency, and

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Trust (Steel & Cruz, 2023). In terms of responsible production, Atkinsons installed the eco-friendly Loring Smart Eco Roaster with minimal emissions and reduced energy consumption. In line with SDG#12.5, Atkinsons promotes waste reduction by implementing recycling initiatives and encouraging customers to use their own receptacles or recycled bags for coffee refills (Steel & Cruz 2023). Having a Sustainability Development Officer (SDO) on their team fosters staff engagement and encourages initiatives like beach clean-ups, bee-hive visits, and upcycling.

Atkinsons operates as a link between coffee producers and consumers, taking pride in storytelling and ethical trading practices. They work closely with trusted partners who share their values. Atkinsons aim to educate customers about "speciality" coffee and global citizenship, as indicated in SDG#12.8.1. Atkinsons' Relationship Coffee model adds value to coffee production by enhancing bean quality and offering long-term contracts to farmers, promoting both financial and environmental sustainability (Steel & Cruz 2023). Looking ahead, Atkinsons plans to invest in green initiatives like a living roof, renewable energy, and waste reduction, aiming to set an example for sustainable city centres. In conclusion, Atkinsons Coffee Roasters exemplifies how a family-owned business can align with and promote sustainability goals, especially SDG#12 while maintaining a successful and responsible presence in the coffee industry.

SUSTAINABLE DEVELOPMENT GOAL #13 – CLIMATE ACTION

SDG#13 showcases family businesses which are strategically thinking about their actions and the impact they have on our planet. Badger, a family business based in New Hampshire, USA, is strategically aligned with SDG#13 (Climate Action) through its commitment to sustainability and climate justice (Birdthistle, 2023). Bill Whyte, the founder, needed a product to soothe his fingers whilst working as a carpenter in extreme conditions, so he mixed beeswax and olive oil and from that, Badger was born. Badger now produces over 100 products, employs 90 people, and sells in over 20 countries (Badger, 2023). Climate action initiatives are at the core of the business operations of this family business. The Whyte family are staunch advocates for regenerative and sustainable agriculture. In the development, design, and marketing of their products, they emphasize the protection of natural resources and strive to have a positive impact on the environment. The Whyte family signed an open letter to the international community in 2017, pledging their commitment to upholding the Paris

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Agreement. They aim to reduce greenhouse gas emissions by 26-28% by 2025, contributing to global climate action efforts. In upholding the Paris Agreement, they have developed a sustainable manufacturing facility, which is one of the largest post and beam buildings on the East Coast and incorporates features such as skylights, windows, and plants to promote the health and well-being of employees. Badger has switched to 100% renewable power and purchases Renewable Energy Credits. The family business also ensures that commodities within its supply chain, such as palm, soy, and paper/pulp, come from deforestation-free sources. Badger reduces water usage through the production of waterless products, which are concentrated and require less energy for packaging and shipping. When water is required, they use natural solvents that are not harmful to the environment. Waste generated during production and employee lunches are composted, contributing to waste reduction and sustainable practices.

The Whyte family are explicit about the values of the family and the business and sees them as being intertwined. Their values are creating ‘products for people we love’; staying ‘closer to the source’; they see the community at the heart of their business and see ‘kindness as their compass’, and striving ‘to protect our natural resources and make climate justice and integral part of their daily practices’ by ‘walking a healthy trail’ (Badger, 2023, para 2-5). Overall, Badger's commitment to climate action and sustainability aligns with SDG#13, and they actively implement various initiatives to minimize their environmental impact and promote a more sustainable future.

CONCLUSION

Family businesses can and do make an important contribution to the attainment of the Sustainable Development Goals (SDGs). There is limited prior research on how family businesses (Johansson et al. 2020) and their adoption of the SDGs in the creation and redefinition of their purpose and operations, however, this paper provides case studies that demonstrate how family businesses do this. We observed how family businesses did not baulk at the idea of investing (heavily in some cases i.e., *Creativhotel Luise* and Badger) in developing a sustainable business, which is like the findings of Haag et al (2023) and Schuman et al. (2010). Family business leaders believe that having this investment helps the business in the long term, which is very much in line with what research has found (Kachaner et al. 2012).

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Monitoring and reporting on their contributions to sustainability and achieving the SDGs, gives the family business the opportunity to transparently report and demonstrate to key stakeholders their contribution to improving lives. They can also show where they are making an impact and allow them to benchmark their sustainability performance against other similar businesses. This strategy when communicated to customers enables customers to make better choices and ‘think with their feet’.

Our global case studies reveal that family businesses that align their business purpose with the SDGs undergo a strategic process of reflection upon business purpose. This was quite evident within the Ishizaka Sangyo family business when they were faced with recriminations about an environmental catastrophe (which they were not responsible for) and during Noriko’s leadership she reflected upon the purpose of the family business and redesigned the strategic direction of the family business. We have found that SDGs provided external validation for strategic choice of the purpose of a family business’s core activities and provided benchmarks from which family businesses could reflect on performance and plan future activities aligned with the SDGs. This was evident in Outland Denim, where they were able to influence the career pathway of girls and women in the region they were present. In observing the strategies, the family businesses have adopted to ensure that sustainability and the SDGs are part of the family businesses thinking, many family businesses have adopted the strategy of having sustainability as an agenda item on the Board of Directors’ agenda. This ensures that top management addresses the issue of family business practices for developing a sustainable future. Many family businesses see also the importance of communicating the plans for sustainability to their internal and external stakeholders. This is achieved through being included on their website, on their marketing communications and through in-house newsletters to staff. This helps in the creation of key values towards sustainability being embedded in the mindset of staff and management. Through this case study series, we would hope that other family businesses would have role models to benchmark their investment in the sustainable future of their own family business and see the positive impact they have then made on society in general. By investing in practices, training and education, the family business is harnessing the power for good, and they subsequently can craft a business model that looks after people and the planet for generations to come.

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Appendix A Sustainable Development Goals and the Targets and Indicators

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| SDG 1 No poverty | TARGET 1.1 ERADICATE EXTREME POVERTY TARGET 1.2 REDUCE POVERTY BY AT LEAST 50% TARGET 1.3 IMPLEMENT SOCIAL PROTECTION SYSTEMS TARGET 1.4 EQUAL RIGHTS TO OWNERSHIP, BASIC SERVICES, TECHNOLOGY AND ECONOMIC RESOURCES TARGET 1.5 BUILD RESILIENCE TO ENVIRONMENTAL, ECONOMIC AND SOCIAL DISASTERS TARGET 1.6 MOBILIZE RESOURCES TO IMPLEMENT POLICIES TO END POVERTY TARGET 1.7 CREATE PRO-POOR AND GENDER-SENSITIVE POLICY FRAMEWORKS |
| SDG 2 Zero hunger | TARGET 2.1 UNIVERSAL ACCESS TO SAFE AND NUTRITIOUS FOOD TARGET 2.2 END ALL FORMS OF MALNUTRITION TARGET 2.3 DOUBLE THE PRODUCTIVITY AND INCOMES OF SMALL-SCALE FOOD PRODUCERS TARGET 2.4 SUSTAINABLE FOOD PRODUCTION AND RESILIENT AGRICULTURAL PRACTICES TARGET 2.5 MAINTAIN THE GENETIC DIVERSITY IN FOOD PRODUCTION TARGET 2.6 INVEST IN RURAL INFRASTRUCTURE, AGRICULTURAL RESEARCH, TECHNOLOGY AND GENE BANKS TARGET 2.7 PREVENT AGRICULTURAL TRADE RESTRICTIONS, MARKET DISTORTIONS AND EXPORT SUBSIDIES TARGET 2.8 ENSURE STABLE FOOD COMMODITY MARKETS AND TIMELY ACCESS TO INFORMATION |
| SDG 3 Good health & well-being | TARGET 3.1 REDUCE MATERNAL MORTALITY TARGET 3.2 END ALL PREVENTABLE DEATHS UNDER 5 YEARS OF AGE TARGET 3.3 FIGHT COMMUNICABLE DISEASES TARGET 3.4 REDUCE MORTALITY FROM NON-COMMUNICABLE DISEASES AND PROMOTE MENTAL HEALTH TARGET 3.5 PREVENT AND TREAT SUBSTANCE ABUSE TARGET 3.6 REDUCE ROAD INJURIES AND DEATHS TARGET 3.7 UNIVERSAL ACCESS TO SEXUAL AND REPRODUCTIVE CARE, FAMILY PLANNING AND EDUCATION TARGET 3.8 ACHIEVE UNIVERSAL HEALTH COVERAGE TARGET 3.9 REDUCE ILLNESSES AND DEATH FROM HAZARDOUS CHEMICALS AND POLLUTION TARGET 3.A IMPLEMENT THE WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL TARGET 3.B SUPPORT RESEARCH, DEVELOPMENT AND UNIVERSAL ACCESS TO AFFORDABLE VACCINES AND MEDICINES TARGET 3.C INCREASE HEALTH FINANCING AND SUPPORT HEALTH WORKFORCE IN DEVELOPING COUNTRIES TARGET 3.D IMPROVE EARLY WARNING SYSTEMS FOR GLOBAL HEALTH RISKS |
| SDG 4 | TARGET 4.1: FREE PRIMARY AND SECONDARY EDUCATION TARGET 4.2: EQUAL ACCESS TO QUALITY PRE-PRIMARY EDUCATION TARGET 4.3: EQUAL ACCESS TO AFFORDABLE TECHNICAL, VOCATIONAL AND HIGHER EDUCATION |

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| | <p>TARGET 4.4: INCREASE THE NUMBER OF PEOPLE WITH RELEVANT SKILLS FOR FINANCIAL SUCCESS</p> <p>TARGET 4.5: ELIMINATE ALL DISCRIMINATION IN EDUCATION</p> <p>TARGET 4.6: UNIVERSAL LITERACY AND NUMERACY</p> <p>TARGET 4.7: EDUCATION FOR SUSTAINABLE DEVELOPMENT AND GLOBAL CITIZENSHIP</p> <p>TARGET 4.A: BUILD AND UPGRADE INCLUSIVE AND SAFE SCHOOLS</p> <p>TARGET 4.B: EXPAND HIGHER EDUCATION SCHOLARSHIPS FOR DEVELOPING COUNTRIES</p> <p>TARGET 4.C: INCREASE THE SUPPLY OF QUALIFIED TEACHERS IN DEVELOPING COUNTRIES</p> |
| SDG 5 Gender equality | <p>TARGET 5.1 END DISCRIMINATION AGAINST WOMEN AND GIRLS</p> <p>TARGET 5.2 END ALL VIOLENCE AGAINST AND EXPLOITATION OF WOMEN AND GIRLS</p> <p>TARGET 5.3 ELIMINATE FORCED MARRIAGES AND GENITAL MUTILATION</p> <p>TARGET 5.4 VALUE UNPAID CARE AND PROMOTE SHARED DOMESTIC RESPONSIBILITIES</p> <p>TARGET 5.5 ENSURE FULL PARTICIPATION IN LEADERSHIP AND DECISION-MAKING</p> <p>TARGET 5.6 UNIVERSAL ACCESS TO REPRODUCTIVE HEALTH AND RIGHTS</p> <p>TARGET 5.7 EQUAL RIGHTS TO ECONOMIC RESOURCES, PROPERTY OWNERSHIP AND FINANCIAL SERVICES</p> <p>TARGET 5.8 PROMOTE THE EMPOWERMENT OF WOMEN THROUGH TECHNOLOGY</p> <p>TARGET 5.9 ADOPT AND STRENGTHEN POLICIES AND ENFORCEABLE LEGISLATION FOR GENDER EQUALITY</p> |
| SDG 6 Clean water & sanitation | <p>TARGET 6.1 SAFE AND AFFORDABLE DRINKING WATER</p> <p>TARGET 6.2 END OPEN DEFECATION AND PROVIDE ACCESS TO SANITATION AND HYGIENE</p> <p>TARGET 6.3 IMPROVE WATER QUALITY, WASTEWATER TREATMENT AND SAFE REUSE</p> <p>TARGET 6.4 INCREASE WATER-USE EFFICIENCY AND ENSURE FRESHWATER SUPPLIES</p> <p>TARGET 6.5 IMPLEMENT INTEGRATED WATER RESOURCES MANAGEMENT</p> <p>TARGET 6.6 PROTECT AND RESTORE WATER-RELATED ECOSYSTEMS</p> <p>TARGET 6.7 EXPAND WATER AND SANITATION SUPPORT TO DEVELOPING COUNTRIES</p> <p>TARGET 6.8 SUPPORT LOCAL ENGAGEMENT IN WATER AND SANITATION MANAGEMENT</p> |
| SDG 7 Affordable & clean energy | <p>TARGET 7.1 UNIVERSAL ACCESS TO MODERN ENERGY</p> <p>TARGET 7.2 INCREASE THE GLOBAL PERCENTAGE OF RENEWABLE ENERGY</p> <p>TARGET 7.3 DOUBLE THE IMPROVEMENT IN ENERGY EFFICIENCY</p> <p>TARGET 7.4 PROMOTE ACCESS TO RESEARCH, TECHNOLOGY AND INVESTMENTS IN CLEAN ENERGY</p> <p>TARGET 7.5 EXPAND AND UPGRADE ENERGY SERVICES FOR DEVELOPING COUNTRIES</p> |
| SDG 8 | <p>TARGET 8.1 SUSTAIN PER CAPITA ECONOMIC GROWTH</p> |

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| Decent work and economic growth | <p>TARGET 8.2 DIVERSIFY, INNOVATIVE & UPGRADE FOR ECONOMIC PRODUCTIVITY</p> <p>TARGET 8.3 PROMOTE POLICIES TO SUPPORT JOB CREATION AND GROWING ENTERPRISES</p> <p>TARGET 8.4 IMPROVE RESOURCE EFFICIENCY IN CONSUMPTION AND PRODUCTION</p> <p>TARGET 8.5 FULL EMPLOYMENT AND DECENT WORK WITH EQUAL PAY</p> <p>TARGET 8.6 PROMOTE YOUTH EMPLOYMENT, EDUCATION & TRAINING</p> <p>TARGET 8.7 END MODERN SLAVERY, TRAFFICKING AND CHILD LABOUR</p> <p>TARGET 8.8 PROTECT LABOUR RIGHTS AND PROMOTE SAFE WORKING ENVIRONMENTS</p> <p>TARGET 8.9 PROMOTE BENEFICIAL AND SUSTAINABLE TOURISM</p> <p>TARGET 8.10 UNIVERSAL ACCESS TO BANKING, INSURANCE & FINANCIAL SERVICES</p> <p>TARGET 8.A INCREASE AID FOR TRADE SUPPORT</p> <p>TARGET 8.B DEVELOP A GLOBAL YOUTH EMPLOYMENT STRATEGY</p> |
| SDG 9 Industry, Innovation & Infrastructure | <p>TARGET 9.1: DEVELOP SUSTAINABLE, RESILIENT AND INCLUSIVE INFRASTRUCTURES</p> <p>TARGET 9.2: PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION</p> <p>TARGET 9.3: INCREASE ACCESS TO FINANCIAL SERVICES AND MARKETS</p> <p>TARGET 9.4: UPGRADE ALL INDUSTRIES AND INFRASTRUCTURES FOR SUSTAINABILITY</p> <p>TARGET 9.5: ENHANCE RESEARCH AND UPGRADE INDUSTRIAL TECHNOLOGIES</p> <p>TARGET 9.A: FACILITATE SUSTAINABLE INFRASTRUCTURE DEVELOPMENT FOR DEVELOPING COUNTRIES</p> <p>TARGET 9.B: SUPPORT DOMESTIC TECHNOLOGY DEVELOPMENT AND INDUSTRIAL DIVERSIFICATION</p> <p>TARGET 9.C: UNIVERSAL ACCESS TO INFORMATION AND COMMUNICATIONS TECHNOLOGY</p> |
| SDG 10 Reduce inequalities | <p>TARGET 10.1 REDUCE INCOME INEQUALITIES</p> <p>TARGET 10.2 PROMOTE UNIVERSAL SOCIAL, ECONOMIC AND POLITICAL INCLUSION</p> <p>TARGET 10.3 ENSURE EQUAL OPPORTUNITIES AND END DISCRIMINATION</p> <p>TARGET 10.4 ADOPT FISCAL AND SOCIAL POLICIES THAT PROMOTE EQUALITY</p> <p>TARGET 10.5 IMPROVED REGULATION OF GLOBAL FINANCIAL MARKETS AND INSTITUTIONS</p> <p>TARGET 10.6 ENHANCED REPRESENTATION FOR DEVELOPING COUNTRIES IN FINANCIAL INSTITUTIONS</p> <p>TARGET 10.7 RESPONSIBLE AND WELL-MANAGED MIGRATION POLICIES</p> <p>TARGET 10.8 SPECIAL AND DIFFERENTIAL TREATMENT FOR DEVELOPING COUNTRIES</p> <p>TARGET 10.9 ENCOURAGE DEVELOPMENT ASSISTANCE AND INVESTMENT IN LEAST DEVELOPED COUNTRIES</p> <p>TARGET 10.A REDUCE TRANSACTION COSTS FOR MIGRANT REMITTANCES</p> |

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| SDG 11 Sustainable Cities & Communities | <p>TARGET 11.1: SAFE AND AFFORDABLE HOUSING</p> <p>TARGET 11.2: AFFORDABLE AND SUSTAINABLE TRANSPORT SYSTEMS</p> <p>TARGET 11.3: INCLUSIVE AND SUSTAINABLE URBANIZATION</p> <p>TARGET 11.4: PROTECT THE WORLD'S CULTURAL AND NATURAL HERITAGE</p> <p>TARGET 11.5: REDUCE THE ADVERSE EFFECTS OF NATURAL DISASTERS</p> <p>TARGET 11.6: REDUCE THE ENVIRONMENTAL IMPACTS OF CITIES</p> <p>TARGET 11.7: PROVIDE ACCESS TO SAFE AND INCLUSIVE GREEN AND PUBLIC SPACES</p> <p>TARGET 11.A: STRONG NATIONAL AND REGIONAL DEVELOPMENT PLANNING</p> <p>TARGET 11.B: IMPLEMENT POLICIES FOR INCLUSION, RESOURCE EFFICIENCY AND DISASTER RISK REDUCTION</p> <p>TARGET 11.C: SUPPORT LEAST DEVELOPED COUNTRIES IN SUSTAINABLE AND RESILIENT BUILDING</p> |
| SDG 12 Responsible consumption and production | <p>TARGET 12.1: IMPLEMENT THE 10-YEAR SUSTAINABLE CONSUMPTION AND PRODUCTION FRAMEWORK</p> <p>TARGET 12.2: SUSTAINABLE MANAGEMENT AND USE OF NATURAL RESOURCES</p> <p>TARGET 12.3: HALVE GLOBAL PER CAPITA FOOD WASTE</p> <p>TARGET 12.4: RESPONSIBLE MANAGEMENT OF CHEMICALS AND WASTE</p> <p>TARGET 12.5: SUBSTANTIALLY REDUCE WASTE GENERATION</p> <p>TARGET 12.6: ENCOURAGE COMPANIES TO ADOPT SUSTAINABLE PRACTICES AND SUSTAINABILITY REPORTING</p> <p>TARGET 12.7: PROMOTE SUSTAINABLE PUBLIC PROCUREMENT PRACTICES</p> <p>TARGET 12.8: PROMOTE UNIVERSAL UNDERSTANDING OF SUSTAINABLE LIFESTYLES</p> <p>TARGET 12.A: SUPPORT DEVELOPING COUNTRIES' SCIENTIFIC AND TECHNOLOGICAL CAPACITY FOR SUSTAINABLE CONSUMPTION AND PRODUCTION</p> <p>TARGET 12.B: DEVELOP AND IMPLEMENT TOOLS TO MONITOR SUSTAINABLE TOURISM</p> <p>TARGET 12.C: REMOVE MARKET DISTORTIONS THAT ENCOURAGE WASTEFUL CONSUMPTION</p> |
| SDG 13 Climate Action | <p>TARGET 13.1: STRENGTHEN RESILIENCE AND ADAPTIVE CAPACITY TO CLIMATE-RELATED DISASTERS</p> <p>TARGET 13.2: INTEGRATE CLIMATE CHANGE MEASURES INTO POLICY AND PLANNING</p> <p>TARGET 13.3: BUILD KNOWLEDGE AND CAPACITY TO MEET CLIMATE CHANGE</p> <p>TARGET 13.A: IMPLEMENT THEN UN FRAMEWORK CONVENTION ON CLIMATE CHANGE</p> <p>TARGET 13.B: PROMOTE MECHANISMS TO RAISE CAPACITY FOR PLANNING AND MANAGEMENT</p> |
| SDG 14 Life below water | <p>TARGET 14.1 REDUCE MARINE POLLUTION</p> <p>TARGET 14.2 PROTECT AND RESTORE ECOSYSTEMS</p> <p>TARGET 14.3 REDUCE OCEAN ACIDIFICATION</p> |

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| | <p>TARGET 14.4 SUSTAINABLE FISHING</p> <p>TARGET 14.5 CONSERVE COASTAL AND MARINE AREAS</p> <p>TARGET 14.6 END SUBSIDIES CONTRIBUTING TO OVERFISHING</p> <p>TARGET 14.7 INCREASE THE ECONOMIC BENEFITS FROM SUSTAINABLE USE OF MARINE RESOURCES</p> <p>TARGET 14.8 INCREASE SCIENTIFIC KNOWLEDGE, RESEARCH AND TECHNOLOGY FOR OCEAN HEALTH</p> |
| SDG 15 Life on land | <p>TARGET 15.1 CONSERVE AND RESTORE TERRESTRIAL AND FRESHWATER ECOSYSTEMS</p> <p>TARGET 15.2 END DEFORESTATION AND RESTORE DEGRADED FORESTS</p> <p>TARGET 15.3 END DESERTIFICATION AND RESTORE DEGRADED LAND</p> <p>TARGET 15.4 ENSURE CONSERVATION OF MOUNTAIN ECOSYSTEMS</p> <p>TARGET 15.5 PROTECT BIODIVERSITY AND NATURAL HABITATS</p> <p>TARGET 15.6 PROMOTE ACCESS TO GENETIC RESOURCES AND FAIR SHARING OF THE BENEFITS</p> <p>TARGET 15.7 ELIMINATE POACHING AND TRAFFICKING OF PROTECTED SPECIES</p> <p>TARGET 15.8 PREVENT INVASIVE ALIEN SPECIES ON LAND AND IN WATER ECOSYSTEMS</p> <p>TARGET 15.9 INTEGRATE ECOSYSTEM AND BIODIVERSITY IN GOVERNMENTAL PLANNING</p> <p>TARGET 15.A INCREASE FINANCIAL RESOURCES TO CONSERVE AND SUSTAINABLY USE ECOSYSTEM AND BIODIVERSITY</p> <p>TARGET 15.B FINANCE AND INCENTIVIZE SUSTAINABLE FOREST MANAGEMENT</p> <p>TARGET 15.C COMBAT GLOBAL POACHING AND TRAFFICKING</p> |
| SDG 16 Peace, Justice & Strong Institutions | <p>TARGET 16.1 REDUCE VIOLENCE EVERYWHERE</p> <p>TARGET 16.2 PROTECT CHILDREN FROM ABUSE, EXPLOITATION, TRAFFICKING AND VIOLENCE</p> <p>TARGET 16.3 PROMOTE THE RULE OF LAW AND ENSURE EQUAL ACCESS TO JUSTICE</p> <p>TARGET 16.4 COMBAT ORGANIZED CRIME AND ILLICIT FINANCIAL AND ARMS FLOWS</p> <p>TARGET 16.5 SUBSTANTIALLY REDUCE CORRUPTION AND BRIBERY</p> <p>TARGET 16.6 DEVELOP EFFECTIVE, ACCOUNTABLE AND TRANSPARENT INSTITUTIONS</p> <p>TARGET 16.7 ENSURE RESPONSIVE, INCLUSIVE AND REPRESENTATIVE DECISION-MAKING</p> <p>TARGET 16.8 STRENGTHEN THE PARTICIPATION IN GLOBAL GOVERNANCE</p> <p>TARGET 16.9 PROVIDE UNIVERSAL LEGAL IDENTITY</p> <p>TARGET 16.A ENSURE PUBLIC ACCESS TO INFORMATION AND PROTECT FUNDAMENTAL FREEDOMS</p> <p>TARGET 16.B STRENGTHEN NATIONAL INSTITUTIONS TO PREVENT VIOLENCE AND COMBAT TERRORISM AND CRIME</p> <p>TARGET 16.C PROMOTE AND ENFORCE NON-DISCRIMINATORY LAWS AND POLICIES</p> |

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| SDG 17 | <p>TARGET 17.1 MOBILIZE RESOURCES TO IMPROVE DOMESTIC REVENUE COLLECTION</p> <p>TARGET 17.2 IMPLEMENT ALL DEVELOPMENT ASSISTANCE COMMITMENTS</p> <p>TARGET 17.3 MOBILIZE FINANCIAL RESOURCES FOR DEVELOPING COUNTRIES</p> <p>TARGET 17.4 ASSIST DEVELOPING COUNTRIES IN ATTAINING DEBT SUSTAINABILITY</p> <p>TARGET 17.5 INVEST IN LEAST DEVELOPED COUNTRIES</p> <p>TARGET 17.6 KNOWLEDGE SHARING AND COOPERATION FOR ACCESS TO SCIENCE, TECHNOLOGY AND INNOVATION</p> <p>TARGET 17.7 PROMOTE SUSTAINABLE TECHNOLOGIES TO DEVELOPING COUNTRIES</p> <p>TARGET 17.8 STRENGTHEN THE SCIENCE, TECHNOLOGY AND INNOVATION CAPACITY FOR LEAST DEVELOPED COUNTRIES</p> <p>TARGET 17.9 ENHANCE SDG CAPACITY IN DEVELOPING COUNTRIES</p> <p>TARGET 17.A PROMOTE A UNIVERSAL TRADING SYSTEM UNDER THE WTO</p> <p>TARGET 17.B INCREASE THE EXPORTS OF DEVELOPING COUNTRIES</p> <p>TARGET 17.C REMOVE TRADE BARRIERS FOR LEAST DEVELOPED COUNTRIES</p> <p>TARGET 17.D ENHANCE GLOBAL MACROECONOMIC STABILITY</p> <p>TARGET 17.E ENHANCE POLICY COHERENCE FOR SUSTAINABLE DEVELOPMENT</p> <p>TARGET 17.F RESPECT NATIONAL LEADERSHIP TO IMPLEMENT POLICIES FOR THE SUSTAINABLE DEVELOPMENT GOALS</p> <p>TARGET 17.G ENHANCE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT</p> <p>TARGET 17.H ENCOURAGE EFFECTIVE PARTNERSHIPS</p> <p>TARGET 17.I ENHANCE AVAILABILITY OF RELIABLE DATA</p> |
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Too Many Exclamation Marks? Never!!!

Perceptions of Leader Use of Positive Emotion in Email by Leader Gender

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Too Many Exclamation Marks? Never!!!**Perceptions of Leader Use of Positive Emotion in Email by Leader Gender**

ABSTRACT: *As contemporary opinion steers leaders toward using emotional intelligence, leaders try different strategies to utilize positive emotion in a way that is both effective and authentic. What about gender, however? Is the use of positive emotion by women leaders expected and thus not beneficial, or do they receive a boost by engaging in gender-congruent behavior. Through experimental vignettes, we determine positive emotion in email communication is most effective for men, improving leader evaluations as well as emotional contagion, as followers pass along the positive tone in subsequent communication. We take a first step in examining differential evaluations of leader use of emotion in digital communication and, practically, highlight one way men as leaders can encourage positive communication in their teams.*

Keywords: leadership, emotion, gender, leader, digital communication

Overview:

As emotional intelligence continues to represent an important construct both from a practical (Schwartzberg, 2022) and scholarly (Côté et al., 2010) perspective, leaders may ask how they can use positive emotion to benefit themselves and their teams at work. Emotion remains a poorly understood but influential topic at work, and emotion's connection with leadership beyond emotional labor remains ambiguous (Ashkanasy & Dorris, 2017). While emotional communication have been investigated within the context of leadership and leader-follower relationships (Gooty et al., 2017), and demonstrated important for leader emergence and effectiveness (Riggio et al., 2003), the role of emotion in computer-mediated communication (CMC; Romiszowski & Mason, 2004; Luppigini, 2007) and the intersection of emotion and gender (Brescoll, 2016) deserves further attention. In the following section, we outline the current understanding of CMC as well as the current understanding of the intersection of emotion, gender, and leadership.

Current understanding:**Computer-mediated communication and emotion**

Computer-Mediated Communication (CMC) is defined by Romiszowski and Mason (2004) as

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“the process by which people create, exchange, and perceive information using networked telecommunications systems” (p. 398). Luppici (2007) adds that CMC consists of multiway communication tools used to connect people otherwise separated, occurring synchronously (e.g., video chat) or asynchronously (e.g., email). Emails represent the most common way to interpersonally communicate mediated through a computer (e.g., Kato & Akahori, 2005; Kato et al., 2007), and CMC in general is the most used way to communicate in today’s business environment (Harris & Paradice, 2007). Compared to face-to-face (F2F) interactions, email precludes the use of non-verbal cues (Aldunate & González-Ibáñez, 2016). Email could, therefore, hide some cues that encourage stereotyping or make gender less salient (Kiesler & Sproull, 1992; Lee, 2007b). According to the “equalization phenomenon,” people are perceived more similarly when there are fewer contextual cues (Mano, 2013). However, Lee (2007a, 2007b) challenges the equalization hypothesis, claiming that stereotyping remains prevalent in CMC. These findings are supported by other researchers (e.g., Rodino, 1997), and Herring (1993) claims that asynchronous CMC highlights gender stereotypes even more than F2F communication.

Emotions are, according to Salovey and Mayer (1990), responses which can be adapted by the sender to shape interactions. Emotions in communication are used to share and express feelings with others (Derks, Fischer, & Bos, 2008). This, as reported by Riordan and Kreuz (2010), is more effective in F2F communications than in CMC because of the use of non-verbal cues, but is contended by others (Derks, Fischer, & Bos, 2008). The absence of non-verbal cues necessitates the use of other indicators to transfer emotions through CMC (Lafren & Fiorenza, 2012). According to Harris and Paradice (2007), these cues can be verbal or non-verbal, paralinguistic cues. Emotion words can be directly named in a communication with statements like “I’m happy with this outcome”, but one can also transfer emotions without explicitly using any emotion words, such as, “I want to thank him a thousand times” (Harris & Paradice, 2007, p. 2083). Lafren and Fiorenza (2012) add that words like “absolutely” or “truly” are quantity devices that can be used to express strength of emotion. In contrast

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to verbal cues, paralinguistic cues signal emotion without words (Harris & Paradice, 2007). These can include the intentional use of exclamation marks or emoticons to express emotions (Harris & Paradice, 2007). Exclamation marks are a sign of emotional communication (Sterkel, 1988), representing a quantity device to emphasize emotions even more clearly (Laflen & Fiorenza, 2012). Furthermore, emoticons (such as :) and others) can reinforce emotions in CMC such as email (Derks, Bos, & Grumbkow, 2008; B. Fischer & Herbert, 2021). Emoticons replace missing facial expression and can thus reintroduce social context normally reserve for F2F interaction (Derks, Bos, & Grumbkow, 2008). Regardless of whether emotions are conveyed through verbal or non-verbal cues in CMC, the greater the quantity of emotional cues in a message, the more emotion attributed to the message by the receiver (Harris & Paradice, 2007). The extent to which positive emotional CMC influences leadership evaluations, however, remains unclear.

Gender, emotional display, and leadership

The case for further investigating the extent to which emotion can be conveyed via CMC and prove useful for leaders is fairly straightforward. The influence of leader gender, however, is not. As Brescoll (2016) wrote, “the belief that women are more emotional than men is one of the strongest gender stereotypes held in Western cultures” (p. 415). Furthermore, men and women face dramatically different expectations when it comes to display of emotion (Brescoll, 2016). Identical displays of emotion are perceived as more extreme when enacted by women, and women may face backlash for displaying emotion whereas men are rewarded (Brescoll, 2016). As women are perceived as more emotional than men and even ruled by their emotions, it could be that women’s use of emotional communication backfires as it represents a double-bind in being inconsistent with the leadership role while consistent with the gender role (Eagly and Karau, 2002). As the use of positive emotion specifically is congruent with gendered expectations of women, however, it may positively impact evaluations of their leadership effectiveness (A. H. Fischer, 1993). In summary, the use of emotion in leader email communication and

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its efficacy for men and women leaders, despite being an integral part of everyday leadership, is poorly understood and warrants further investigation.

Research questions:

The discussion above leads us to the following hypothesis and research questions:

Hypothesis 1: Leader positive emotion in email improves follower evaluations of leadership effectiveness

RQ 1: Does leader gender moderate this relationship? If so, in what way?

RQ 2: Does leader's positive emotion "trickle down" and influence subordinate's emotion in subsequent communication?

Research approach:

To assess the above hypothesis and research questions, we utilized an experimental vignette methodology (EVM; Aguinis & Bradley, 2017) in a 2 x 2 between-subjects design. Participants were asked to imagine they were a manager in a company with four subordinates and then presented with an email written by a man (woman) leader in an neutral (positive emotional) style, which we had pilot tested for perceived emotionality. These emails were developed using the Linguistic Inquiry and Word Count (LIWC) application from Pennebaker et al. (2015) and validated using the lexicon from Rocklage and Fazio (2015).

Participants were then asked to read the email (see an example of emotional communication in Figure 1) and evaluate the leader in terms of their effectiveness using the four-item scale from Yun et al. (2020). We also asked participants to follow the instructions in the email by composing an email to their team of subordinates to share the news from the leader James (Mary) Smith to determine whether the positive emotional tone used by the leader "trickles down" to the subordinate.

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Figure 1: Emotional & Male Vignette with Color-Coding

From: James Smith <james.smith@management.com>
Sent: Thursday, March 16, 2023 11:17 AM
To: All Team Leaders
Subject: Quarterly Update

Hi Team Leaders!

I want to briefly update you on the status of our company's performance. This first quarter of 2023 was **challenging** so far. We overcame some **troubles** with our supply chain and the market and macroeconomic conditions were not in our **favor** which **really** impacted our company **significantly**, BUT we managed to overcome all **these** obstacles and **improved** our performance compared to the previous quarter by 3% up to now! Furthermore, every team managed to be **extraordinary** and achieved **their** goals **perfectly**! Our stakeholders are **really** happy with this outcome!

The next quarter looks **promising** and we expect continuous growth across all our business units and have already some new **exciting** projects lined up! I want to **thank** you **profusely** for your **engagement**! You are doing a **really** good job and I'm **truly** thankful to have you in our team!

If you have any questions or comments, **please** reach out to me! I **will** **happily** provide you answers!

Please share **this** information in **your** own words with **your** subordinates for **them** to be **well** informed about the **well-being** of the company!

See you soon! :)

Best regards,
James Smith

James Smith – General Manager
Contact me: james.smith@management.com
Follow me on LinkedIn!

Findings:

Sample and descriptive statistics

We tested the above hypothesis and research questions through a gender-balanced sample of 169 working adults in the United Kingdom obtained via Prolific. The participants were on average 37.1 years old, and two thirds (66%) reported previous experience managing others at work. Our manipulation checks were successful, as an ANOVA revealed the emotional email condition was perceived as significantly more emotional than the neutral condition ($F(1,166) = 50.38, p > .001$), and all but 13 participants correctly identified the gender of the leader.

Main effects on leader effectiveness

Leadership effectiveness evaluations did not significantly differ by leader gender, as an ANOVA revealed no main effect of gender ($F(1,166) = 1.89, p = .346$). Emotionality on the other hand, was significantly associated with more positive leadership evaluations ($F(1,166) = 9.96, p = .0019$). a follow up test of Tukey's HSD revealed, however, that the only significant differences between groups was between the neutral email sent from a woman leader and the positive emotional email sent from the man leader. Thus, Hypothesis 1 was partially supported, and we discovered evidence suggesting that the

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positive influence of leader positive emotion *is* contingent upon leader gender, such that men benefit from the use of positive emotion while it does not appear to be effective for women, answering Research Question 1 in the affirmative.

Emotion contagion

To explore Research Question 2, we examined the content of the emails that participants wrote (see Figure 2 for an example). The LIWC dictionary *Tone* was used to analyze how the participants differed in their use of positive tone (Pennebaker et al., 2015). While men and women participants did not differ in their positive tone, the Kruskal-Wallis test showed a significant mean difference between experimental conditions ($p = 0.0047$). Pairwise comparisons using Wilcoxon rank sum post-hoc test revealed a significant difference between man-neutral and man-positive emotion conditions (adjusted $p = 0.014$) and the woman-neutral and man-positive emotion conditions (adjusted $p = 0.034$). Participants who received positively emotional email from a man leader wrote more positive and optimistic e-mails in return. This finding was robust via other estimation methods as well, as a Kruskal-Wallis test ($p = .0007$) indicated that participants in the man-positive emotion condition used more words in their emails (operationalized as a percentage of the overall word count; WC) from the positive emotion words from the Rocklage and Fazio (2015) lexicon. We observed a similar pattern for participant use of *exclamation marks*. Again, a post-hoc test following the Kruskal-Wallis test reveals that the participants from the man-positive emotion condition used significantly more exclamation marks as percentage of the WC than participants in the man-neutral and woman-neutral conditions.

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Figure 2: Example Email from Participant

Hi Team
 I am keen to share an update with you on our company's performance and our contribution to that performance.

Despite a challenging internal and external environment we have improved overall company performance by 3% compared to the previous quarter. This is a great achievement and I want to thank you for your contribution towards this – it is extremely pleasing to see how we have pulled together as a team to deliver for the organization.

We are anticipating more of the same going into the next quarter so please continue to support each other and reach out to me or your line manager as we move into delivering new projects.

Thank you once again for all that you do.

Contribution and Limitations:

While this project represents a critical step forward in better understanding the efficacy of men and women leaders' use of positive emotion, it is of course not without its limitations. First, while the data are experimental and thus can be tentatively interpreted as causal (Antonakis et al., 2010), the situation participants encountered is also to a certain extent artificial in nature, which may influence their responses (Lonati et al., 2018). Second, leader-follower relationships are developed over time, and in the field, followers will have more individuating information about their leaders, which is not reflected in this design. Finally, the results may have been influenced by this lack of individuating information, as humans tend to rely more heavily on stereotypes when information is incomplete or ambiguous (Heilman, Manzi, & Caleo, 2019).

Albeit tentative in nature, this work suggests that the use of positive emotion in digital communication can be especially effective for leaders who are men. This finding could be the result of positive stereotype violation (similar to the glass escalator effect, see Williams, 2013). Or it could simply be the case that as men hold higher status in our society (Berger et al., 1972), they are afforded more leniency when violating gender norms and a broader range of acceptable behaviors, because they already have greater status. The mechanism through which men receive outsize benefits for their use of positive emotional communication remains unclear, and this warrants further investigation. Going one step

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further, additional research should be conducted to determine whether “best practices” in leadership such as demonstrating empathy or use of positive emotion truly represent best practices for all leaders, or instead only for leaders who are men.

Implications:

Practically speaking, no negative consequences were associated with the use of positive communication for either men or women leaders, and pre-testing revealed that the neutral and positive emotional email were indistinguishable in professionalism. As a result, we can tentatively encourage men and women leaders both to use positive emotional communication in their emails, and these findings suggest that men may even see a boost in their leadership evaluations as a result. Furthermore, participants who received a positive emotional email from a man leader were more likely to reproduce that positive emotional tone in their own emails, suggesting emotion contagion. Should men leaders wish to “pay it forward” in terms of positive emotional communication, we would especially encourage them to adopt more positive language (and perhaps even include an exclamation mark or two) in their emails!

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Measuring ESG impacts: A new framework for agribusiness

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Measuring ESG impacts: A new framework for agribusiness

Abstract

Agribusinesses, like all other business organisations, face many environmental, social, and governance (ESG) challenges and are looking to reduce their impacts across the value chain. Currently, prevalent ESG frameworks fall short of addressing the unique sustainability challenges of agribusiness organisations. Here we propose a new framework to measure ESG impacts for agribusiness organisations. This framework includes human capital, natural capital, social capital, produced capital and governance indicators to measure all impacts effectively for agribusiness organisations. Measuring such impacts can help agribusiness organisations prioritise ESG considerations to manage associated risks, attract investment, meet consumer demands, and ensure long-term sustainability, productivity, and profitability. We also discuss the implications of such a framework for practice, research, and policy.

Keywords: ESG indicators, human capital, natural capital, social capital

INTRODUCTION

The agribusiness sector contributes \$3.7 trillion (FAO, 2023) annually to the global economy and employs around 1.3 billion people worldwide (UN, 2020). The sector is critical for achieving the Sustainable Development Goals of the United Nations. Due to its size and dependency on natural resources, this sector faces several environmental, social and governance (ESG) challenges (Shapiro et al., 2018; Zeng & Jiang, 2023). Like other corporations, agribusiness organisations are looking for ways to reduce their impacts to demonstrate their social and responsible agenda (Sandhu, 2022). However, the current ESG frameworks often fail to capture agribusiness organisations' diverse nature and dependence on natural resources. Therefore, based on the current literature, we propose a new conceptual framework to measure ESG impacts in agribusiness organisations.

Business organisations started showing environmental and social responsiveness around the 1970s (Sandhu, 2010). The concept of corporate social responsibility (CSR), developed in the 1970s,

encouraged businesses to voluntarily adopt responsible practices (Bansal & Desjardine, 2014; Sharma & Hart, 2014). The triple bottom line concept was popularised by John Elkington in the 1990s to emphasise the interconnectedness of economic, social, and environmental performance (Mook, 2020). In the 2000s, initiatives focused on integrating ESG into investment analysis and decision-making, such as the United Nations ‘Global Compact’ and the ‘Global Reporting Initiative’, called for the companies to align their operations with principles related to human rights, labour standards, environmental protection, and anti-corruption (GRI, 2023; UN Global Compact, 2008). ESG as a concept was greatly popularised by the Freshfields report in 2005, which led to the development of the United Nations Principles of Responsible Investment (Leins, 2020). The 2015 Paris Agreement and Sustainable Development Goals (SDGs) highlighted the importance of sustainability and ESG impacts, increasing investor demand for ESG integration and disclosures (Dye et al., 2021).

Over the years, ESG evolved as a structured framework for evaluating the non-financial performance of companies, considering environmental, social, and governance factors (Leins, 2020; Tenuta & Cambrea, 2022). Governments and regulatory bodies have implemented or considered ESG reporting and disclosure regulations, and investors have recognised that non-financial factors could impact a company’s long-term financial performance (Leins, 2020). Reporting standards such as the Sustainability Accounting Standards Board (SASB) framework and Task Force on Climate-related Financial Disclosures (TCFD), recommendations have emerged to guide companies in disclosing material ESG information (Dye et al., 2021). However, few frameworks are designed for agribusiness organisations to assess their ESG impacts. Therefore, we propose a new conceptual framework to help agribusiness organisations identify, capture and measure their ESG impacts across value chains.

METHOD

The conceptual framework

The agribusiness sector is complex as it affects and is affected by four capitals: natural, social, human and produced. We followed the existing literature to describe these four capitals and developed a foundation for our proposed framework (TEEB, 2018). One of the studies led by the United Nations Environment Programme highlighted all social, economic, and environmental externalities in global

agriculture and food systems, including positive and negative effects (Sandhu et al., 2019; TEEB, 2018). To capture all ESG impacts holistically, it is vital to examine all inter-dependencies of agriculture and food systems across these four capitals (TEEB, 2018).

We adopted natural, social, human, and produced capital as major categories to reflect key factors that affect agribusiness organisations. In addition, we also included governance as one of the key categories based on the recent studies on the governance component of ESG (Edmans, 2023; Monteiro et al., 2021; Shapiro et al., 2018). We further selected 25 indicators across five broad categories based on the current literature on social, environmental, and economic impacts of agriculture food systems. The term ‘agribusiness’ refers to the industry that includes a variety of agricultural production, processing, distribution, and marketing operations. The conceptual framework with five categories and 25 indicators to assess ESG impacts in agribusiness organisations is summarised in Figure 1. We describe all categories and indicators of the proposed framework in this section.

Insert Figure 1 here

Natural capital

Natural capital refers to the earth’s limited physical and biological resource stocks, including air, water, land, minerals, forests, and biodiversity, and the ecosystems’ limited ability to provide ecosystem services such as clean air, clean water, pollination, climate regulation, and soil fertility (Costanza et al., 1997; TEEB, 2018). Agribusiness and natural capital have a significant and interconnected relationship (Sandhu et al., 2012). Healthy ecosystems and natural resources are essential to agriculture’s ability to generate food, feed, fibre, and other agricultural products (FAO, 2021). Agricultural expansion and production have been associated with greater land use change, soil erosion, a quick depletion of water supplies, pollution from chemical farming, and increased energy usage (Ramankutty et al., 2018). The quantity and quality of natural capital directly impact the productivity, sustainability, and profitability of agribusiness.

Agriculture requires fertile land and healthy soil for high yields and long-term productivity (FAO, 2017). Preserving hedgerows, wetlands, and wildlife habitats on farms helps with pest

management, nutrient cycling, and ecosystem balance (Pretty, 2008). Water resources, such as rivers, lakes, and groundwater, are essential for irrigation, cattle, and agro-industrial operations (FAO, 2017). Biodiversity has eroded with intensive agriculture activities, while it is crucial for crop pollination, water supply, flood risks, and soil moisture preservation (IPBES, 2019; Rasmussen et al., 2018). It also supports breeding programs for crops and livestock, enabling the creation of hardy and high-yielding cultivars. Agribusinesses and natural capital are closely related in the context of climate change with GHG emissions (TEEB, 2018). By valuing and protecting natural capital, agribusinesses can safeguard their future while promoting environmental sustainability and global food security.

Nine indicators in this category are described below.

Net GHG emissions: GHG emissions produced by crop and livestock production, farm production, processing, and transportation

Freshwater extraction and water pollution: Freshwater used in agricultural production, clean and operate facilities and machinery and water pollution due to these activities.

Waste generation (on the farm): Waste produced throughout the production process.

Air pollution: GHG, odour, and organic dust produced.

Loss of plant/livestock biodiversity: The loss of plant/livestock diversity by only using selected breeds or crops.

Loss of agri-enviro biodiversity: The impact of agricultural production on flora and fauna (insects, birds, animals, soil microbes) that exist in the landscape in addition to the livestock and crops.

Land use change (indirect): Change in land use to produce crops or livestock.

Land degradation (direct): Degradation of the land caused by agricultural production systems.

Soil contamination: Soil contamination due to chemicals and organic pollutants.

Human capital

Human capital refers to the human knowledge, skill, competencies, and characteristics that individuals possess and contribute to the development of personal, social and economic well-being (TEEB, 2018). The abilities and knowledge of the people working in various production, processing,

marketing, and management stages are crucial to the success of agribusiness. Human capital is essential to agribusiness because it promotes innovation, efficiency, and sustainability in the agricultural industry (Šlaus & Jacobs, 2011).

Human capital encompasses productive, social, organisational, mental, intellectual, cultural, and psychological resources, including skills, tools, and knowledge. It also encompasses mental, intellectual, and cultural aspects, such as values, customs, and individuality (Inwood, 2017). It is crucial to place focus on the human capital requirements of farm families and farm workers in terms of their health, the standard of their occupations, and the social infrastructure they need to support a more robust and resilient agricultural sector (Inwood, 2017). Pretty (2008) reported that sustainability principles involve integrating biological and ecological processes into food production, minimising non-renewable inputs that harm the environment or consumers' and farmers' health. These principles aim to minimise environmental harm, improve self-reliance, and reduce the use of costly external inputs. Recognising and nurturing human capital in agribusiness unlocks its potential for sustainable growth, increased productivity, and improved livelihoods for farmers and rural communities.

Five indicators under this category are described below.

Skills and knowledge of workers: Formal and informal education required to do the job.

Workplace health & safety standards: Extent of industry regulations to ensure worker conditions.

Health of farmers: Farm owners' physical and mental health, lifestyle, security/stability.

Health of farm/production workers: Farm workers' physical and mental health, lifestyle, security/stability.

Consumers' health: Risk of disease from production processes or from consumption.

Social capital

Social capital refers to the institutions and networks as well as common norms, values, and perceptions that exist between or within groups that promote connections, cooperation, and collective action among individuals and groups (Putnam, 1993; TEEB, 2018). Social capital is important in agribusiness because it promotes collaboration, information sharing, group problem-solving, and group decision-making (Fu et al., 2018; Pretty, 2003), lowering transaction costs and providing access

to information through trust and networking among stakeholders (Park et al., 2017). Cooperative actions among farmers improve the effectiveness and efficiency of agriculture value chains (Lowitt et al., 2015) and enable the implementation of sustainable farming methods boosting production and agribusiness resilience and livelihood (Fu et al., 2018; Johnson et al., 2013).

Producers can participate in lobbying and collective action, raising their voices and negotiating effectively (Rydin & Pennington, 2010). Social capital encourages agribusinesses to adopt social responsibility and sustainable practices, including interacting with local communities, upholding labour laws, and considering the needs of employees and rural communities (ESCAP, 2017). Although there are employment opportunities, young people are less attracted towards agriculture production-related jobs. This indicates the need for innovation for their engagement and generational sustainability (FAO & IFAD, 2019). Recognising and utilising social capital can lead to increased output, improved livelihoods, and a fair distribution of gains in the agriculture value chain.

Five indicators under this category are described below.

Community engagement: Engagement of the producers with the local community.

Networks: Network of stakeholders for learning, sharing and collaborating.

Employment: Quantity of employment generated by the production system.

The livelihood of farmers: Support of agribusiness to farmers' livelihood.

Opportunities for young people: Employment, training, future prospects.

Produced capital

Produced capital refers to all physical infrastructures created by human efforts, such as roads, and irrigation systems, all financial capital, all manufactured capital as buildings, factories, and machinery and all intellectual capital as technology, software, patents, brands (TEEB, 2018; Sandhu et al., 2019). Produced capital is essential for improving productivity, efficiency, and the smooth functioning of agricultural operations in any agribusiness. Energy as input is essential for economic activities and the functioning of produced capital (TEEB, 2018).

Modern agricultural machinery automates tasks, improves processes, and boosts output (Tzounis et al., 2017). However, produced capital, including machinery, equipment, and infrastructure, can contribute to animal and plant health risks in agribusinesses. Inadequate facilities,

contaminated inputs, improper chemical use, and machinery accidents increase animal disease transmission and environmental stress (Hennessy et al., 2019). Proper management and responsible use of input and infrastructure can mitigate these risks. Strong infrastructure, such as roads, railways, ports, cold storage, and processing, reduces storage and transportation costs and ensures prompt delivery of agricultural products (Prus & Sikora, 2021; Warner et al., 2009). Digital tools and information technology systems increase productivity and decision-making (Trendov et al., 2019). Investing in physical assets and infrastructure enhances the agricultural sector's efficiency, productivity, and value addition by increasing product shelf life and satisfying customer demand (Coltrain et al., 2000). Prioritising and investing in produced capital is crucial for sustainable growth and competitiveness in the agribusiness industry.

Four indicators under this category are described below.

Energy use: Electricity and fuel are used in production, processing, and transportation.

Plant/Animal health: Health risk of animals/plants.

Productivity: Productivity by geographical area and human/resource input.

Profits: Return on investment after expenses.

Governance

Governance refers to the institutions, processes, and techniques used to make decisions, exercise authority, and carry out plans of action (Keping, 2017; Rose-Ackerman, 2017). Effective governance is crucial for sustainable agriculture growth, accountability, transparency, and fair benefit sharing (FAO, 2014). Good governance in the agribusiness sector entails stakeholder involvement, clear rules, regulations, and enforcement of standards to create a supportive environment (CFS, 2014; FAO, 2014).

Agribusiness governance involves developing and implementing precise policies and regulations that direct the sector's activities. This includes laws governing land use, food safety standards, environmental protection laws, and trade rules. A strong policy framework safeguards stakeholders' interests, encourages sustainable practices, and provides stability, predictability, and fairness in agribusiness operations (Ronaghi et al., 2020). Effective governance requires strong institutions at various levels, such as government organisations, agricultural research organisations,

extension services, and industry groups, to create and carry out policies, offer technical assistance, uphold laws, and coordinate efforts among stakeholders (Ronaghi et al., 2020). Good governance also promotes the integration of social and environmental factors into agribusiness operations, ethical labour standards, involvement in society, and CSR programs (Cristea et al., 2022; UNEP, 2008). By fostering good governance in the agribusiness sector, societies can encourage sustainable agricultural development, increase food security, and improve the well-being of the involved population.

Two indicators under this category are described below.

Influence on policies & regulations: Lobbying power, level of investment, publicity, the extent of influence.

Governance structure: Framework of management and decision making.

We do not report here how to measure these impacts as this is beyond the scope of this paper. However, for a holistic and comprehensive assessment of agribusiness organisations, they need to measure, capture and report impacts across these categories across the value chain. This will help them develop an appropriate response to reduce negative impacts on society and the environment and contribute more effectively to economic development.

DISCUSSION

Agribusiness organisations can achieve long-term success by adopting sustainable practices, implementing advanced technologies, and demonstrating a strong commitment to a social and responsible agenda to create value (Porter and Kramer, 1999). However, there are certain environmental, social, and governance factors that are unique to agricultural activities. A specific ESG framework is essential for the agribusiness sector due to its unique sustainability challenges, the complexity of the value chain, and the need for sector-specific indicators. A dedicated ESG framework can account for the interconnectedness of the agribusiness value chain, allowing for comprehensive assessment and reporting on sustainability performance. Sector-specific indicators, such as land use, water use, biodiversity conservation, animal welfare, and greenhouse gas emissions, can be selected and tracked using a specific ESG framework.

Several sustainability accounting frameworks have been developed to standardise the disclosure of ESG information, catering to increasing investor demand for non-financial information from corporations (Bose, 2020). Among the most commonly used frameworks, Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), and Sustainability Accounting Standard Board (SASB) are often used for large corporations; Impact Reporting and Investment Standards (IRIS), B Impact Assessment, and Future-Fit Assessment are the most frequently used frameworks for smaller businesses; Carbon Disclosure Project (CDP), Climate Disclosure Standard Board (CDSB) and Taskforce on Climate-related Financial Disclosure (TCFD) are frameworks related to climate change; and UNSDGs (United Nations Sustainable Development Goals) targets nations for sustainability reporting (Bose, 2020). There are many other frameworks, however, it is beyond the purview of this study to examine all standards and frameworks in depth. None of them is a dedicated framework for agribusinesses and does not include unique indicators of the sector. So, they cannot fully capture the sustainability challenges and considerations specific to agribusiness. Hence, we developed this framework with unique agribusiness-related indicators.

While developing an effective ESG framework for agribusiness, it must adhere to internationally recognised guidelines and frameworks to address specific sustainability challenges and possibilities within the industry. TEEB AgriFood framework is an already recognised framework that explains interlinkages between the four capitals (natural, social, produced and human) and the agriculture value chain (TEEB, 2018). The TEEB AgriFood Framework assesses economic, social, and environmental aspects of agricultural and food sectors, valuing impacts on nature and ecosystem services through the capital stock concept (TEEB, 2018). By using the capital stock concept from TEEB, an ESG framework for agribusiness can evaluate and address the environmental and social aspects. So, these four capital stocks, along with the governance, are relevant to be included in the ESG framework to identify relevant indicators and targets that reflect the impact and performance of agribusiness operations

Reporting across all five categories will help agribusiness organisations achieve social, environmental and economic sustainability. We highlight the implications of this framework for practice, research and policy.

Implications for business practices

The framework helps agricultural enterprises to identify, reduce, and manage social, environmental, and reputational risks, safeguarding operations, reputation, and long-term profitability through proactive strategies. Agribusiness organisations can identify and reduce risks, controlling environmental issues such as resource depletion, water scarcity, and climate change while managing social risks such as reputational harm, community conflicts, and labour rights abuses. This proactive approach safeguards operations, reputation, and long-term profitability. Sustainability-focused agribusinesses are more likely to receive funding and investment from investors seeking ESG-aligned opportunities. Effective communication of ESG objectives and performance fosters long-lasting connections.

A comprehensive assessment can lead to adopting sustainable practices that can enhance operational effectiveness and reduce costs, making operations more efficient. The ESG assessment using this framework can drive agribusiness innovation and market opportunities by promoting sustainable farming practices, traceability, and alternative farming techniques. Agribusinesses can capitalise on customer demand for socially and environmentally responsible products, increasing their market share. Such a framework can also encourage agribusiness organisations to build strong relationships with stakeholders, including farmers, consumers, communities, employees, investors, and regulatory bodies. Engaging with stakeholders, addressing concerns, and incorporating feedback enhance trust, relationships, and social license to operate.

Implications for research

The proposed framework is comprehensive and holistic, including all four capitals and governance impacts essential to developing equitable and inclusive agriculture and food systems. It can be used across all stages of value chains and is universal. However, there is a need to develop guidelines for using such a framework so that agribusiness organisations can develop their pathways for the transition towards sustainability. It also requires the development of standardised methodologies to assess all impacts across 25 indicators. There could be multiple uses of such a comprehensive framework depending upon the scope of the assessment. Further research is required to develop assessment methods to capture the diverse nature of agribusiness organisations.

Implications for policy

This framework can help influence agricultural and environmental policies in both private and public sectors. Such policies can promote sustainable agricultural practices and resource conservation and address social issues. Governments can encourage agribusinesses to adopt sustainable practices in line with the ESG framework by offering incentives, subsidies, and assistance programs. These could include grants for environmentally friendly technologies, financial incentives, and capacity-building programs for smallholder farmers. This framework can encourage policymakers to promote stakeholder collaboration and engagement. This involves interacting with corporations, civil society organisations, academic institutions, and communities to gather opinions, share knowledge, and identify best practices. Policies in agriculture can promote rural development and social welfare by fostering inclusive practices, supporting smallholder farmers, and facilitating market access. For example, addressing labour rights, fair wages, and working conditions to ensure social justice. Using the framework to assess ESG impacts can help governments enhance agriculture supply chain traceability by implementing policies and regulations, such as product labelling, ethical sourcing, and certification programs like organic or fair-trade certificates for increased transparency and consumers' confidence.

CONCLUSION

The proposed framework based on five categories and 25 indicators is comprehensive and holistic. Adopting such a framework can help agribusinesses assess their impacts across the value chain for sustainability and long-term profitability. Such an assessment can help the transition of agribusiness organisations towards sustainability by reducing their ESG impacts. Further research is required to develop guidelines to carry out assessments and methods to measure all impacts.

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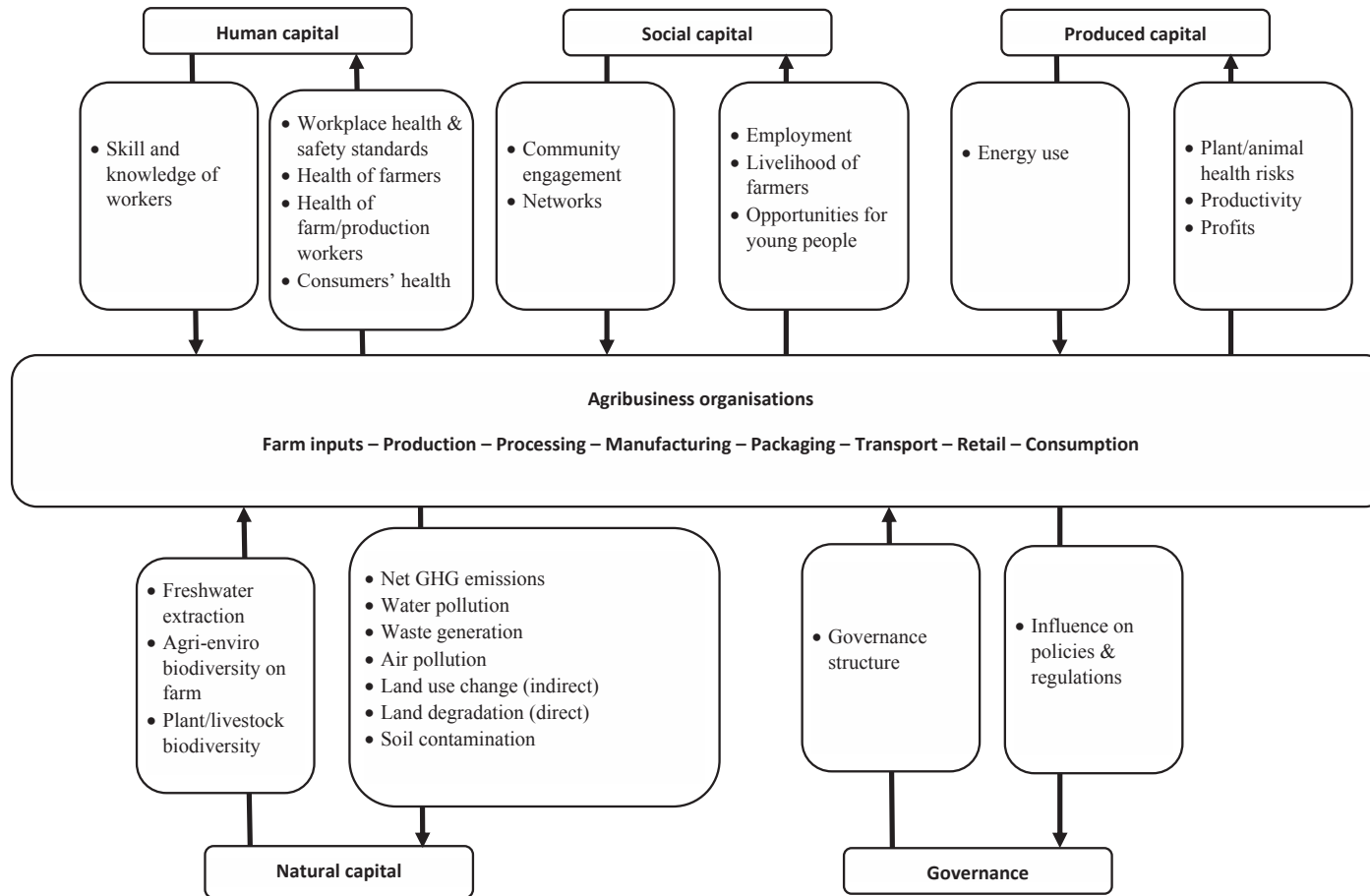
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Figure 1: The conceptual framework for agribusiness organisations to assess ESG impacts. Arrows towards capital stocks denote the impacts, and arrows towards agribusiness organisations denote dependence.



**WILL WORKPLACE EXERCISE IMPROVE THE WELL-BEING OF SECURITY
GUARDS? A FIELD EXPERIMENT INTERVENTION EXAMINING THE
IMPLEMENTATION OF
SDT AND JD-R MODELS TO PROMOTE
WORKPLACE EXERCISE**

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ABSTRACT

Elderly blue-collar workers, like security guards, face poor working conditions, including long sedentary hours, leading to health issues. Their well-being is often neglected due to societal position and lack of support. A workplace exercise program could improve these workers' health without additional cost. We used self-determination theory to design an intervention bundle that could motivate security guards to exercise. We integrated the Job Demands-Resources Model to determine how providing job resources and reducing job demands might influence the effectiveness of the need-based intervention bundle. We found that the intervention bundle encouraged security guards to exercise more, and those who did experience a significant reduction in their pain level. Therefore, promoting workplace exercise for security guards could improve these employees' well-being.

Keywords: workplace exercise, burnout, back pain, self-determination theory, Job Demands-Resources Model, Elderly blue-collar workers

In Hong Kong, it is not uncommon to find elderly blue-collar workers who continue to work in order to sustain their livelihood. Unfortunately, many of them experience poor well-being due to extended working hours and unfavourable working conditions, such as those of security guards in residential buildings. The well-being of elderly blue-collar workers appears to be overlooked and neglected in society.

Security guards in residential buildings—particularly single-block buildings—tend to be older, and their jobs are sedentary over long working hours. They tend to suffer from health problems, particularly lower back pain (Adnan et al., 2017). Back pain sufferers have difficulty moving or standing upright, which affects their physical working ability and their quality of life (Aishwarya, Ashvini, Swara, & Tajuddin, 2020). So far, no supportive governmental policies exist to improve health conditions among security guards, and most property management companies (PMC) are reluctant to address the problem or lack the resources to do so.

Studies show that regular exercise can benefit elderly and sedentary workers, including relief from pain (Sipaviciene & Kliziene, 2020). In order to improve the situation for elderly blue-collar workers and their well-being, it is essential to address their working conditions, especially given the long sedentary workers. As such, we recommend encouraging these workers to engage in more physical activity to enhance their overall health.

THEORETICAL BACKGROUND AND HYPOTHESES

Based on previous studies and our pilot interview study among security guards, we found two major barriers to exercise—lack of intrinsic motivation and lack of resources. This study focuses on sedentary elderly security guards and uses self-determination theory (SDT) to design a need-based intervention bundle to explore how to motivate security guards to exercise. We also integrate the Job Demands-Resources Model (JD-R Model) to determine how providing job resources and reducing demands can influence the effectiveness of the need-based intervention bundle. Finally, we identify the short-term effects of increased exercise. Figure 1 shows the Research Model’s overall design.

Insert Figure 1 here.

Self-Determination Theory and Intervention to Exercise

SDT suggests that intrinsic motivation occurs when the needs for autonomy, competence, and relatedness are satisfied; therefore, we designed a need-based intervention bundle, based on these three basic needs, to motivate security guards to exercise. Autonomy means people exercise their power to choose (Deci & Ryan, 2008), and thus, the intervention bundle allowed participants to decide when and how to exercise. All participants received information on the benefits of exercise and suggestions for stretch exercises they could select to perform at work or home. Competence involves people using their experience or ability to control or achieve a positive outcome from a task (Deci, 1971). When people achieve targets that vary from easy to more difficult ones, they satisfy their need for competence; therefore, participants were allowed to choose stretch exercises with different levels of difficulty which could be increased as they exercised longer. Finally, relatedness can be satisfied through social connections as people realize others care about their feelings (Grolnick & Ryan, 1989). Therefore, the intervention included opportunities to interact with an assigned partner. For example, day shift workers were paired with night shift security guards at the same building. Partners could share their exercise experiences and support each other during the intervention period. An intervention bundle that satisfies all three basic needs should increase security guards' intrinsic motivation to exercise. Therefore:

Hypothesis 1. The need-based intervention bundle is positively related to exercise.

Job Demands-Resources Model and Exercise Motivation

The JD-R Model explains how the work environment affects employees' well-being, which in turn affects behavior. When job demands are high, employees suffer strain and health impairment more easily. On the other hand, more resources can boost employees' motivation and increase their productive (Schaufeli & Taris, 2014). Therefore, the JD-R Model assumes that employees will enjoy better health and well-being when their work environment reduces job demands and increases job resources.

Job demands occur when an employee exerts sustained physical or mental effort to complete a task (Hu, Schaufeli, & Taris, 2011) which does not allow the employee to adequately recover (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Meijman & Mulder, 1998).

In contrast, job resources are actions that ease job demands, which is rewarding for employees as they are more likely to achieve their work goals and improve their abilities (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). They also may buffer the negative impact of job demands (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007) and help reduce them (Halbesleben, 2010; Schaufeli & Bakker, 2004). Consequently, we combined the JD-R Model with SDT to create a motivation tool, since some job resources can fulfill basic human needs and enhance the effects of the need-based intervention bundle.

Job resources to enhance the effect of the need-based intervention

Based on previous studies and our pilot study suggest that reducing job demands and providing job resources are essential for an effective need-based intervention bundle. Although employees may have their psychological needs fulfilled, high job demands from long hours or heavy workloads can increase mental pressure (psychological problems) and fatigue (physical problems), and reduce motivation. However, job resources can provide a buffer for to these job demands and enhance employees' intrinsic motivation by bolstering their basic needs (Deci & Ryan, 2000; Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008).

In a pilot test for this research, most security guards said they lacked time to exercise. Most worked 12 hours, after which they went home for dinner and to bed. Thus, those who want to exercise can be constrained by time. Therefore, we proposed that the job resource of time be provided to allow security guards to exercise during work hours, thus enhancing their intrinsic motivation and strengthening the effect of the intervention bundle. Therefore:

Hypothesis 2. Job resources (time to exercise during work hours) enhances the positive relationship between the need-based intervention bundle and exercise.

Job demands to reduce the effect of the need-based intervention

Job demands such as workload and work pressure (Bakker, Demerouti, & Sanz-Vergel, 2014) can reduce the effect of need-based intervention because they exhaust valuable mental and physical resources and lead to depletion of energy (Bakker, Demerouti, & Schaufeli, 2003, Hu et al. 2011). Workload is a salient job demand for security guards as they must handle various customer complaints and incidents. Heavy workloads may exhaust the security guard's time and energy for exercise

(Demerouti & Nachreiner, 1998; Demerouti et al., 2001; Lee & Ashforth, 1996), lowering the effectiveness of the need-based intervention bundle.

Hypothesis 3. Job demands (workload) weaken the positive relationship between the need-based intervention bundle and exercise.

The Downstream Consequences of Exercise

Lower back pain is a common health problem among adults and the most common problem among security guards in Hong Kong (Adnan et al., 2017). Research shows that regular exercise can improve this condition (Gao et al., 2019; Mailloux, Finno, & Rainville, 2006; Hellman, 1997; Plonczynski, 2000).

In addition, workers can experience burnout related to physical such as back pain and/or mental health problems such as anxiety (Acker, 2009; Melamed, Shirom, Toker, Berliner, & Shapira, 2006; Peterson et al., 2008). Also, lack of exercise is associated with burnout (Gorter, Eijkman, & Hoogstraten, 2000). Latino, Cataldi, and Fischetti (2021) found that exercise could improve perception of energy.

Based on this literature, we included the downstream consequences of exercise in this study. Specifically, we examined whether exercise had a positive physical and psychological effect on security guards, focusing focus on reduced back pain (physical effect) and burnout (psychological effect).

Hypothesis 4. Exercise is negatively related to (a) back pain and (b) burnout.

METHOD

This research was conducted in three stages in the context of a property management company in Hong Kong. The first stage was a pilot study in which we conducted face-to-face interviews with security guards working in single-block residential buildings to understand their perceptions of exercise and exercise habits. Next, we conducted a second pilot study to test a need-based intervention bundle with a small sample of security guards for two days, interviewing them to determine the effectiveness of the interventions to motivate them and how it could be improved. The final stage comprised the main study: a field experiment to compare the effectiveness of a need-based intervention bundle with and without resource provision to motivate participants to exercise and to

measure the downstream consequences. Participants in the two pilot studies were not selected for the main study to avoid the effect. Figure 2 shows the flow of the study’s overall design.

Insert Figure 2 here.

Pilot Study 1

Twenty-eight full-time security guards working in single-block buildings in Hong Kong were interviewed. Twenty-four (85.7%) were male and four (14.3%) female, and their average age was 64 years. Each interview lasted approximately 15 minutes. As shown in Table 1, interviewees said their job was sedentary, and approximately 40% said they occasionally exercised.

Asked about possible barriers to exercise, respondents mirrored previous studies, indicating that they lacked time and did not see the need, or they believed they exercised adequately (see Table 2).

Insert Table 1 and 2 here.

Pilot Study 2

In the second pilot study, we interviewed ten full-time security guards working in non-single-block buildings in Hong Kong. Nine participants (90%) were male, and one (10%) female. Their average age was 60.7 years. The intervention bundle addressed the need for competence and autonomy; therefore, participants chose the exercises to do and their frequency. This small group provided feedback to improve the main study. The participants pointed out similar items in the questionnaire and others that were difficult to understand, including how to report their exercise. They also expressed that the part for the reporting exercise was unclear. Based on their feedback, we revised the questionnaires to improve the design, wording, and length. In addition, all participants tried all the suggested exercises to determine their suitability for the study. All exercises could be performed at the workplace, and the intensity was suitable for security guards.

Main Study: Field Quasi Experiment

We conducted a between-subject, field quasi experiment in 81 single-block residential buildings among approximately 162 security guard participants. We randomly divided the buildings into two groups: experimental group 1, with 80 security guards equally divided among day and night shifts, and

experiential group 2, with 82 participants, again equally divided among day and night shifts. In addition, to fulfill the need for relatedness, day shift guards were paired with those working the night shift, so guards in the same building were in the same group. The data collection lasted for 28 days. Figure 3 shows the data collection schedule of the main study.

 Insert Figure 3 here.

The field study included two groups of participants, those who received the SDT approach only and those who received additional job resources. In the briefing session, both groups received information on the benefits of exercise and stretch exercises that they could pursue in the workplace or after work. Due to the limited sample size, a control group was not included; instead, we administered pre- and post-tests to compare all participants' exercise behaviors and well-being before and during the interventions.

Participants in **experimental group 1 (SDT only)** were encouraged to perform the recommended stretch exercise during their one-hour meal break or after work, but were asked not to exercise or stretch during work hours. **Experimental group 2 (SDT + job resources)** were allowed to engage in workplace exercise during office hours as long as it did not affect their work duties. They were encouraged to utilize non-peak hours when job demands were lower. This time allowance provided participants with the necessary job resources for workplace exercise.

To rule out alternative explanations, we considered both person level and daily-level factors as **control variables**. As participants were placed randomly into the two experimental groups, I included a control variable only when it was significantly different between the groups.

The person level control variables included:

Demographic factors:

Age, gender, company tenure, and education level.

Commute mode and time:

Security guards who spend more time or energy commuting to work can be expected to begin their shift with less energy, reducing their willingness to exercise.

Health condition:

Results could be affected if a participant becomes ill during the intervention period.

Relationship with assigned exercise partner:

If the participant did not develop a good relationship with their assigned partner, their motivation could be affected.

Work environment and conditions:

Some buildings had better environments and conditions, such as air conditioning, larger workplace areas, access to toilets, water, microwave ovens, and refrigerators. The exercise motivation among participants working in poorer environments could be affected.

The daily-level control variables included the participants' energy level and positive or negative affect each morning. Low energy level or negative affect induced by unknown factors, such as insomnia during the intervention period, could affect exercise motivation and performance.

Measures

Data collected and compared in this field study included measures of participants' exercise, back pain, feelings of burnout, job demands (workload), and fulfillment of basic needs. The following measures were used for these factors. All measurement items in this research were reported in the previous paper, listed in Appendix A

Exercise:

All participants completed a baseline questionnaire using the method from International Physical Activity Questionnaire (Craig et al., 2003). To measure participants' daily exercise, we logged the time (minutes) participants reported they spent exercising (Huang, Lee, & Chang, 2007).

Back pain:

Participants' back pain was self-reported using a numeric rating scale from 0 (no pain) to 10 (worst possible pain) (Gatchel, Mayer, Capra, Diamond, & Barnett, 1986; Walker, Polaner, Berde, 2019).

Burnout:

Participants completed the Oldenburg Burnout Inventory (Demerouti & Nachreiner, 1998; Demerouti et al., 2001; Demerouti, Bakker, Vardakou, & Kantas, 2003), which gauges feelings of exhaustion and feelings of disengagement.

Job demands (workload):

Security guards could encounter an unexpected incident or emergency (job demand) that would interrupt their exercise routine; however, the field study included no manipulated job demand. Instead, we gauged security guards' workload, adopting four subjective measurements from Kirmeyer (1988) and Caplan and Jones (1975).

Basic need fulfillment:

To assess the participants level of fulfillment of their need for relatedness, competency, and autonomy.

Sample Description

The study sample included 150 security guards from among 162 recruited (response rate of 92.6%). This number returned all the initial questionnaires, which were validated. The sample comprised 71.3% males, 28.7% females respondents with an average age of 62.59 years (SD = 8.174), ranging from 29 to 83. The average company tenure was 4.36 years (SD = 3.345), ranging from less than a year to more than 15. The difference among demographic factors between the randomly constructed experimental groups was not significant, except for participant's age ($F = 5.815$, $p = 0.017$); therefore, age was a control variable. Table 3 shows the groups' descriptive statistics, and Table 4 lists the correlation matrix and descriptive statistics among key variables.

Insert Tables 3 and 4 here.

We first applied a mixed measure ANOVA to test whether exercise altered participants' experiences, and then we used a multilevel analysis to test exercise as a mediator and workload as a moderator between intervention and participant outcomes.

We posited that a need-based intervention bundle would increase exercise; therefore, we used a mixed ANOVA method to understand whether a participants' exercise, need satisfaction, pain level,

and burnout differed before and during intervention and between the experimental groups 1 and 2. As shown in Table 5, both experimental groups increased their exercise in week 3, after the need-based intervention was applied (See also Appendix B, Table B1), supporting Hypothesis 1.

Insert Table 5 here.

We predicted that job resources would positively affect the relationship between the need-based intervention bundle and exercise. The analysis indicated that the interaction effect between experimental condition and time was significant for exercise ($F = 512.93$, $p < 0.001$) as shown in Table 5 (see also Appendix B, Table B2). That is, the security guards who accessed the job resource of time to exercise during work hours (group 2) showed a substantial increase in exercise compared with those (group 1) who were allowed to exercise only on break or after work (see Figure 4).

Insert Figure 4 here.

The intervention bundle was designed to fulfill participants' basic needs for autonomy, relatedness, and competence; therefore, we examined whether participants perceived any changes in their need satisfaction and compared the results between the two groups (Table 6). The results indicated the interventions positively affected the participants' satisfaction of most of these basic needs; however, there were differences between the two groups. Specifically, participants in group 2, who received job resources, increased their satisfaction for autonomy need over the experimental period, but those in group 1 decreased their satisfaction in this area (Figure 5). Both groups reported an increase in satisfaction for competence over the experimental period (Figure 6), and again, group 2 increased their satisfaction for relatedness while group 1 reported a decrease (Figure 7). For more details on these analyses, see Appendix B, Tables B2–B4.

Insert Figures 5, 6, and 7 here.

On measures of back pain level and burnout, both groups reduced their pain levels during the experimental time (see Table 5 and Figure 8), however, the reduction in the pain level of group 2 has a steeper decline, which may relate to the exercise.

Insert Figure 8 here.

Interestingly, the level of burnout decreased for group 1, but increased for group 2 (Figure 9). Group 1 had a high burnout level at the beginning and an improved burnout level after the treatment. On the contrary, experimental group 2 had a lower burnout level at the beginning and a low level of improvement in the burnout level after the treatment. The difference between the groups may be a function of age. The average age of participants was 61.01 in group 2 and 64.8 in group 1, with exercise having a greater effect on burnout among the older participants.

Insert Figure 9 here.

We further used multi-level analyses to test all four hypotheses. We posited that job demands (workload) would weaken the positive relationship between the need-based intervention and exercise. To test this idea, we followed Enders and Tofighi (2007) to grand-mean centered the intervention, group-mean centered daily variables such as the moderator (workload), IV, the mediator (exercise) and the daily controls (e.g., health, positive effect etc.), and include the group means as the control variables. As shown in Table 7, the interaction term between intervention and workload was significant: $\beta = 0.839$, $p < 0.01$, supporting Hypothesis 3. As shown in Tables 6 and 7, the interaction term remained significant with or without control variables.

Insert Tables 6 and 7 here.

Tables 8 and 9 summarize the results of the mediation effect with and without control variables. Since the results are consistent, we hereby only report them in Table 9 with control variables. Model 1 shows that the intervention has a significant effect on exercise ($b = 1.947$, $SE = 0.085$, $p < 0.001$). Model 2 and Model 3 in Table 8 show that exercise is negatively related to pain ($b = -0.064$, $SE = 0.014$, $p < 0.001$) and burnout ($b = -0.085$, $SE = 0.015$, $p < 0.001$), both providing support for Hypothesis 4.

Insert Tables 8 and 9 here.

DISCUSSION

Theoretical Implications

This study may provide several theoretical contributions. First, it focuses on an understudied population—security guards in single-block residential buildings—who work a sedentary, blue-collar job often for long hours. This research provides a new understanding of these workers who often lack the motivation and resources for exercise. Furthermore, the finding from this study is encouraging and informative for using the SDT in study another aspect of blue-collar sedentary workers research, such as in improving their sleep quality.

Second, this study combines SDT and a JD-R Model to design interventions to motivate security guards to exercise, showing the boundary conditions of SDT. This study shows that providing job resources and reducing job demands can enhance SDT-based intervention bundles to motivate security guards to engage in more exercise. It also shows the value of integrating SDT and a JD-R Model to design motivation methods and contributes to the literature showing how job resources and job demands change the effectiveness of the intervention bundle.

In addition, the analysis indicates that exercise reduces pain levels in sedentary workers, builds on the benefits of exercise, and provides data on blue-collar workers' motivation to exercise.

Managerial Implications

The need for security guards continues to increase with more buildings, which poses staffing challenges for PMCs. This study suggests that SDT and the JD-R Model can be used to design interventions to motivate security guards to exercise, and exercise can reduce lower back pain (Gao et al., 2019), a common complaint among security guards (Adnan et al., 2017). Therefore, PMCs can promote workplace exercise to improve the health and well-being of security guards, which may improve their job satisfaction and reduce turnover. This research indicates that the job resources (permission to exercise during work hours) successfully motivated security guards to exercise more and did not affect their work. Promoting workplace exercise costs free and can demonstrate corporate social responsibility and concern for employees.

Limitations and Future Research

One limitation of this study is its narrow focus on security guards working in single-block residential buildings, which could mean the findings are not be generalized to other building types and settings, such as shopping malls or industrial buildings. Similarly, the results may not be generalizable to other types of sedentary workers. Therefore, future research could involve other types of buildings and employees.

Second, the main sample size in this study was small, which suggests that a larger group could be tested with an extended intervention and follow-up period to measure behavior. In addition, with a greater number of participants, a control group could be used to test the implementation of JD-R Model without SDT intervention.

Third, this study focuses on motivation to exercise; however, other aspects such as the diet and sleeping habits may also influence security guards' well-being, which could be a focus of future study.

Fourth, this research focused on examining the relationship between exercise and pain level. However, exercise may be beneficial in other ways. For example, security guards who experiment with a reduction in their pain may provide a higher quality of work, which could lead to better customer satisfaction. Moreover, corporate social responsibility, which may be improved by the company caring for security guards, could be studied, and exercise could also improve job satisfaction, and in turn, reduce the turnover rate. This relationships point to areas of further research.

In addition, our study found that experimental group 2 had a lower burnout level and a low-level improvement in burnout level after more exercise; on the other hand, experimental group 1 had a higher burnout level to begin with and a greater level of improvement after engaging in exercise. These results may be attributed to the fact that the average age of group 1 was slightly older than that of group 2. Older workers may show better improvement in burnout levels after more exercise than younger workers. Further study into the relationship between age and burnout level is needed.

Finally, I sought to identify the short-term effects of more intense and frequent exercise, focusing on back pain and burnout, which are subjective items. Future studies could utilize more objective measures, such as job performance and customer satisfaction or sick leave and turnover levels.

Figure 1. Research Model

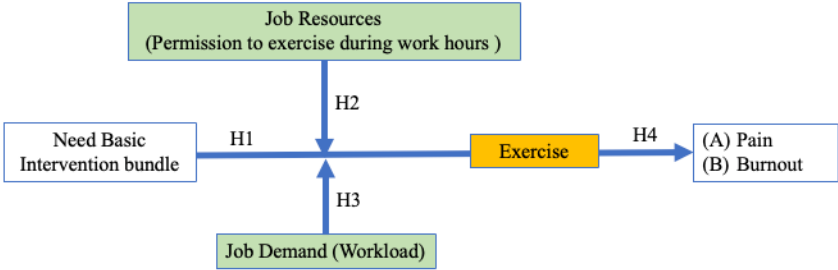


Figure 2. Research Design

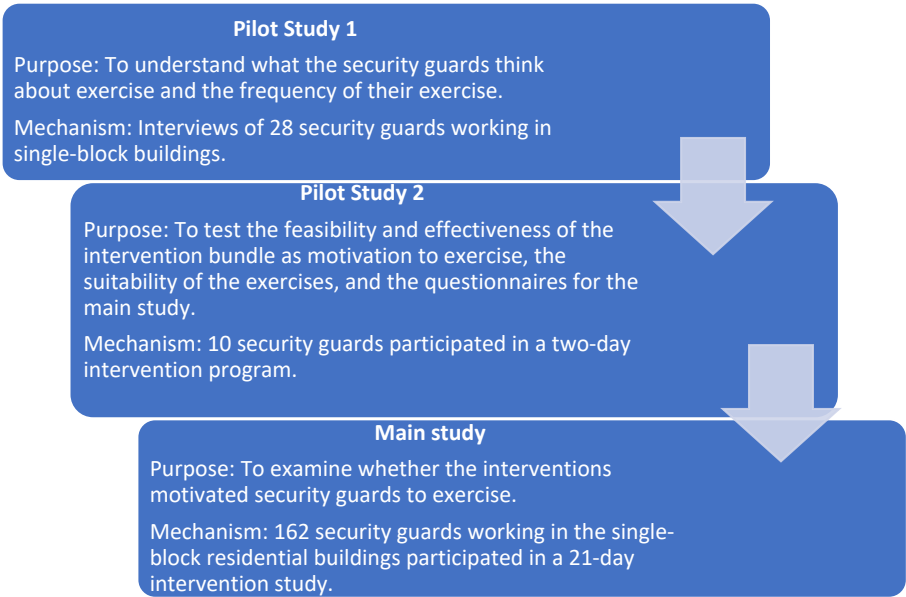


Figure 3. Main Study Data Collection Schedule

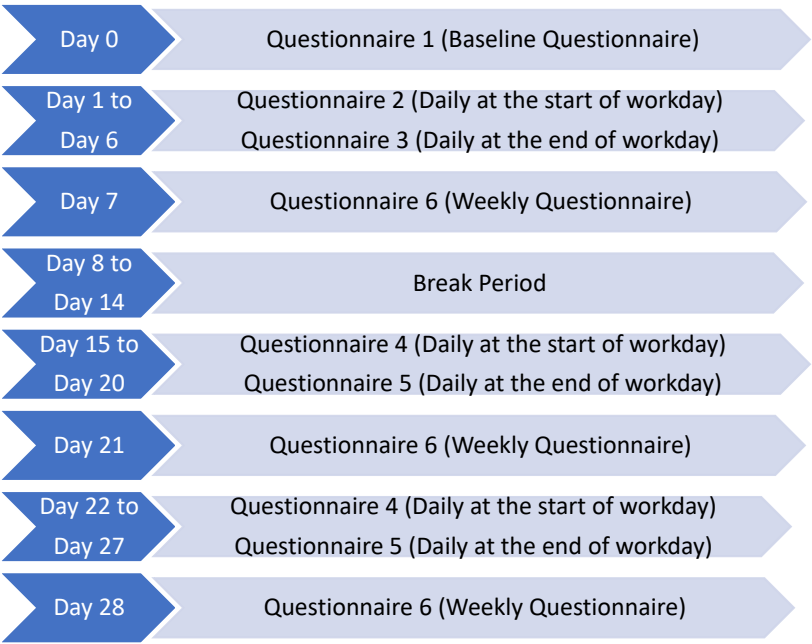


Figure 4. Exercise Over Time.

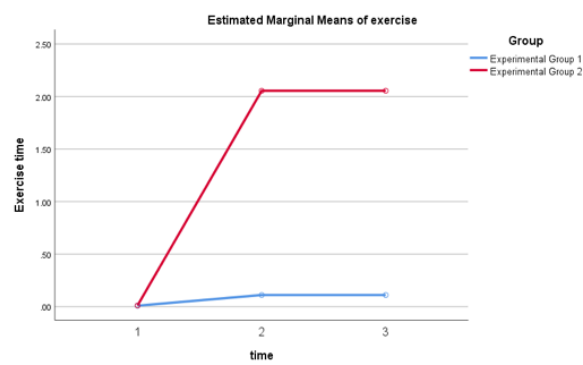


Figure 5. Fulfillment of the Need for Autonomy Over Time.

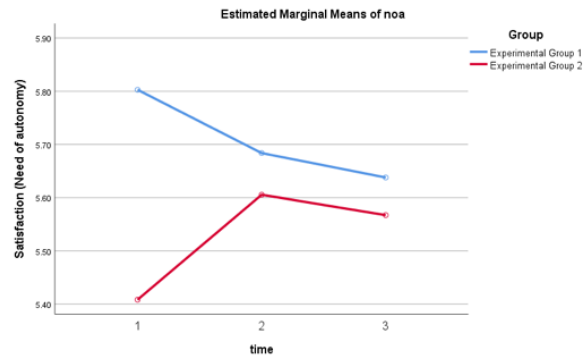


Figure 6. Fulfillment of the Need for Competence Over Time.

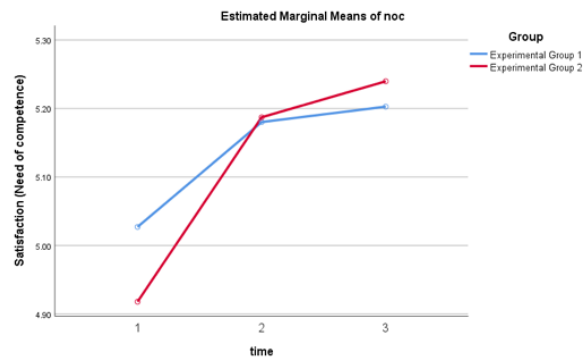


Figure 7. Fulfillment of the Need for Relatedness Over Time.

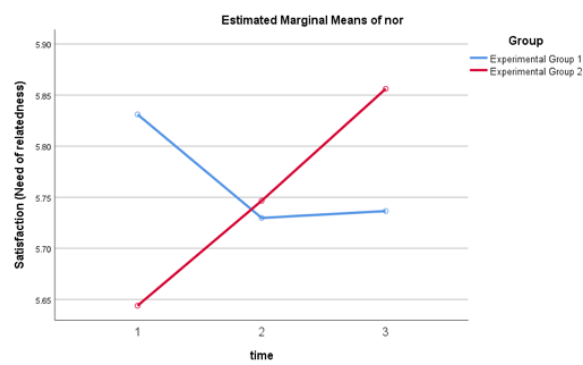


Figure 8. Pain Levels Over Time.

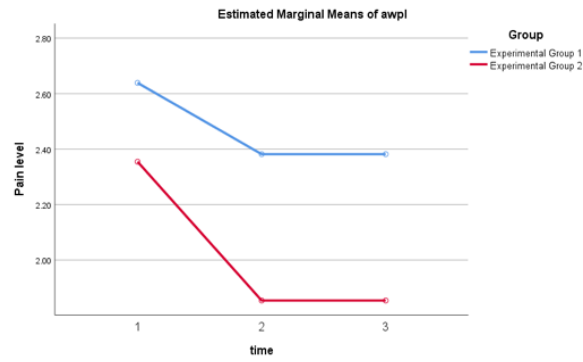


Figure 9. Burnout Levels Over Time

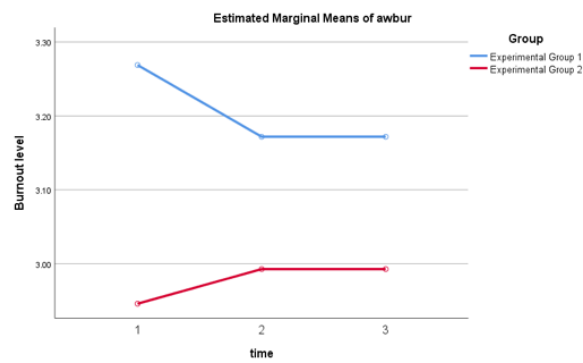


Table 1. Pilot Study 1—Sample Summary

| ALL PARTICIPANTS | | |
|---|-------|--------|
| | No. | % |
| Sex | | |
| Female | 4 | |
| Male | 24 | |
| Average age | 63.60 | |
| Exercise is important | | |
| Yes | 27 | 96.43% |
| No | 1 | 3.57% |
| Regular exercise | | |
| Yes | 17 | 60.71% |
| No | 11 | 39.29% |
| Commute mode | | |
| Bus/minibus | 15 | 53.57% |
| MTR (Railway) | 6 | 21.43% |
| Walking | 7 | 25.00% |
| Sedentary time | | |
| Over 90% | 11 | 39.29% |
| 80%–90% | 8 | 28.57% |
| <80% | 9 | 32.14% |
| Aware for the negative effects of sedentary work | | |
| Yes | 4 | 14.29% |
| No | 24 | 85.71% |
| <i>Note.</i> N=28 | | |

Table 2. Pilot Study 1—Barriers to Exercise

| AXIAL CODE | STATEMENTS ABOUT... | ILLUSTRATIVE QUOTATIONS |
|--|--------------------------------------|---|
| Lack of intrinsic motivation to exercise | Already active enough | <p>“I don’t think I need extra exercise. It is already enough exercise when I travel to work.” (#13)</p> <p>“I engage in regular exercise. I walk for about 20 minutes to my workplace from home, six days per week. Therefore, I believe that is enough exercise for me.” (#5)</p> |
| | Wrong information regarding exercise | <p>“I am 60 years old and don’t think I need to do any exercise.” (#19)</p> |
| Lack of resources to exercise | Too tired | <p>“I need to work 12 hours. I feel very tired when I finish my work. So, I cannot do any exercise and I need to go to sleep after dinner. Otherwise, I will not have enough rest time.” (#3)</p> <p>I cannot exercise after work due to tiredness. (#16)</p> <p>“I want to exercise, but long working time makes me very tired. Recently, I have felt that I don’t want to exercise even on holidays.” (#28)</p> |
| | Not enough time | <p>“I work from 7:00 a.m. to 7:00 p.m., 12 hours per day. I leave home at 6:00 a.m. and return home at 8:00 p.m. I have no time to exercise.” (#4)</p> <p>“My work makes it difficult for me to exercise. Therefore, I will only exercise on holidays.” (#6)</p> <p>“There is no time to exercise unless I work less hours per day. Otherwise, I don’t think I can exercise.” (#8)</p> <p>“It is very difficult to exercise after work. So, I will exercise when I have a holiday.” (#9)</p> <p>“I cannot exercise when I need to work. I don’t want to waste time on exercise.” (#10)</p> <p>“I have no time to exercise due to long working hours.” (#16) (#23) (#26) (#27)</p> <p>“I used to exercise around four to five days per week. But I have had no chance to exercise since I started this job. Long working hours makes me unable to exercise.” (#11)</p> |

| | |
|---|---|
| | “Actually, most security guards have no exercise. I have no exercise, too. It is because 12 hours per shift makes me unable to exercise.” (#22) |
| Do you think sedentary work has a negative impact for your health | “I don’t think it is a problem. It is because I have been working in this job for over 15 years, and I am fine.” (#1) |
| | “I really enjoy staying at the same position when I am working.” (#3) (#27) |
| | “I don’t believe sedentary work is a problem, but I believe that if the work requires me to stand for a long time, there will be problems.” (#11) (#28) |
| | “I don’t think it is a problem. Many security guards also work long hours and I have not heard that they have problems.” (#21) |
| | “Sedentary work may be a bit of a problem for health.” (#18) (#20) |
| | “I have regular exercise, so I don’t think sedentary work is a problem for me.” (#15) |

Table 3. Comparison between the experimental groups 1 and 2 using ANOVA

| PERCEPTIONS | GROUP 2 | | GROUP 1 | | <i>t</i> | F-STATISTICS | SIGNIFICANCE |
|---------------------|---------|------|---------|------|----------|--------------|--------------|
| Week 0 | Mean | SD. | Mean | SD. | | | |
| Gender | 1.31 | 0.46 | 1.27 | 0.45 | -0.00 | 0.29 | 0.59 |
| Age | 61.01 | 8.87 | 64.18 | 7.13 | 4.16 | 5.82 | 0.02 |
| Tenure | 4.61 | 3.43 | 4.11 | 3.26 | -0.02 | 0.86 | 0.36 |
| Living situation | 1.87 | 0.34 | 1.88 | 0.33 | -0.00 | 0.03 | 0.86 |
| Family relationship | 5.40 | 1.29 | 5.26 | 1.47 | -0.02 | 0.38 | 0.54 |
| Commute mode | 4.01 | 1.60 | 3.73 | 1.81 | 0.00 | 1.05 | 0.31 |
| Commute time | 2.80 | 1.05 | 2.77 | 1.05 | -0.01 | 0.04 | 0.85 |
| Coworker relation | 4.21 | 0.62 | 4.30 | 0.59 | -0.00 | 0.86 | 0.36 |
| Health condition | 3.91 | 0.65 | 3.93 | 0.67 | -0.01 | 0.03 | 0.87 |
| Exercise | 3.75 | 1.50 | 3.33 | 2.52 | -1.05 | 0.08 | 0.79 |
| Pain level | 2.71 | 1.68 | 2.67 | 1.45 | -0.03 | 0.02 | 0.89 |
| Job satisfaction | 3.49 | 0.33 | 3.45 | 0.33 | -0.00 | 0.51 | 0.48 |
| Burnout | 3.35 | 1.13 | 3.24 | 1.14 | -0.01 | 0.37 | 0.54 |

Table 4. Mean, SD, and Correlations Among Variables

| Variable | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | | |
|--------------------------------|-------|------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|
| Group | 1.50 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Age | 62.59 | 8.17 | -.194* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Health condition | 3.926 | 0.66 | -0.01 | -0.01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Positive affect (Week 1) | 3.239 | 0.79 | 0.13 | 0.06 | -0.12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Native affect (week 1) | 1.228 | 0.28 | 0.10 | 0.05 | 0.04 | -0.01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Energy level (week 1) | 3.608 | 1.08 | 0.03 | -0.06 | -0.08 | .773** | -.315* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Work exercise 3 (week 1) | 0.017 | 0.0 | 0.02 | -0.06 | -0.03 | 0.03 | 0.14 | 0.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Need of relatedness (week 1) | 5.749 | 0.79 | -0.12 | -0.12 | -0.14 | .215** | -0.05 | .318** | -.001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Need of competence (week 1) | 4.977 | 0.77 | -0.07 | -0.09 | -0.01 | .470** | -0.08 | .504** | 0.05 | .502* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Need of autonomy (week 1) | 5.612 | 1.02 | -.195* | -0.15 | -0.09 | -0.14 | -.169* | 0.14 | -.007 | .490* | .396** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Job satisfaction (week 1) | 3.954 | 0.54 | 0.12 | -0.06 | -0.04 | .574** | -.193* | .545** | -.002 | .303* | .414** | 0.05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| After work pain level (week 1) | 2.504 | 1.54 | -0.09 | 0.10 | 0.00 | -.468* | .236** | -.506* | 0.09 | -.183* | -.287* | 0.07 | -.397* | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| After work burnout (week 1) | 3.110 | 1.20 | -0.14 | 0.02 | -0.03 | -.609* | 0.12 | -.477* | 0.02 | -0.08 | -.230* | .264* | -.539* | .562** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Health condition (week 3) | 3.961 | 0.51 | -0.01 | -0.04 | -0.05 | .454** | -.327* | .597** | -.003 | .294* | .458** | .177* | .433** | -.451* | -.370* | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Positive affect (week 3) | 3.300 | 0.70 | 0.09 | 0.02 | -0.08 | .951** | -0.07 | .757** | 0.03 | .225* | .461** | -.199 | .579** | -.498* | -.629* | .522** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Native affect (week 3) | 1.347 | 0.2 | 0.04 | 0.05 | 0.02 | -0.11 | .709** | -.397* | 0.15 | -0.03 | -0.04 | -0.04 | -.170* | .305** | .236** | -.399* | -.190* | | | | | | | | | | | | | | | | | | | | | | | | |
| Energy level (week 3) | 3.933 | 0.83 | 0.04 | -0.14 | -0.04 | .532** | -.304* | .773** | 0.00 | .280* | .418** | 0.10 | .448** | -.452* | -.370* | .700** | .601** | -.427* | | | | | | | | | | | | | | | | | | | | | | | |
| Work Exercise 5 (week 3) | 1.080 | 1.11 | .883** | -.185* | 0.01 | 0.08 | 0.09 | 0.01 | 0.01 | -0.13 | -0.14 | -.183* | 0.06 | -0.10 | -0.07 | 0.01 | 0.06 | -0.02 | 0.08 | | | | | | | | | | | | | | | | | | | | | | |
| Need of relatedness (week 3) | 5.726 | 0.66 | 0.01 | -0.10 | -0.10 | .249** | -0.04 | .280** | -.006 | .810* | .437** | .392* | .306** | -.202* | -0.10 | .302** | .253** | -0.07 | .269** | 0.00 | | | | | | | | | | | | | | | | | | | | | |
| Need of competence (week 3) | 5.185 | 0.55 | 0.01 | -0.06 | -0.04 | .427** | -0.08 | .458** | 0.06 | .439* | .817** | .383* | .366** | -.254* | -0.15 | .430** | .440** | -0.10 | .441** | 0.02 | .437* | | | | | | | | | | | | | | | | | | | | |
| Need of autonomy (week 3) | 5.643 | 0.63 | -0.07 | -0.15 | -0.15 | 0.03 | -0.10 | .247** | -.009 | .491* | .443** | .815* | .197* | -0.05 | 0.13 | .282** | 0.01 | -0.08 | .194* | -0.05 | .416* | .493** | | | | | | | | | | | | | | | | | | | |

[illegible]

**<0.001, *p<0.05. N(W1)=150, N(W3)=150, N(W4) = 150

Table 5. Mixed Repeated Measure ANOVA on Treatment X Time Interaction Effect

| | EXPERIMENTAL GROUP 2 | | | EXPERIMENTAL GROUP 1 | | | SPHERICITY ASSUMED | | GREENHOUSE-GEISSER | |
|--|----------------------|-------------|-------------|----------------------|-------------|-------------|--------------------|------------|--------------------|------------|
| | W1 | W3 | W4 | W1 | W3 | W4 | F (Sig) | η_p^2 | F | η_p^2 |
| | Mean(sd) | Mean(sd) | Mean(sd) | Mean(sd) | Mean(sd) | Mean(sd) | | | | |
| Exercise | 0.01(0.69) | 2.06(0.64) | 2.06(0.64) | 0.01(0.08) | 0.11 (0.36) | 0.11 (0.36) | 512.93*** | 0.78 | 512.93*** | 0.78 |
| Need of Relatedness | 5.64 (0.81) | 5.75(0.66) | 5.86(0.67) | 5.83 (0.75) | 5.73 (0.66) | 5.74(0.70) | 7.60*** | 0.05 | 7.60*** | 0.05 |
| Need of Competence | 4.92(0.79) | 5.19(0.56) | 5.24 (0.48) | 5.03(0.74) | 5.18 (0.57) | 5.20 (0.48) | 2.63* | 0.02 | 2.63* | 0.02 |
| Need of Autonomy | 5.41(1.05) | 5.61(0.64) | 5.57(0.57) | 5.80 (0.95) | 5.68 (0.64) | 5.64(0.61) | 8.58*** | 0.06 | 8.58*** | 0.06 |
| Pain level | 2.35(1.61) | 1.85 (1.29) | 1.85 (1.29) | 2.64(1.47) | 2.38 (1.28) | 2.38 (1.28) | 8.72*** | 0.06 | 8.72*** | 0.06 |
| Burnout | 2.95(1.16) | 2.99 (1.05) | 2.99 (1.05) | 3.27(1.22) | 3.17 (1.07) | 3.17 (1.07) | 3.73** | 0.03 | 3.73* | 0.03 |
| <i>Noted.</i> *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$ $N_{W1} = 150$, $N_{W3} = 150$, $N_{W4} = 150$. | | | | | | | | | | |

Table 6. Multilevel Path Analysis of the Moderation Effect (Without Control Variable)

| Variables | EXERCISE (MODEL 1) | | PAIN (MODEL 2) | | BURNOUT (MODEL 3) | |
|---|-----------------------|------|-------------------|------|----------------------|------|
| | B | SE | B | SE | B | SE |
| Person level | | | | | | |
| Treatment (Group) | 2.05*** | 0.34 | -1.10 | 0.93 | -0.19 | 0.75 |
| Exercise (m) | | | -0.19 | 0.20 | 0.24* | 0.16 |
| Moderator (m) | 0.11 | 0.96 | 0.62** | 0.24 | 0.58** | 0.19 |
| Interaction (treatment x, work load m) | -0.05 | 0.19 | 0.60 | 0.46 | -1.98 | 0.37 |
| Within-person level | | | | | | |
| Exercise (w) | | | -0.05*** | 0.01 | -0.04** | 0.02 |
| Moderator (w) | -0.45*** | 0.04 | 0.05* | 0.03 | 0.37*** | 0.03 |
| Interaction (treatment x, work load w) | -0.84*** | 0.09 | 0.08* | 0.05 | 0.02 | 0.05 |

Note. *p<.05, **p<.01, ***p<.001, N = 150.

Table 7. Multilevel Path Analysis of the Moderation Effect (With Control Variable)

| Variables | EXERCISE (MODEL 1) | | PAIN (MODEL 2) | | BURNOUT (MODEL 3) | |
|---|-----------------------|------|-------------------|-------|----------------------|------|
| | B | SE | B | SE | B | B |
| Person level | | | | | | |
| Age | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Health (m) | -0.02 | 0.13 | -0.49 | 0.26 | -0.09 | 0.21 |
| Positive affect (m) | -0.07 | 0.08 | -0.63*** | 0.17 | -0.79*** | 0.13 |
| Negative Affect (m) | -0.19 | 0.18 | 0.59 | 0.38 | 0.49* | 0.30 |
| Energy level (m) | 0.08 | 0.08 | -0.01 | 0.17 | 0.14 | 0.14 |
| Treatment (Group) | 1.95*** | 0.35 | -0.56 | 0.81 | 0.27 | 0.65 |
| Exercise (m) | | | -0.14 | 0.18 | 0.24 | 0.14 |
| Moderator (m) | 0.14 | 0.10 | 0.21* | 0.22 | 0.31 | 0.17 |
| Interaction (treatment x, work load m) | 0.02 | 0.20 | 0.24 | 0.41 | -0.43 | 0.33 |
| Within-person level | | | | | | |
| Health (w) | 0.34*** | 0.06 | -0.07* | 0.04 | -0.10** | 0.04 |
| Positive affect (w) | -0.06 | 0.08 | 0.02 | 0.05 | 0.01 | 0.05 |
| Negative affect (w) | 0.08 | 0.08 | -0.06 | 0.05 | 0.00 | 0.05 |
| Energy level (w) | 0.05 | 0.05 | -0.09** | 0.03 | -0.08** | 0.03 |
| Exercise (w) | | | -0.04** | 0.015 | -0.03 | 0.02 |
| Moderator (w) | -0.41*** | 0.04 | 0.04 | 0.03 | 0.35*** | 0.03 |
| Interaction (treatment X work load w) | -0.84*** | 0.08 | 0.09** | 0.05 | 0.02 | 0.05 |

*p<.05, **p<.01, ***p<.001, N = 150.

Table 8. Multilevel Path Analysis of the Mediation Effect

| Variables | EXERCISE (MODEL 1) | | PAIN (MODEL 2) | | BURNOUT (MODEL 3) | |
|---------------------|-----------------------|------|-------------------|------|----------------------|------|
| | B | SE | B | SE | B | SE |
| Person level | | | | | | |
| Treatment (Group) | 1.95*** | 0.09 | -0.24 | 0.45 | -0.77* | 0.37 |
| Exercise (m) | | | -0.15 | 0.20 | 0.30** | 0.17 |
| Within-person level | | | | | | |
| Exercise (w) | | | -0.06*** | 0.01 | -0.09*** | 0.02 |
| Variables | | | | | | |

Note. *p<.05, **p<.01, ***p<.001, N= 150.

Table 9. Multilevel Path Analysis of the Mediation Effect (With Control Variables)

| Variables | EXERCISE (MODEL 1) | | PAIN (MODEL 2) | | BURNOUT (MODEL 3) | |
|---------------------|-----------------------|------|-------------------|------|----------------------|------|
| | B | SE | B | SE | B | B |
| Person level | | | | | | |
| Age | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Health (m) | -0.06 | 0.12 | -0.54** | 0.26 | -0.20 | 0.21 |
| Positive affect (m) | -0.08 | 0.08 | -0.64*** | 0.17 | -0.82*** | 0.14 |
| Negative affect (m) | -0.16 | 0.18 | 0.67 | 0.37 | 0.51 | 0.30 |
| Energy level (m) | 0.10 | 0.08 | 0.01 | 0.17 | 0.18 | 0.14 |
| Treatment (Group) | 1.95*** | 0.09 | -0.20 | 0.39 | -0.62 | 0.32 |
| Exercise (m) | | | -0.12 | 0.17 | 0.28 | 0.14 |
| Within-person level | | | | | | |
| Health (w) | 0.37*** | 0.06 | -0.07 | 0.04 | -0.12** | 0.04 |
| Positive affect (w) | -0.03 | 0.08 | 0.02 | 0.05 | -0.01 | 0.05 |
| Negative affect (w) | 0.01 | 0.09 | -0.06 | 0.05 | 0.04 | 0.05 |
| Energy level (w) | 0.08 | 0.05 | -0.09** | 0.03 | -0.10** | 0.03 |
| Exercise (w) | | | -0.06*** | 0.01 | -0.07*** | 0.02 |

Note. *p<.05, **p<.01, ***p<.001, N= 150.

APPENDIX A

MEASURES OF THE EXPERIENCE SAMPLING SURVEY

I. MEDIATORS

Exercise (Source: Laffrey, 2000)

Four items were adapted to measure regular exercise, and I added one item “Explicit motivation: Exercise self-efficacy.”

1. Do you currently engage in regular exercise?
2. Do you intend to engage in regular exercise?
3. Do you intend to engage in regular exercise in the next 30 days?
4. Have you been exercising regularly for the past 6 months?
5. I can exercise five times per week at moderate or high intensity for 40+ minutes without quitting for the next month.

II. DEPENDENT VARIABLES

Back Pain (Source: Visual Analogue Scale, Lillefjell et al., 2015; $\alpha = 0.75\text{--}0.83$)

The Visual Analogue Scale is employed to assess lower back pain (degree of pain and how troublesome you experience the pain to be).

Items include:

1. Pain: On a scale from 0 to 10, where 0 is “no pain” and 10 is “unbearable pain,” how much pain do you have at present?
2. Pain experience: On a scale from 0 to 10, where 0 is “not troublesome at all” and 10 is “extremely troublesome,” how troublesome do you experience the pain to be in everyday life?

Burnout/Emotional Exhaustion (Source: Exhaustion from Wharton, 1993)

1. I feel drained
2. I feel used up
3. I feel burned out

Job Satisfaction (Source: Rentsch, J. R., & Steel, R. P., 1992; reliability and validity measured in van Saane et al., 2003, Andrews & Withey Job Satisfaction Questionnaire; $\alpha = 0.81$)

Responses to the items are recorded on a verbally anchored rating scale ranging from 1 (“delighted”) to 7 (“terrible”).

1. How do you feel about your job?
2. How do you feel about the people you work with—that is, your co-workers?
3. How do you feel about the work you do on your job—that is, the work itself?
4. What is it like where you work—that is, the physical surroundings, the hours, the amount of work you are asked to do?
5. How do you feel about what you have available for doing your job—that is, equipment, information, good supervision, and so on?

Vigor (Backup DV) (Source: Shirom, & Ezrachi., 2003)

The first two items were chosen from the original Shirom-Melamed Vigor Measure scale for daily measurements. I add one item: “lively.”

1. Vigorous
2. Energetic
3. Lively

Engagement (Backup DV) (Source: Lee et al., 2019; Rich et al. 2010)

Following Lee, Bradburn, Johnson, Lin, and Chang (2019), I adapted three items from Rich et al. (2010) to measure end-of-the-day work engagement.

1. I exerted a lot of energy on the job.
2. I felt positive about my job.

3. I was absorbed by the job.

III. CONTROL VARIABLES

Sleep quality (Source: Schilpzand et al., 2018; Original source: Scott & Judge, 2006)

The original scale included a fourth item: “I woke up after the usual amount of sleep feeling tired and worn out”; however, the 2018 *AMJ* paper dropped this item because it may overlap with employee energy level in the morning.

1. I had trouble falling asleep.
2. I had trouble staying asleep (including waking up too early).
3. I woke up several times during the night.

Positive affect and negative affect at the beginning of work (Source: Watson et al., 1988; Thompson, 2007)

Items 1–5 represent positive affect, and items 6–10 negative affect. The measure is from the short-form of the Positive and Negative Affect Schedule developed by Thompson (2007).

To what extent, do you feel this way right now:

1. Determined
2. Attentive
3. Alert
4. Inspired
5. Active
6. Afraid
7. Nervous
8. Upset
9. Ashamed
10. Hostile

IV. MODERATORS

Workload (subjective items) (Source: Caplan, & Jones, 1975; Kirmeyer, 1988)

Four items were adapted to measure the subjective items related to workload:

1. I feel that the number of requests, problems, or complaints I deal with is more than expected.
2. I feel that the amount of work I do interferes with how well it is done.
3. I feel busy or rushed.
4. I feel pressured.

Workload (objective)

The following items will be adapted to measure the objective items related to workload:

1. Number of complaints
2. Number of incidents
3. Number of visitors
4. Number of renovation units
5. Any repair / maintenance work or large-scale renovation work

V. INDEPENDENT VARIABLES

The need of autonomy (Simmering, Colquitt, Noe, & Porter, 2003; Sheldon et al, 2001)

Five items were adapted to measure the need of autonomy.

1. “The opportunity to work as fast or as slowly as I like.”
2. “The opportunity to do my work in my own way.”
3. “That my choices were based on my true interests and values.”,
4. “Free to do things my own way.”
5. “That my choices expressed my “true self.”.

The need of competence (Sheldon & Schüler, 2011; Schlegel, Hicks, Arndt, & King, 2009; Sheldon et al, 2001)

Six items were adapted to measure the need of relatedness.

1. I do well even at the hard things.
2. “Most days I feel a sense of accomplishment from what I do.”
3. “I have been able to learn interesting new skills recently”.
4. “That I was successfully completing difficult tasks and projects.”,
5. “That I was taking on and mastering hard challenges.”
6. “Very capable in what I did.”.

The need of relatedness (Source: Sheldon, & Schüler, 2011; Weinstein, Deci, & Ryan, 2011).

Two items were adapted to measure the need of relatedness.

1. I feel a sense of contact with people who care for me, and whom I care for.
2. When I am with my partner, I feel loved and cared about

APPENDIX B

PAIRWISE COMPARISONS OF WITHIN SUBJECT EFFECTS

Table B1. Pairwise Comparisons of Within Subject Effects for Exercise

| Group | (i)time | (j)time | Mean difference (i-j) | S.E. | Sig. |
|----------------------|---------|---------|-----------------------|-------|-------|
| Experimental group 2 | Week 1 | Week 3 | -2.044 | 0.061 | 0.000 |
| | | Week 4 | -2.044 | 0.061 | 0.000 |
| Experimental group 1 | Week 1 | Week 3 | -0.101 | 0.061 | 0.097 |
| | | Week 4 | -0.101 | 0.061 | 0.097 |

Table B2. Pairwise Comparisons of Within Subject Effects for Need for Autonomy

| Group | (i)time | (j)time | Mean difference (i-j) | S.E. | Sig. |
|----------------------|---------|---------|-----------------------|-------|-------|
| Experimental group 2 | Week 1 | Week 3 | 0.197 | 0.070 | 0.006 |
| | | Week 4 | 0.159 | 0.075 | 0.037 |
| Experimental group 1 | Week 1 | Week 3 | 0.119 | 0.070 | 0.091 |
| | | Week 4 | 0.165 | 0.075 | 0.029 |

Table B3. Pairwise Comparisons of Within Subject Effects for Need for Competence

| Group | (i)time | (j)time | Mean difference (i-j) | S.E. | Sig. |
|----------------------|---------|---------|-----------------------|-------|-------|
| Experimental group 2 | Week 1 | Week 3 | -0.269 | 0.052 | 0.000 |
| | | Week 4 | -0.322 | 0.058 | 0.000 |
| Experimental group 1 | Week 1 | Week 3 | -0.153 | 0.052 | 0.004 |
| | | Week 4 | -.176 | 0.058 | 0.003 |

Table B4. Pairwise Comparisons of Within Subject Effects for Need for Relatedness

| Group | (i)time | (j)time | Mean difference (i-j) | S.E. | Sig. |
|----------------------|---------|---------|-----------------------|-------|-------|
| Experimental group 2 | Week 1 | Week 3 | -0.103 | 0.053 | 0.053 |
| | | Week 4 | -0.212 | 0.071 | 0.003 |
| Experimental group 1 | Week 1 | Week 3 | 0.101 | 0.052 | 0.055 |
| | | Week 4 | 0.095 | 0.070 | 0.180 |

Table B5. Pairwise Comparisons of Within Subject Effects for After Work Pain Level

| Group | (i)time | (j)time | Mean difference (i-j) | S.E. | Sig. |
|----------------------|---------|---------|-----------------------|-------|-------|
| Experimental group 2 | Week 1 | Week 3 | 0.500 | 0.058 | 0.000 |
| | | Week 4 | 0.500 | 0.058 | 0.000 |
| Experimental group 1 | Week 1 | Week 3 | 0.257 | 0.058 | 0.000 |
| | | Week 4 | 0.257 | 0.058 | 0.000 |

Table B6. Pairwise Comparisons of Within Subject Effects for After Work Burnout

| Group | (i)time | (j)time | Mean difference (i-j) | S.E. | Sig. |
|----------------------|---------|---------|-----------------------|-------|-------|
| Experimental group 2 | Week 1 | Week 3 | -0.047 | 0.053 | 0.376 |
| | | Week 4 | -0.247 | 0.053 | 0.376 |
| Experimental group 1 | Week 1 | Week 3 | 0.097 | 0.053 | 0.068 |
| | | Week 4 | 0.097 | 0.053 | 0.068 |

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2. Organisational Behaviour

**Ideal-Self-Actualisation:
A Dynamic, Prospective Model of One of Psychology's Genuinely Good (But
Troublesome) Ideas**

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Ideal-Self-Actualisation: A Dynamic, Prospective Model of One of Psychology's Genuinely Good (But Troublesome) Ideas

ABSTRACT: Maslow's hierarchy of needs – with self-actualisation sitting atop – has been called “one of psychology's genuinely good ideas”. But since its popularisation decades ago, self-actualisation has been plagued by issues of construct clarity, and a lack of rigorous empirical research. As a result, researchers today are not much closer than Maslow was to convincingly identifying the self-actualised person.

This research aims to address these issues by introducing “ideal-self-actualisation”; conceptualised as occurring when a person reduces the discrepancy between their actual-self and ideal-self over time.

This phenomenon is investigated through longitudinal research exploring the link between the dynamics of ideal-self-actualisation, and employee well-being and work engagement.

Ideal-self-actualisation seeks to chart a new pathway for understanding how individuals fulfil their potential at work.

Keywords: self-actualisation, ideal self, wellbeing, engagement,

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Structured Submission

Overview

Across the various ideas concerning human potential and fulfillment, the quest for self-actualisation – to find oneself, be oneself, and become oneself – has become a legitimate question that guides what it means to be human (Baumeister, 1987). ‘Self-actualisation’ became a buzzword in both psychology and the public domain following the writings of Abraham Maslow (see Maslow, 1943; 1971). In his well-known hierarchy of needs, Maslow placed self-actualisation at the apex of human fulfillment. To become self-actualised was, according to Maslow, to live authentically – according to the nature of one’s ‘true self’, and by realising one’s unique configuration of potentialities.

Some seventy years following Maslow’s thinking, self-actualisation continues to resonate with the public psyche (Baumeister, 2022). Recently, a renaissance of public interest in self-actualisation has emerged following Scott Barry Kaufman’s (2020) modern integration of Maslow’s ideas with contemporary psychology. Many scholars maintain that self-actualisation is ‘one of psychology’s genuinely good ideas’ (Peterson & Park, 2010).

Despite continued resonance across scholars and society, however, systematic and rigorous empirical investigations of self-actualisation have languished (Kaufman, 2018; Baumeister, 2022). As a result, little can be said about self-actualisation with any empirical certainty (Baumeister, 2022). Beyond empirical issues, the very concept of self-actualisation is beset by a plurality of perspectives – each with its own individual nuances, ambiguities, dubious empirical investigations (or lack thereof), and reference points (i.e., to what does one ‘actualise’ towards?). As a result, little can also be definitively said about what it means to be ‘self-actualised’. Yet, even in the face of confounding ideas and a dearth of convincing empirical research, scholars concede that there may be something to self-actualisation (Baumeister, 2022; Kaufman, 2020; Krems, Kenrick, & Neel, 2017; Peterson & Park, 2010).

In light of these issues, any attempts to conceptually revive self-actualisation and ground it in empirical research are considerably audacious. Important questions need to be answered before scholars turn to how self-actualisation may be nurtured in individuals. For one, how do we know if someone is fulfilling their potential? How do researchers know if one is living in accordance with the

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nature of their true self? How do we know if someone is self-actualised or not? These questions (among others) must be purposefully considered to clarify the construct of self-actualisation, and chart a viable pathway for rigorous empirical investigations.

Current Understanding

One of the difficulties researchers have when it comes to working with self-actualisation as a concept is the sheer variety of perspectives across thinkers (Goldstein, 1934) Rogers, 1961) (Maslow, 1971) Stone Brown, (2014)Kaufman (2018, 2020). Whilst each theorist offers their own nuanced perspective on what self-actualisation, and this plurality indicates a lack of conceptual consensus across scholars. The issues from the plurality of perspectives are particularly evident when trying to establish the reference point for self-actualisation; that is, what do people actualise towards?

For self-actualisation research to have a legitimate pathway forward, greater conceptual clarity and better empirical approaches are needed. This research seeks to offer an alternative conceptualisation of self-actualisation informed by existing research on self-discrepancy theory and ideal selves. Broadly, the perspective offer here is defined by two key elements: 1) the ideal self is the reference point for self-actualisation; and 2) Self-actualisation is a subjectively experienced and dynamic psychological state.

Research Question

This research aims to tackle these issues, first, by introducing what I term “ideal-self-actualisation”, and second, by empirically exploring the work-related antecedents and consequences of ideal-self-actualisation. Conceptually, this research draws on literature related to self-actualisation (Maslow, 1971; Rogers, 1961), self-discrepancy theory (Hardin & Larsen, 2014; Higgins, 1987), and the ideal self (Boyatzis & Akrivou, 2006; Boyatzis & Dhar, 2021) to understand self-actualisation as a prospective and dynamic psychological experience, rooted in an individual’s sense of progression (or regression) towards their ideal self. From this perspective, it follows that individuals experience self-actualisation when they sense that their actual self and ideal self are becoming more congruent (Boyatzis & Akrivou, 2006; Carver & Scheier, 1990; Hardin & Larsen, 2014; Martinez, et. al., 2021);

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that is, when they feel as if they are *becoming* their ideal self.

While the first part of the research undertaken is conceptual, the second part will be empirical. Across two studies, this research aims to better understand the work-related consequences (Study 1, a longitudinal survey) and antecedents (Study 2, analysis of qualitative data) of ideal-self-actualisation.

The following research questions therefore aim to build a theoretical foundation regarding the antecedents and consequences of ideal-self-actualisation at work:

RQ1: How does ideal-self-actualisation affect workers' well-being, and with what workplace consequences?

RQ2: What are the work-related antecedents of ideal-self-actualisation?

The following hypotheses are proposed regarding the relationship between ideal-self-actualisation and the key dependent variables (eudaimonic wellbeing; work engagement).

1. *Hypothesis 1: ISA slope will be positively associated with work engagement at the end of the survey period*
2. *Hypothesis 2: ISA slope will be positively associated with eudaimonic well-being at the end of the survey period*
3. *Hypothesis 3a. ISA stability strengthens the positive association between ISA slope and eudaimonic well-being*
4. *Hypothesis 3b. ISA stability strengthens the positive association between ISA slope and work engagement*
5. *Hypothesis 4a. ISA mean strengthens the positive association between ISA slope and eudaimonic well-being*
6. *Hypothesis 4b. ISA mean strengthens the positive association between ISA slope and work engagement*

Research Approach

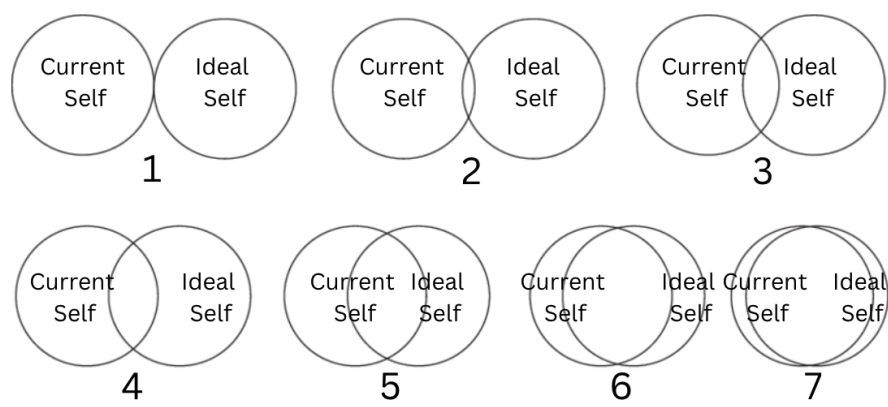
These research questions and hypotheses will be investigated by using a longitudinal panel study, where repeated measures will be collected from the same individuals

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at multiple time points, thus allowing the research to track both average levels of and changes in the focal variables over time. Specifically, I will conduct a 4-wave survey across a 6-month period. Surveys will be conducted at Time 1 (0 months – beginning of study), Time 2 (2 months), Time 3 (4 months), and Time 4 (6 months) measuring ideal-self-actualisation, life eudaimonic well-being, workplace engagement, as well as qualitative data related to any perceived changes in ideal self content and/or congruency. 250 research participants have been recruited using Prolific, focusing on a gender-balanced sample of Americans employed in full-time work.

Ideal-self-actualisation. Ideal-self-actualisation will be measured by asking respondents about their subjective evaluation of the discrepancy between their actual self and ideal self (1 = not at all/large discrepancy, 7 = complete match/no discrepancy). To help participants identify their ideal-self, I will adopt a modified version of the ‘Inclusion of Other in the Self’ scale (Aron et. al., 1992) [see below. Figure1]. The scale has been modified to explore the congruency between an individual’s current self (defined as “who you are today”) and their ideal self (the image of the person you would like to be in the future).

Figure 1. Ideal-Self Congruency Scale



This measure will be adopted to evaluate the discrepancy between an individual’s current self

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and their ideal self across a number of life domains (e.g. Health & Wellbeing, Work & Career), as well as the respondent's 'Overall Ideal Self' (defined as "your vision of the person you would like to be in the future when thinking about your life as a whole"). Ideal-self-actualisation will be measured by exploring the progression or regression between actual-self and ideal-self across each time point of the 4-wave survey.

In surveys 2, 3 and 4, participants will be asked to reflect on any events in their workplace and/or broader life that have either contributed to greater or lesser congruency between their current self and their ideal self, or any changes in the content of their ideal self. These responses will be collated and analysed to determine the antecedents which may enable ideal-self-actualisation in the workplace, or within an individual's broader life.

Eudaimonic well-being. The Questionnaire of Eudaimonic Well-Being (QEWB) is a 21-item measure developed by Waterman (2010). Of the numerous measures of well-being, I have chosen to adopt the QEWB because of its specific focus on the development of potential and self-enhancement and its high reliability (typical α of .84). Sample scale items include: "I believe I know what my best potentials are and I try to develop them whenever possible"; "I can say that I have found my purpose in life"; and "I feel best when I am doing something worth investing a great deal of effort in".

Work engagement. I will use the 3-item Utrecht Work Engagement Scale (UWES-3; Schaufeli et al., 2019) to measure work engagement, which is a shortened measure of Schaufeli's (2002) original 17-item UWES scale (typical α of .80). Sample scale items include: "I am enthusiastic about my job"; and "I am immersed in my work".

Findings

As this research project is still collecting data (as of June 2023), we cannot yet speak about the main research findings, outcomes and results. However, it is expected that at least 3 waves of longitudinal data will be collected by the beginning of December, which will be able to be analysed and shared as a part of the conference paper.

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Contribution and Limitations:

Specifically, I intend for this research to make three key scholarly contributions. The first is a more precise and empirically accessible perspective on self-actualisation. Self-actualisation as a concept has been befuddled by a plurality of perspectives, each of which has its own conceptual issues, and shortcomings in terms of empirical support. My research will help to resolve this dilemma by framing self-actualisation as the dynamic process of actualising towards one's ideal self. This approach promotes empirical investigations of the discrepancy between actual-self and ideal-self experienced by individuals (see: Hardin & Lakin, 2009; Gürcan-Yıldırım & Gençöz, 2022; Zhu & Wang, 2022), which can then be explored longitudinally.

The second contribution of this project will be much-needed, empirically grounded insights into the dynamism of self-actualisation over time. Several notable theorists contend that self-actualisation is a dynamic process, rather than a fixed state or trait (Goldstein, 1934; Maslow, 1971; Rogers, 1961; Kaufman, 2020). Despite this repeated claim, empirical studies virtually always measure an individual's level of self-actualisation at a fixed singular point in time (Shostrom, 1974; Shostrom, 1975; Jones & Crandall, 1986; Crandall & Jones, 1991; Sumerlin, 1995; Sumerlin & Bundrick, 1996; Lefrancois, et. al., 1997; Kaufman, 2018). In fact, to the best of my knowledge, across the literature on self-actualisation there have been no longitudinal studies of the phenomenon. Thus, while self-actualisation has long been claimed to be a dynamically experienced state, in practice it is repeatedly reduced to a fixed state, or trait – seemingly contrary to the idea of self-actualisation as a process, proposed by numerous self-actualisation thinkers. In short, these empirical studies have only explored self-actualisation through the lens of the degree to which someone is, or isn't, self-actualised. My study, then, may be the first to empirically explore self-actualisation as a dynamic experience over time. This will represent a significant step in self-actualisation research, shifting from focusing whether or not someone is self-actualised, to instead whether someone is self-actualising. This shift emphasises that the direction and trajectory of self-actualisation are equally as important to understand as one's absolute level of self-actualisation, and offers potential insights into self-actualisation as an ever-changing and dynamically experienced process over time.

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Finally, this research project will deliberately bridge research on self-actualisation with that focused on the ideal-self and self-discrepancy theory. Whilst the term ‘ideal-self-actualisation’ has been proposed in earlier research exploring self-discrepancy and affective states (Hardin & Larsen, 2014), and the ‘ideal self’ has been identified as a potential self-guide resulting in the emergence “a new state of being with self-actualisation as a core quality” (Boyatzis & Akrivou, 2006, pg. 625), researchers are yet to explicitly grounded these ideas as central components of self-actualisation. This research project contends that the ideal-self and self-discrepancy literatures are vital for making self-actualisation a precise and empirically accessible concept.

Implications

Beyond contributing self-actualisation literature and academia, the significance of this research lies in endeavouring to better understand how to help individuals realise their potential, live fulfilling lives, and become the person they want to be; in short, how individuals self-actualise. My hope is that this research project will be the first steps towards helping organisations cultivate the conditions that enable individuals to actualise towards their ideal self.

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Inorganic Growth Strategies in Private Family Firms: A Behavioral Agency View

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Inorganic Growth Strategies in Private Family Firms: A Behavioral Agency View

ABSTRACT

Using behavioral agency theory, we examine target selection practices in private family firms during acquisitions. We compare family-owned acquirers to institutional-owned acquirers, expecting the former to balance socioemotional wealth (SEW) and financial goals and the latter to prioritize financial objectives. Analyzing 423 acquisitions by private family-controlled firms and 565 non-family-controlled firms in the EU-15 between 2005 and 2018, we test hypotheses on how SEW influences target selection by family firms. Our findings reveal that protecting SEW influences target selection, with family firms being less likely to pursue cross-border deals, more inclined to diversify their portfolios, and acquire less innovative targets. Additionally, we highlight that family CEOs and founder CEOs adopt more conservative M&A strategies compared to non-family CEOs and non-founder CEOs.

Keywords

family firms, acquisitions, socio-emotional wealth, behavioral agency theory

Amongst public and private firms (Shleifer and Vishny, 1997; Burkart et al., 2003), family firms are one of the most prevalent forms of ownership in the world, and family members are often actively involved in either board or management positions, significantly shaping strategic growth (Calabrò and Mussolino, 2013; Chrisman et al., 2012; Gomez-Mejia et al., 2010; Graves and Thomas, 2006; Sánchez-Bueno and Usero, 2014; Block, 2012). However, most extant research has only addressed how much family firms grow (McKelvie and Wiklund, 2010). Despite research that also reveals the importance of firm growth for long-term success (Ben-Hafaïedh and Hamelin, 2022) and the positive effect of family ownership on firm growth (Miroshnychenko et al., 2020), we still lack insights on how family firms grow. One neglected area is the investigation of the modes of growth adopted by family firms, including organic, inorganic (i.e., acquisitions) and hybrid forms (McKelvie and Wiklund, 2010). Our main objective is to reveal how family firms grow by way of inorganic growth strategies.

Previous studies have demonstrated that family firms tend to invest less in acquisitions (Miller et al., 2010; Gomez-Mejia et al., 2018). Other work has predominantly investigated target selection practices, typically focusing on the industry-diversifying nature of family-backed acquisitions. However, this stream of research has delivered conflicting results, signaling ambiguous theoretical expectations concerning the types of target acquisitions that family firms prefer. On one hand, research has shown that family firms are eager to select unrelated acquisition targets as family wealth is usually undiversified and heavily invested in the firm (Defrancq et al., 2016; Miller et al., 2010; Schierstedt et al., 2020). To ensure transgenerational transfer of family wealth, family firms are incentivized to diversify into new industries through unrelated acquisition targets. On the other hand, researchers argued that family firms often lack the required knowledge to expand into new industries. Unrelated acquisition targets require expanding the management team by hiring non-family managers to oversee new business lines, a move that can potentially lead to not only a loss of control but also a loss of family identity (Gomez-Mejia et al., 2018). In light of these risks, some studies revealed that family firms prefer related acquisition targets to preserve socio-emotional wealth, or SEW (Gomez-Mejia et al., 2018; Hussinger and Issah, 2019). Gomez-Mejia et al. (2018) addressed the tension between unrelated and related acquisition targets, demonstrating that when risky diversification practices (i.e., involving unrelated acquisition targets) dominate, family firms are more likely to underperform with respect to

their performance aspirations. However, when firms perform in line with their aspirations, they focus more on industry-related acquisition targets.

While research has provided relevant insights, notable gaps remain in our understanding of acquisition behavior of family firms. First, the industry relatedness of an acquisition is only one of several target characteristics. If SEW plays a central role in acquisition behavior of family firms, target selection is likely to be driven by at least two further dimensions extensively examined in the family business literature: internationalization and innovation (see Arregle et al. (2017), for a review of internationalization, and Block et al. (2022) a review of innovation). These two dimensions drive two key questions: to what extent do family firms engage in cross-border acquisitions and how innovative are the acquisition targets? For the family firm, SEW has been shown to be a main driver of both internationalization behavior (Kim et al., 2019; Sciascia et al., 2015; Xu et al., 2020) and innovation efforts (Block et al., 2013; Chrisman and Patel, 2012; Sciascia et al., 2015; Gomez–Mejia et al., 2014).

Second, family business research has mostly addressed acquisition behavior of public family firms. However, family firms are heterogeneous, and insights derived from public family firms might not apply to private family firms (Carney et al., 2015; Schierstedt et al., 2020). SEW is expected to play a more pivotal role in private family firms since ownership is typically extremely concentrated, with the family acting as the exclusive shareholder. Private family firms also more frequently reserve top-management positions for family members (Gómez-Mejía et al., 2007). Thus, private family firms are shielded from stock market regulations and monitoring by other shareholders, and the combination of family ownership and management creates the ideal context to pursue SEW (Schulze et al., 2001). As a result, private family firms provide a better study setting to isolate the impact of SEW on acquisition behavior.

Finally, some inconsistencies in the literature stem from family firms being compared with their non-family counterparts, which has led family firms to be cast as a homogeneous group. However, the extent to which controlling family owners focus on SEW depends upon their level of involvement and emotional affiliation with the firm (Minichilli et al., 2014; Bammens et al., 2008). Thus, family firm heterogeneity must be addressed when investigating the impact of SEW on firm growth (Gu et al., 2019). Inconsistencies in the literature also stem from non-family firms – typically included in the

control samples of prior studies addressing acquisition behavior – being cast as another homogeneous group. These studies assume that all non-family firms focus on the maximization of financial wealth. However, some shareholders in non-family firms, such as managers (Kim and Lu, 2011), employees (Dam and Scholtens, 2012) and governments (Suchard et al., 2021; Hao and Lu, 2018), also have non-economic goals. For example, there is growing evidence of self-control agency problems in private non-family firms (Lubatkin et al., 2005; Schulze and Zellweger, 2021). Owners of private firms can do as they wish (Schulze and Zellweger, 2021), and “performance itself can have very idiosyncratic definitions, depending on the shareholders’ conceptions of their company’s goals and missions” (Durand and Vargas, 2003: 668). Overall, we contend that investigating acquisition behavior of private family firms merits close attention to firm heterogeneity within both family and non-family firms.

To address these gaps in the literature, we investigate target selection in private family firms by focusing on three dimensions: product diversification, internationalization and innovation. Drawing on behavioral agency theory, we contend that private family firms – over private non-family firms – adopt more conservative acquisition strategies. We not only expect that family shareholders avoid cross-border and highly innovative acquisition targets due to potential threats to managerial control of the family but also expect that family firms are incentivized to engage in acquisitions in unrelated industries to diversify concentrated wealth (Miller et al., 2010; Gomez-Mejia et al., 2018) in order to pass on their wealth from one generation to the next.

To account for family firm heterogeneity, we further argue that – depending on the identity of the CEO – family firms vary in the degree to which they focus on SEW as part of acquisition decisions. First, we hypothesize that family firms hiring non-family CEOs signal a preference for financial objectives and expertise over SEW (Gómez-Mejía et al., 2007). The influence of SEW on target selection should thus be more pronounced for family firms where the CEO is a family member. Second, we hypothesize that family firms managed by founder CEOs emphasize socio-emotional goals when engaging in acquisitions, leading to conservative acquisition strategies. Prior research has revealed that first-generation firms focus on socio-emotional goals, whereas later-generation firms are more economically oriented (Anderson and Reeb, 2003; Schierstedt et al., 2020; Gómez-Mejía et al., 2007).

To test our hypotheses, we constructed a novel dataset combining accounting data from Orbis with acquisition data from Zephyr. We complemented our dataset with CEO information drawn from press articles and company websites. We employed a sample of 423 acquisitions by family-controlled firms and 565 by non-family-controlled firms made between 2005 and 2018 in the EU-15.¹ To ensure an appropriate control group, we compared acquisitions made by private family firms with those made by private non-family firms that were majority-owned by institutional investors and had an economic focus. As a result, we established a cleaner control sample than prior studies that considered all non-family firms as a homogenous group (Hussinger and Issah, 2019; Gomez-Mejia et al., 2018; Defrancq et al., 2016; Miller et al., 2010).

Our study contributes to the existing literature in two main areas. First, the family business literature has focused on how family firms grow their businesses, either through product diversification (Anderson and Reeb, 2003; Gu et al., 2019; Gomez-Mejia et al., 2010), internationalization (Graves and Thomas, 2006; Sánchez-Bueno and Usero, 2014; Calabrò and Mussolino, 2013; Gomez-Mejia et al., 2010) or innovation (Chen and Hsu, 2009; Block, 2012; Chrisman and Patel, 2012). However, few studies have addressed inorganic growth strategies (McKelvie and Wiklund, 2010), and, of the few that have done so, most have addressed family firm acquisitions through portfolio diversification (Gomez-Mejia et al., 2018; Miller et al., 2010; Defrancq et al., 2016; Schierstedt et al., 2020; Hussinger and Issah, 2019). As expected, we find significant differences in the acquisition behavior of private family firms and private non-family firms controlled by institutional investors. Our results indicate that private family firms are less likely to engage in cross-border acquisitions and that their acquisition targets are less innovative. Following the findings of Miller et al. (2010) regarding public family firms, our results also indicate that private family firms are more inclined to engage in unrelated acquisitions to diversify family wealth.

Second, previous studies addressing acquisition behavior of family firms have largely neglected family firm heterogeneity, especially in the context of private family firms. Following Schierstedt et al.

¹ The EU-15 includes Belgium, Germany, Denmark, Finland, France, Greece, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Spain, the United Kingdom, and Sweden.

(2020), who recently demonstrated how acquisitions of related and unrelated targets are driven by different configurations of family firm governance, we show how family firm governance is also related to cross-border and innovative acquisition targets. Our results indicate that conservative acquisition behavior is more pronounced in firms led by family CEOs and in firms led by a founder rather than a non-founder CEO. Our study thus contributes to the ongoing debate in the literature concerning heterogeneity within family firms (Swab et al., 2020).

DATA AND METHODS

Data Sample

We tested our hypotheses with a sample of private family firms that made acquisitions between 2005 and 2018 in the EU-15. Since data on shareholder and board member identity has been well-documented in Orbis only since 2005, we excluded transactions prior to this date. We chose Europe as our research setting since most European countries require private firms to publicly report financial data (Erel et al., 2015). Given our focus on European transactions, we rely on the Zephyr database (Bureau van Dijk) to identify M&A transactions. We chose Zephyr because it is considered to have better coverage of European acquirers (Huyghebaert and Luypaert, 2010) and private targets (Bollaert & Delanghe, 2015; Erel et al., 2015). A recent surge in the use of Zephyr in publications dedicated to M&A research (Erel et al., 2015; Craninckx and Huyghebaert, 2011; Hammer et al., 2017) also indicates that it is a reliable source and good alternative to the commonly-used SDC database.

We included deals where the acquirer held less than 50% of the target before the deal and more than 50% after. However, we excluded all M&A transactions where the SIC code of either the target or the acquirer began with the number six, since this SIC code is associated with financial firms with unique accounting standards. We also excluded deals where we could not identify the listing status and main industry of the acquirer or target (i.e., at the time of the agreement) and where we could not match the acquirer or target to accounting data in Orbis (Bureau van Dijk). Finally, we also excluded deals where the relative asset size of the target was less than 1% of the total assets of the acquirer and where the total assets of the target were less than 1 million USD. Our base sample consists of 1347 private-to-private M&A deals, sufficient data to categorize them as either family or non-family firm transactions.

After eliminating all observations for which there was insufficient accounting data for our regressions, our final sample included 988 acquisitions.

To identify family-controlled acquirers, we relied on the classification method employed by Neckebrouck et al. (2018). We selected all companies that had a family holding a majority stake in the company and that had at least two board members or shareholders bearing the last name of the family. If two or more directors shared a last name but shareholder data was missing, we considered them family firms if they represented at least 50% of the board. Our selection process produced a sample of 423 M&A deals made by private family-controlled firms.

For our study, we also built an uncontaminated sample of non-family firms. A strategy commonly employed in the literature addressing SEW in public firms is to designate firms in which no family is identified as non-family firms (Miller et al., 2014; Gomez-Mejia et al., 2010; Defrancq et al., 2016; Block, 2012). Past studies have assumed that SEW is irrelevant for all non-family firms, regardless of the type of non-family shareholders. However, many lone-founder firms can evolve into family businesses if these firms are passed down to descendants. To ensure that we included a control group for which SEW is irrelevant, we first included firms that were majority-owned by institutional investors. We searched for acquirers in which an institutional investor took a majority stake before the deal through a transaction registered in Zephyr (Hammer et al., 2017; Tykvová and Borell, 2012). We then manually searched for the exit date of these investors using LexisNexis, Zephyr, Google News, Amadeus shareholder information, and websites of acquiring firms and institutional investors. The exit date is the point at which an institutional investor sells down its stake to less than 50%. Finally, we considered acquisitions as non-family backed if institutional investors held more than 50% of the shares in the acquirer at the time of the deal. Our selection process produced a sample of 565 acquisitions by non-family-controlled firms.

As our ownership data is measured at the closest date before the deal, we manually confirmed the identity of the majority shareholders. We also collected additional data on the identity of the CEOs (i.e., at the time of the acquisition) from press articles, Orbis, and the websites of the acquirers to construct our proxies for family affiliation and generational stage of the CEOs.

Method

Dependent Variables

Our three main variables of interest include: (a) whether the deal is cross-border (H1); (b) industry relatedness of the target to the acquirer (H2); and (c) target innovativeness (H3). Cross-border deals (i.e., *CB_Deal*) are captured by an indicator that takes the value of 1 if the country codes of the acquirer and target are different, and 0 otherwise. To measure industry relatedness (i.e., *Relatedness*), we follow Gomez-Mejia et al. (2018) who employed an approach based on SIC codes. The deal receives a score of 1 if the first four digits of the primary SIC codes of the target and acquirer are the same, 0.75 if the first three digits are the same, 0.5 if the first two digits are the same, 0.25 if the first digit is the same, and 0 if there is no match. As an alternate definition, we include a dummy variable (i.e., *Conglomerate*) for whether the industry of the target and acquirer match, based on the two-digit SIC code in the robustness section. It takes the value of 1 if the 2-digit SIC-codes match and 0 otherwise.

We relied on patent data to test our hypothesis on target innovativeness (Lerner et al., 2011; He and Tian, 2013). We constructed two proxies: (a) the first for innovation efforts, counting the number of patent applications of the target before the deal and calculating the natural log of that number plus 1 (i.e., *Target_Patentcount*); and (b) the second for alternate specifications of innovativeness, counting the number of citations for each of those patents and again calculating the natural log of that number plus 1 (i.e., *Target_Citecount*). To compose these two measures, we followed Lerner et al. (2011), matching the names of the target firms involved in each transaction to their patenting record in PATSTAT and Espacenet. We controlled for name changes included in ORBIS. In some cases, names were not identical but similar and the location differed from the firm address included in Orbis. For these, we manually inspected whether the content and inventor of each patent related to our firm of interest.

Independent Variables

To test Hypotheses 1-3, the main independent variable of the model is a dummy variable (i.e., *FF*), taking the value of 1 if the deal was completed by a family firm and 0 if the deal was completed by a non-family firm. When testing Hypothesis 4, we used the models and control variables of Hypotheses

1 and 3 but split up the family ownership variable into two categorical variables. The first categorical variable equals 1 for family firms with a non-family CEO and 0 for other firms (i.e., *FF_Non_FamilyCEO*). The second equals 1 for family firms with a family CEO and 0 for other firms (i.e., *FF_FamilyCEO*). Finally, to test Hypothesis 5, we distinguished between founder-led and non-founder-led family firms by creating: (a) a dummy equal to 1 for family firms with a founder CEO and 0 otherwise (i.e., *FF_FounderCEO*); and (b) a dummy equal to 1 for family firms with a non-founder CEO and 0 otherwise (i.e., *FF_Non_FounderCEO*).

Control Variables

We introduced several control variables to account for firm-level heterogeneity. We included acquisition experience, measured as the total number of acquisitions over a five-year period (i.e., *Acquirer_Exp5*), as this has been shown to be a significant predictive factor for the probability of future deals (Laamanen and Keil, 2008; Aktas et al., 2013). Following Iyer and Miller (2008) who demonstrated that slack has a positive relationship with deal propensity, we included the ratio of “acquirer cash & equivalents” over total assets (i.e., *Acquirer_Cash*). We also included the related ratio of acquirer long-term debt over total assets (i.e., *Acquirer_Debt*). More leveraged firms are expected to have a lower external financing capacity to promote acquisitions (Huang et al., 2018). We included the natural log of 1 plus the patent count of the acquirer since more innovative firms are expected to pursue other innovation opportunities through M&A (i.e., *Acquirer_Patentcount*). Table 1 presents an overview of all dependent, independent and control variables.

Insert Table 1 about here

Regression Models

We employed a logistic regression model to test Hypothesis 1 (*CB_Deal*) since the dependent variable is a dummy variable. Following Gomez-Mejia (2018) who contended that the measure that we used for target relatedness is left and right-censored, we employed a Tobit model to test Hypothesis 2. Finally, and in line with He and Tian (2013), we employed an OLS model to test Hypothesis 3, which addresses the impact of family ownership on target innovativeness.

To ensure that sample-level differences regarding the size, performance or industry of the acquirer did not drive our results, we applied propensity score matching (PSM). Each family firm acquirer was matched one-to-one with a institutional-backed acquirer, based on size, ROA and 2-digit SIC code. The PSM method generates a propensity score based on the matching variables and then matches the score with the closest scoring observation in the non-family subset. In the robustness section, we reran the models for the unmatched sample but included the natural logarithm of the total assets, ROA of the acquirer, and the acquirer industry dummy as a control variable.

We also included a 2-stage Heckman procedure in our main regression models. Various studies have established that family firms are less likely to engage in M&A deals, which necessitates the inclusion of controls for self-selection. Following Gomez-Mejia et al. (2018), we first employed a probit model where the dependent variable is a dummy equal to 1 if a firm engages in an acquisition in a particular year and 0 otherwise. Our independent variables are ROA, the Altman Z-score (i.e., to measure financial distress), cash and debt ratio, firm size, year, and two-digit SIC industry dummies. Using these estimated probabilities, we then computed the inverse Mills ratio (INVMILLS), including it as an additional control variable.

All accounting variables were lagged by one year relative to the year in which the acquisition was completed, and the continuous variables were winsorized at the 1-99% level. We also ran each regression with robust standard errors to address heteroscedasticity concerns and included year dummies to control for business cycle effects.

RESULTS

Summary Statistics and Univariate Analysis

Tables 2 to 4 present summary statistics and correlations for all variables. In Table 4, mean comparison t-tests highlight differences in acquirer, target and deal characteristics when comparing family firm deals to non-family firm deals.

Univariate results indicated no significant differences in industry relatedness of deals made by family and non-family firm acquirers. Based on the *Conglomerate* dummy variable, 50% of the family

firm acquirers and 48% of non-family acquirers were looking for targets outside their industry. Family firms also engaged less often in cross-border deals than non-family firms (i.e., 8% and 22%, respectively). On average, targets acquired by family firms seemed to be significantly less innovative in both patent count and citation count.

Regarding acquirer controls, the average non-family firm made 2.18 acquisitions five years before each deal, whereas the average family firm made only 0.69. Non-family firms were also significantly more leveraged than family firms. In contrast to non-family firms, our results revealed that family firms underperformed in terms of ROA. Finally, family firm acquirers were considerably less innovative based on their application and citation count.

Insert Table 2,3 and 4 about here

Regression Results

Table 5 presents matched-sample regressions that test Hypotheses 1 to 3. Our family firm indicator determined whether family firms differed from non-family firms in their target selections. While we reran the same models in Tables 6 and 7, we tested Hypotheses 4 and 5 by splitting up our family firm indicator into two categorical variables. Table 6 presents regression results that distinguish between family firms with a family CEO (i.e., *FF_FamilyCEO*) and with a non-family CEO (i.e., *FF_Non_FamilyCEO*). Table 7 then presents regression results that differentiate between family firms with a founder CEO (i.e., *FF_FounderCEO*) and with a non-founder CEO (i.e., *FF_Non_FounderCEO*).

Table 5, column 1, presents the results of the logit model that tests the incidence of cross-border deals. The coefficient for our family firm indicator (i.e., *FF*) is negative and significant at the 1% level, thus confirming Hypothesis 1. Family firms are less likely to engage in cross-border deals than non-family firms. Table 5, column 2, presents the results of the Tobit model, with *Relatedness* as the dependent variable. The coefficient (i.e., *FF*) is negative and only significant at the 10% level, thus providing weak support for Hypothesis 2. Finally, Table 5, column 3, presents the test results of whether the targets acquired by family firms were less innovative. The coefficient (i.e., *FF*) is negative and significant at the 1% level for target's patent count, thus supporting Hypothesis 3.

Table 6 presents results that show that none of the coefficients remain significant for our indicator of family firms with a non-family CEO. However, in column 1, the coefficient of the dummy (i.e., *FF_FamilyCEO*) is significant and negative for cross-border deals in the logit model. We also find that targets acquired by firms having a family CEO are considerably less innovative at the 1% level. Overall, our results support Hypothesis 4: the impact of family ownership on M&A target selection is mainly present in family firms with a family CEO.

In Table 7, we demonstrate the impact of non-founder-led versus founder-led family firms. In column 1, the coefficients for both *FF_Non_FounderCEO* and *FF_FounderCEO* are significant and negative at the 1% level in the logit regression for *CB_Deal*. However, the effect is more significant economically for founder-led firms. In column 2, the coefficient for deal relatedness is negative and greater in absolute value for founder-led firms while significant for family firms at the 10% level. Finally, we find that family ownership negatively impacts target innovativeness for both founder and non-founder-led firms.

Insert Table 5, 6 and 7 about here

Robustness Checks

Table 8 presents the results of robustness checks that use alternate proxies to assess target innovativeness and target relatedness. Models 1, 3, and 5 employ the *Conglomerate* dummy variable instead of the *Relatedness* variable and use a logit regression instead of a Tobit model. Models 2, 4, and 6 employ the citation count instead of the patent application count of the target to serve as the basis for the innovativeness proxy. While the application count is a good proxy for innovation efforts, citation counts are more suitable for testing innovation quality (Lerner et al., 2011). Overall, we obtained the same results as we found in our primary models.

Finally, Table 9 presents the results of rerunning our models for the unmatched sample, including the size of the acquirer, ROA and industry dummies as the control variables. While the results

are similar as those found in our primary models, the coefficients for family ownership on acquirer patent variables are now insignificant.

| Insert Table 8 and 9 about here |

DISCUSSION

Drawing from behavioral agency theory, we investigate how SEW affects the selection of acquisition targets by private family firms. Family firms constantly make trade-offs between gains (or losses) in SEW and losses (or gains) in financial wealth. In contrast, non-family firms do not have to balance financial objectives with family ones, such as maintaining a good family reputation and preserving transgenerational wealth. As a result, we show that family firms avoid cross-border and more innovative acquisition targets. In line with Miller et al. (2010), we also find that family firms diversify their concentrated wealth by acquiring targets in unrelated industries.

We also show that these effects are more substantial for firms that have a family CEO. Factors, such as whether a deal is cross-border or targets innovativeness, are often associated with heightened integration complexity or ex-ante information asymmetry (Ellis et al., 2011; Humphery-Jenner et al., 2017; Kohers and Kohers, 2001). Non-family managers could thus be useful since it is more likely that family firms lack the required knowledge and experience (Lin and Hu, 2007). Having family CEOs indicates that families prefer to maintain control rather than draw from a broader, external talent pool (Bennedsen et al., 2007). Where we distinguish between firms led by family and non-family CEOs, we reveal that family-managed firms are more conservative when selecting their acquisition targets to prevent a loss of SEW.

We further confirm the heterogeneous influence of SEW on M&A decisions by accounting for the generational stage of firms. As founder CEOs have built their firms from inception, they often hold the strongest bond with the firm compared to later-generation CEOs. As more family members become shareholders or managers of the family firm, heterogeneity appears as a product of their individual goals and desires. It thus becomes increasingly challenging to pursue joint family goals, and it is assumed that purely financial goals begin to outweigh socio-emotional ones. We find that founder-led family

firms are more likely to avoid cross-border targets and that founder CEOs are significantly more likely to acquire unrelated targets than non-family firms.

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Table 1. Variable Description.

| Dependent variables | Description |
|-----------------------|--|
| Relatedness | Equals 1 for deals where the SIC-code of the acquirer and target match on four digits, 0.75 on three digits, 0.50 on two digits, 0.25 on the first digit, and 0 if there is no match at all (Orbis). |
| CB_Deal | Equals 1 if the country of the target and acquirer are different, and 0 otherwise (Orbis). |
| Target_Patentcount | Natural logarithm of 1 plus the total amount of patents that the target applied for before the deal (PATSTAT; Espacenet). |
| Conglomerate | Equals 1 for deals where the SIC-code of the acquirer and target match on 2 digits, and 0 otherwise (Orbis). |
| Target_Citecount | Natural logarithm of 1 plus the total amount of citations received by the patents that the target applied for before the deal (PATSTAT; Espacenet). |
| Independent variables | Description |
| FF | Dummy variable; equals 1 for family firm acquirers and 0 for non-family acquirers (Orbis; Amadeus; LexisNexis; corporate websites). |
| FF_FamilyCEO | Dummy variable; equals 1 for family firm acquirers with a family member as CEO, and 0 for non-family firms and family firms where there is at least one CEO from outside the family (Orbis; Amadeus; LexisNexis; corporate websites). |
| FF_Non_FamilyCEO | Dummy variable; equals 0 for non-family firm acquirers and for family firm acquirers with a family member as CEO, and 1 for family firms where there is at least one CEO from outside the family (Orbis; Amadeus; LexisNexis; corporate websites). |
| FF_FounderCEO | Dummy variable; equals 1 for family firm acquirers with at least one founding family member as CEO, and 0 for non-family firms and family firms where there is no founder CEO (Orbis; Amadeus; LexisNexis; corporate websites). |
| FF_Non_FounderCEO | Dummy variable; equals 0 for non-family firm acquirers and family firm acquirers with at least one founding family member as CEO, and 1 for family firms where there is no founder CEO (Orbis; Amadeus; LexisNexis; corporate websites). |
| Control Variables | Description |
| Acquirer_Exp5 | Total number of acquisitions over a five-year period, prior to when the deal was considered (Zephyr). |
| Acquirer_Size | Natural logarithm of total assets (i.e., at year-end before completion year) of the acquirer (Orbis). |
| Acquirer_Debt | Total long-term debt as a percentage of total assets (i.e., at year-end before completion year) of the acquirer (Orbis). |
| Acquirer_Cash | Cash and equivalents as a percentage of total assets (i.e., at year-end before completion) of the acquirer (Orbis). |
| Acquirer_ROA | EBITDA divided by total assets (i.e., at year-end before completion year) of the acquirer (Orbis). |
| Acquirer_Patentcount | Natural logarithm of 1 plus the total amount of patents the acquirer applied for before the deal (PATSTAT; Espacenet). |
| Acquirer_Citecount | Natural logarithm of 1 plus the total amount of citations the patents (i.e., applied for by the acquirer before the deal) received (PATSTAT; Espacenet). |

Table 2. Descriptive Statistics.

| | N | Mean | SD | Median |
|----------------------|-----|-------|------|--------|
| FF | 988 | 0.43 | 0.50 | 0 |
| CB_Deal | 988 | 0.16 | 0.36 | 0 |
| Relatedness | 988 | 0.53 | 0.44 | .50 |
| Conglomerate | 988 | 0.49 | 0.50 | 0 |
| Target_Patentcount | 988 | 0.19 | 0.59 | 0 |
| Target_Citecount | 988 | 0.24 | 0.84 | 0 |
| Acquirer_Size | 988 | 17.44 | 1.48 | 17.38 |
| Acquirer_ROA | 988 | 0.15 | 0.12 | 0.13 |
| Acquirer_Debt | 988 | 0.15 | 0.19 | 0.08 |
| Acquirer_Cash | 988 | 0.10 | 0.11 | 0.07 |
| Acquirer_Exp5 | 988 | 1.54 | 2.89 | 0 |
| Acquirer_Patentcount | 988 | 0.31 | 0.85 | 0 |
| Acquirer_Citecount | 988 | 0.44 | 1.34 | 0 |

Table 3. Correlation Matrix.

| Variables | FF | CB_deal | Relatedness | Conglomerate | Target_Patentcount | Target_Citecount | Acquirer_Size | Acquirer_ROA | Acquirer_Debt | Acquirer_Cash | Acquirer_Exp5 | Acquirer_Patentcount | Acquirer_Citecount |
|----------------------|----------|----------|-------------|--------------|--------------------|------------------|---------------|--------------|---------------|---------------|---------------|----------------------|--------------------|
| FF | 1.00 | | | | | | | | | | | | |
| CB_Deal | -0.19*** | 1.00 | | | | | | | | | | | |
| Relatedness | -0.04 | -0.15*** | 1.00 | | | | | | | | | | |
| Conglomerate | 0.02 | 0.10*** | -0.89*** | 1.00 | | | | | | | | | |
| Target_Patentcount | -0.08*** | 0.20*** | -0.07** | 0.06* | 1.00 | | | | | | | | |
| Target_Citecount | -0.09*** | 0.23*** | -0.07** | 0.05* | 0.88*** | 1.00 | | | | | | | |
| Acquirer_Size | -0.30*** | 0.24*** | -0.06** | 0.04 | 0.14*** | 0.13*** | 1.00 | | | | | | |
| Acquirer_ROA | -0.11*** | -0.03 | -0.03 | 0.01 | -0.04 | -0.05 | -0.15*** | 1.00 | | | | | |
| Acquirer_Debt | -0.09*** | -0.01 | 0.00 | 0.03 | -0.03 | -0.07** | 0.14*** | -0.19*** | 1.00 | | | | |
| Acquirer_Cash | 0.06* | -0.04 | 0.05 | -0.06** | 0.02 | 0.01 | -0.11*** | 0.33*** | -0.23*** | 1.00 | | | |
| Acquirer_Exp5 | -0.26*** | -0.00 | 0.02 | 0.08** | -0.13*** | -0.11*** | 0.20*** | -0.02 | 0.18*** | -0.12*** | 1.00 | | |
| Acquirer_Patentcount | -0.16*** | 0.23*** | -0.09*** | 0.08** | 0.44*** | 0.42*** | 0.21*** | -0.01 | -0.06* | 0.00 | -0.11*** | 1.00 | |
| Acquirer_Citecount | -0.16*** | 0.22*** | -0.07** | 0.07** | 0.45*** | 0.44*** | 0.20*** | -0.02 | -0.04 | 0.00 | -0.10*** | 0.95*** | 1.00 |

Note. ***p < 0.01; **p < 0.05; *p < 0.1.

Table 4. Descriptive Statistics of Subsamples.

| | Family firms | | | | Non-family firms | | | | |
|----------------------|--------------|------|--------|-------|------------------|------|--------|-------|-----------|
| | Mean | SD | Median | Count | Mean | SD | Median | Count | t-test |
| CB_Deal | 0.08 | 0.27 | 0.000 | 423 | 0.22 | 0.41 | 0.00 | 565 | -0.14*** |
| Relatedness | 0.51 | 0.44 | 0.500 | 423 | 0.55 | 0.44 | 0.50 | 565 | -0.03 |
| Conglomerate | 0.50 | 0.50 | 0.000 | 423 | 0.48 | 0.50 | 0.00 | 565 | 0.02 |
| Target_Patentcount | 0.14 | 0.48 | 0.000 | 423 | 0.237 | 0.66 | 0.00 | 565 | -0.10** |
| Target_Citecount | 0.16 | 0.68 | 0.000 | 423 | 0.31 | 0.94 | 0.00 | 565 | -0.15*** |
| Acquirers_size | 16.93 | 1.53 | 16.864 | 423 | 17.83 | 1.32 | 17.65 | 565 | -0.90 *** |
| Acquirer_ROA | 0.13 | 0.10 | 0.119 | 423 | 0.16 | 0.14 | 0.14 | 565 | -0.03*** |
| Acquirer_debt | 0.14 | 0.16 | 0.078 | 423 | 0.17 | 0.21 | 0.09 | 565 | -0.03** |
| Acquirer_cash | 0.11 | 0.13 | 0.063 | 423 | 0.10 | 0.10 | 0.07 | 565 | 0.01 |
| Acquirer_Exp5 | 0.69 | 1.52 | 0.000 | 423 | 2.18 | 3.45 | 1.00 | 565 | -1.48*** |
| Acquirer_Patentcount | 0.16 | 0.61 | 0.000 | 423 | 0.43 | 0.66 | 0.00 | 565 | -0.27*** |
| Acquirer_Citecount | 0.20 | 0.90 | 0.000 | 423 | 0.63 | 1.57 | 0.00 | 565 | -0.42*** |

Note. ***p < 0.01; **p < 0.05; *p < 0.1.

Table 5. Matched-Sample Regressions: Main Results.

| VARIABLES | (1) CB Deal | (4) Relatedness | (5) Target Patentcount |
|----------------------|----------------------|--------------------|---------------------------|
| FF | -1.050*** (0.000) | -0.215 (0.074) | -0.169*** (0.001) |
| Acquirer_Debt | 0.125 (0.870) | 0.115 (0.724) | -0.410*** (0.000) |
| Acquirer_Cash | 0.559 (0.529) | 1.507** (0.004) | 0.085 (0.641) |
| Acquirer_Exp5 | 0.002 (0.977) | -0.085* (0.017) | -0.015* (0.017) |
| Acquirer_Patentcount | 0.335* (0.019) | -0.083 (0.296) | 0.351*** (0.000) |
| INVMILLS | -1.546*** (0.000) | 0.046 (0.679) | -0.019 (0.601) |
| Constant | 3.295*** (0.000) | 0.347 (0.384) | 0.760*** (0.000) |
| Observations | 807 | 822 | 822 |
| (Pseudo) R-squared | 0.199 | 0.042 | 0.235 |
| Industry dummy | NO | NO | NO |
| Year dummy | YES | YES | YES |

Note. ***p < 0.01; **p < 0.05; *p < 0.1.

Table 6. Matched-Sample Regressions Based on CEO-Identity: Family Versus Non-Family CEOs.

| VARIABLES | (1) CB Deal | (2) Relatedness | (3) Target Patentcount |
|----------------------|----------------------|---------------------|---------------------------|
| FF_Non_FamilyCEO | -0.572 (0.191) | -0.156 (0.432) | -0.066 (0.461) |
| FF_FamilyCEO | -1.242*** (0.000) | -0.239 (0.0706) | -0.204*** (0.000) |
| Acquirer_Debt | -0.018 (0.982) | 0.138 (0.681) | -0.442*** (0.000) |
| Acquirer_Cash | 0.475 (0.599) | 1.479** (0.005) | 0.072 (0.697) |
| Acquirer_Exp5 | 0.005 (0.933) | -0.0872* (0.016) | -0.015* (0.024) |
| Acquirer_Patentcount | 0.303* (0.031) | -0.0795 (0.328) | 0.338*** (0.000) |
| INVMILLS | -1.527*** (0.000) | 0.0246 (0.831) | -0.013 (0.731) |
| Constant | 3.330*** (0.000) | 0.424 (0.353) | 0.782*** (0.000) |
| Observations | 785 | 800 | 800 |
| (Pseudo) R-squared | 0.198 | 0.043 | 0.236 |
| Industry dummy | NO | NO | NO |
| Year dummy | YES | YES | YES |

Note. ***p < 0.01; **p < 0.05; *p < 0.1.

Table 7. Matched-Sample Regressions Based on CEO-Identity: Founder Versus Non-Founder CEOs.

| VARIABLES | (1) CB Deal | (2) Relatedness | (3) Target Citecount |
|----------------------|----------------------|--------------------|-------------------------|
| FF_Non_FounderCEO | -0.855** (0.008) | -0.134 (0.332) | -0.169** (0.006) |
| FF_FounderCEO | -1.289** (0.003) | -0.280 (0.099) | -0.178*** (0.001) |
| Acquirer_Debt | 0.066 (0.933) | 0.254 (0.445) | -0.473*** (0.000) |
| Acquirer_Cash | 0.471 (0.601) | 1.336** (0.010) | 0.075 (0.689) |
| Acquirer_Exp5 | 0.005 (0.930) | -0.090* (0.013) | -0.013 (0.051) |
| Acquirer_Patentcount | 0.298* (0.036) | -0.079 (0.321) | 0.341*** (0.000) |
| INVMILLS | -1.522*** (0.000) | 0.017 (0.885) | -0.014 (0.735) |
| Constant | 3.208** (0.001) | 0.402 (0.382) | 0.782** (0.001) |
| Observations | 755 | 770 | 770 |
| (Pseudo) R-squared | 0.189 | 0.045 | 0.234 |
| Industry dummy | NO | NO | NO |
| Year dummy | YES | YES | YES |

Note. ***p < 0.001; **p < 0.01; *p < 0.05.

Table 8. Matched Sample Regressions: Alternative Specification For Target Relatedness and Innovativeness.

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) |
|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|----------------------|
| | Conglomerate | Target Citecount | Conglomerate | Target Citecount | Conglomerate | Target Citecount |
| FF | 0.297* (0.050) | -0.243*** (0.000) | | | | |
| FF_Non_FamilyCEO | | | 0.273 (0.283) | -0.122 (0.344) | | |
| FF_FamilyCEO | | | 0.283 (0.089) | -0.285*** (0.000) | | |
| FF_Non_FounderCEO | | | | | 0.239 (0.186) | -0.252** (0.002) |
| FF_FounderCEO | | | | | 0.304 (0.166) | -0.234** (0.002) |
| Acquirer_Debt | -0.118 (0.772) | -0.610*** (0.000) | -0.196 (0.641) | -0.656*** (0.000) | -0.234 (0.586) | -0.684*** (0.000) |
| Acquirer_Cash | -1.614* (0.013) | -0.266 (0.277) | -1.630* (0.013) | -0.290 (0.240) | -1.512* (0.022) | -0.295 (0.241) |
| Acquirer_Exp5 | 0.071* (0.088) | -0.018* (0.037) | 0.075 (0.076) | -0.017 (0.060) | 0.078 (0.068) | -0.016 (0.087) |
| Acquirer_Patentcount | 0.066 (0.534) | | 0.055 (0.604) | | 0.053 (0.613) | |
| Acquirer_Citecount | | 0.277*** (0.000) | | 0.269*** (0.000) | | 0.271*** (0.000) |
| INVMILLS | 0.097 (0.481) | -0.082 (0.144) | 0.144 (0.312) | -0.074 (0.200) | 0.160 (0.281) | -0.080 (0.196) |
| Constant | 0.011 (0.987) | 1.168*** (0.000) | -0.185 (0.774) | 1.198*** (0.000) | -0.215 (0.744) | 1.216*** (0.000) |
| Observations | 822 | 822 | 800 | 800 | 770 | 770 |
| Pseudo R-squared | 0.040 | 0.240 | 0.042 | 0.243 | 0.042 | 0.242 |
| Industry dummy | NO | NO | YES | YES | YES | YES |
| Year dummy | YES | YES | YES | YES | YES | YES |

Note. ***p < 0.001; **p < 0.01; *p < 0.05.

Table 9. Unmatched Sample Regressions.

| VARIABLES | (1) CB Deal | (2) Relatedness | (4) Conglomerate | (5) Target applications | (6) Target citations |
|----------------------|----------------------|---------------------|---------------------|----------------------------|-------------------------|
| FF | -1.125*** (0.000) | -0.234* (0.043) | 0.379* (0.023) | -0.058 (0.176) | -0.082 (0.215) |
| Acquirer_Debt | -0.502 (0.460) | -0.189 (0.484) | 0.424 (0.300) | 0.045 (0.652) | -0.204 (0.086) |
| Acquirer_Cash | -0.232 (0.844) | 1.077* (0.039) | -1.649* (0.027) | 0.135 (0.474) | 0.004 (0.988) |
| Acquirer_Exp5 | -0.007 (0.864) | 0.016 (0.415) | 0.041 (0.161) | -0.018*** (0.000) | -0.015* (0.011) |
| Acquirer_size | 0.900 (0.578) | -0.568 (0.295) | 0.136 (0.870) | -0.324* (0.098) | -0.408* (0.052) |
| Acquirer_ROA | -0.138 (0.895) | -1.296** (0.005) | 1.225 (0.056) | -0.249 (0.186) | -0.387 (0.111) |
| Acquirer_Patentcount | 0.166 (0.163) | -0.007 (0.912) | 0.066 (0.481) | 0.244*** (0.000) | |
| Acquirer_Citecount | | | | | 0.225*** (0.000) |
| INVMILLS | 1.057 (0.806) | -1.168 (0.408) | 0.094 (0.965) | -0.922 (0.074) | -1.168* (0.035) |
| Constant | -15.738 (0.682) | 13.428 (0.294) | -3.031 (0.877) | 8.820 (0.061) | 11.494* (0.022) |
| Observations | 832 | 988 | 978 | 988 | 988 |
| (Pseudo) R-squared | 0.210 | 0.063 | 0.099 | 0.311 | 0.270 |
| Industry dummy | YES | YES | YES | YES | YES |
| Year dummy | YES | YES | YES | YES | YES |

Note. ***p < 0.001; **p < 0.01; *p < 0.05.

Stream 1. Human Resource Management

Determinants and outcome of employee green behaviours: An Investigation into how green human resource management can support organization environment sustainability

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Determinants and outcome of employee green behaviours: An Investigation into how green human resource management can support organization environment sustainability

Abstract

Green human resource management attempts to understand the human factors involved in the implementation of environment management related initiatives. The purpose of this study is to identify the underlying mechanisms involved which affects employee green behaviours as a result of routinization of environmental processes and the eventual impact on the organization's ability to be resource efficient. The study uses a mixed method research design to explain the role of collective organization engagement as the theoretical context for showing how the routinization of environmental activities results in involved participation of all employees which improves their in-role green performance leading to enhanced organization greening efforts.

Keywords: green human resource management, environment management, employee green behaviours, ecological routines, collective engagement, resource efficiency

Introduction

Organizations so far have relied on the use of technology to limit their greenhouse gas emissions. However, emergent research recognizes the need to foster the growth of environmentally responsible behaviours as one of the ways through which climate-related issues such as carbon emissions, loss of ecosystems etc. can be effectively addressed.

Organizations are using behaviour change research to influence employee actions on conservation efforts related to recycling, reducing energy use, water usage, and increasing public transportation (Saeed, et al., 2019). The behavioural level analysis can help organizations recognize factors which allow effective responses to interventions that results in improved environment performance (Pinzone, Guerci, Lettieri, & Redman, 2016). Environment positive behaviour has also been found to influence important workplace outcomes such as improved financial performance, employee well-being, and job satisfaction (Shen, Dumont, & Deng, 2018).

Therefore, investigating into determinants and outcomes of employee green behaviour at workplace assume further significance.

Research Background

Organizations rely on processes for their compliance to existing laws and regulations, improving environmental outcomes and avoiding workplace incidents (Melnik, Sroufe, & Calantone, 2003). However, the role of human factors in how these organization outcomes are influenced is relatively unexplored. Extant literature reports the scarcity of research papers that examine the interdependence between human resources and environment management (Jabbour & Santos, 2008).

A literature review done scanning the topic (Mukherji & Bhatnagar, 2022) highlight the need to identify additional explanatory frameworks. The following few observations cited from the review illustrate research gaps that suggest the need for further examination

- Human factors play an important role in organization greening efforts as reported by Yong, Yusliza, Ramayah, & Fawehinmi (2019) and hence, require further investigation.
- Zaid, Jaaron, & Bon (2018) in their study highlight the need to understand inclusion of green behaviours into business processes for implementation of effective environment management systems.
- Effective implementation of environment management system requires human resource management support and hence research scholars hold the view that contributing to environment goals would be an important step for HRM's future evolution (Nejati, Soodabeh, & Jabbour, 2017).
- Achieving environment sustainability requires change in the way businesses function. Successful change management requires employee support and participation (Shafaei & Nejati, 2019).
- Studies are needed that extend the micro level foundations of the research domain by exploring cognitive beliefs and psychological mechanisms related to organization environment sustainability. Further, assessing these relationships with corporate performance should include non-financial indicators instead of being limited to only economic indicators (Yusliza, Yong, Tanveer, Faezah, & Muhammad, 2020).

Research Objectives and Research Questions

Based on the research gaps that emerged from the literature review, the study identified the following research objectives and questions for further examination.

Table 1: Research Objectives and Research Questions

| Research Objectives | Research Questions |
|---|---|
| To understand the impact of implementation of environment supportive activities on employee green behaviours and does it result in fostering more supportive behaviour. | How do organization processes promote collective employee green behaviors? |
| To explore pathways to better environment sustainability performance achieved via employee green behaviours, and environment management practices. | How do organization processes promote its resource efficiency via collective employee green behaviours? |

Theoretical Underpinning

In this study we have used Collective Engagement Theory (Barrick, Thurgood, Smith, & Courtright, 2015) which is an extension of Kahn's seminal theory on Employee Engagement (1990) to theoretically explain the link between organizational processes and employee green behaviour. It is defined as a "shared perception amongst organizational members that allows them to fully invest in their work roles" and is different from aggregated individual level engagement by considering engagement to be a firm level resource (p. 112, Barrick et al., 2015). Collective employee behaviour is crucial for organization greening. Hence, organizations attempt to build collective employee engagement for environmental initiatives as part of their daily working routine (Saifulina, Carballo-Penela, & Ruza-Sanmartín, 2020). More research is recommended on the role of

engagement as an organizational context to explain how environment performance is influenced by enhancing employee green behaviours (Tang, Ren, Wang, Li, & Zhang, 2021).

Research Questions and Hypotheses

H1: Ecological Routines are positively related to Employee Green Behaviours

Ecological routines can be considered as deeply embedded, firm specific rules and procedures associated with organizing and practicing corporate environmental management that do not change very much from one iteration, period, or functional unit to another. Their goal is to improve environment resource conservation and management (Zoogah, 2017). Hence, they are expected to positively relate to employee green behaviours aimed at improving resource efficiency.

H1a: Ecological routines are positively related to collective engagement

Collective engagement is often considered an understudied organization capability that helps firm achieve and sustain higher performance (Barrick et al., 2015). The firm's organizational processes and routines are expected to act as antecedent to collective engagement (p.114, Barrick et al., 2015).

H1b: Collective Engagement mediates the relationship between ecological routines and employee green behaviours

An employee's task behaviour is expected to comprise of routine activities assigned in accordance with the organization environment management processes and systems in place (Ababneh, 2021). Collectively engaged employees will share the same sense of engagement about accomplishing these tasks resulting in more effective in-role green performance.

H2: Ecological Routines are positively related to resource efficiency

Organizations aim to use environment management practices as a source of competitive advantage by either saving costs or differentiating through more efficient use of natural resources (Ren, Tang, & Jackson, 2020). Hence ecological routines are expected to test positively with resource efficiency.

H2a: Ecological routines is positively related to resource efficiency through employee green behaviours

Research suggests that superior firm resources such as an engaged staff developed as a result of environmental processes act as a source of competitive advantage and are likely to mediate the relationship between environment management practices and environment performance (Lo'pez-Gamero, Molina-Azor'n, & Claver-Corte's, 2009).

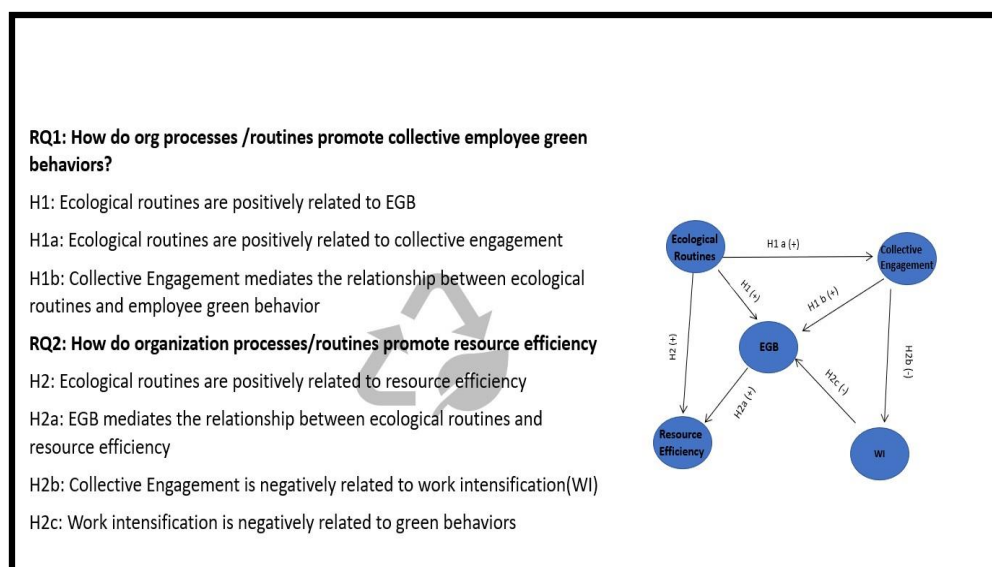
H2b: Collective Engagement is negatively related to Work Intensification

Environment initiatives are often conceptualized as High-involvement work practices (HWPS) as they need significant participation for their success (O'Donohue & Torugsa, 2016). HPWS operate by intensifying work (Lanfranchi & Pekovic, 2014) which could result in negative employee outcomes. However, implementing work practices that enable employees to build knowledge and efficacy should result in their greater discretionary effort thus offsetting any potential negative impact.

H2b: Work intensification is negatively related to employee green behaviours

Implementing environment initiatives is likely to impose additional demands on employees as they may be required to learn new processes, different skills etc. adding to their existing job responsibilities. However, it is unlikely to impact employee in role green performance if there is collective engagement in organizational processes.

Figure 1: Summary of the research questions & hypotheses



Methodology and Data Analysis

Measures

The research study measured ecological routines by adopting 12 items from the environment management practice routines scale by Zoogah (2017). Employee green behaviors were assessed using items adapted from Bachrach, Wang, Bendoly, & Zhang (2007); Pinzone et al. (2016). Collective Work Engagement construct was measured by using 4 items from Barrick et al. (2015). 3 items from the 5-scale Work Intensification published by Kubicek, Paškvan, & Korunka (2015) was used for this study. 7 items from Zhu, Sarkis, & Geng (2005) were used to measure the construct of resource efficiency. The responses for ecological routines, resource efficiency and employee green behaviors were collected from managers (n =60) while collective engagement and negative work intensification data was collected from employees (n=100). We used the aggregated responses to do the firm level analysis. These are all reflective constructs which were assessed using a 5- point Likert scale with ratings ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Pilot Phase

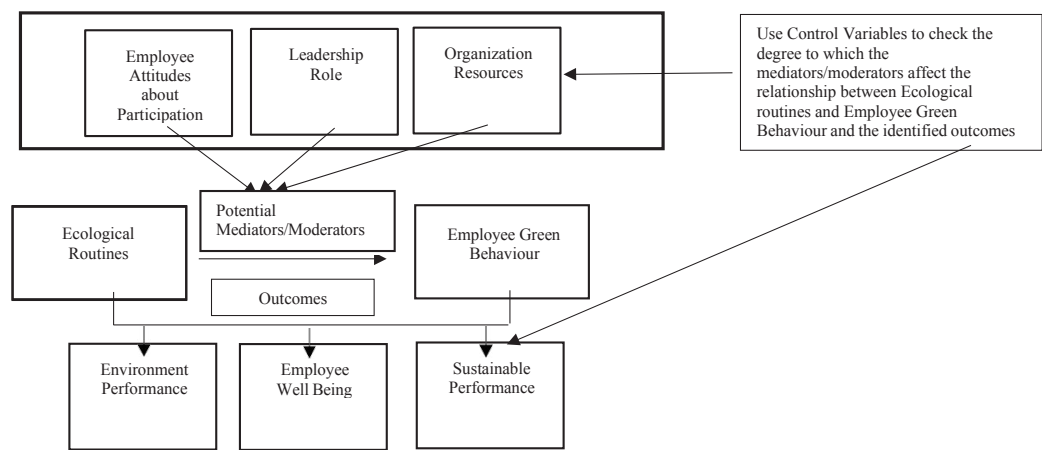
We ran pilot checks to assess the initial reliability and validity of scales, measurement model, and structural model. In addition, we used a mixed method research design (Schoonenboom & Johnson, 2017) where we sought practitioner feedback about our research questions for concurrent validation of the study constructs and identification of additional factors that can be incorporated in the theoretical model. For the quantitative survey we collected data from 40 organizations covering 100 responses from employees and managers who had environment responsibilities assigned as part of their job role.

The responses were analysed using SMART PLS Version 4.0 software for the various statistical checks needed to establish the reliability and validity of the constructs.

Simultaneously, we also spoke to sustainability experts from 6 organizations as part of the exploratory qualitative research approach adopted to validate if our theoretical model derived from literature was relevant to the actual phenomenon occurring in the organizations and identify additional factors that could be incorporated in our proposed framework. The interview responses besides, validating the observations drawn from the literature also helped us to identify potential mediators/moderators that emerged from the interview discussions.

Main Phase

Figure 2: Plan for Main Phase Study



The above model was inferred from the pilot qualitative analysis which complements the theoretical model we had derived independently from literature review

Role of Integrated Goal/Self-Regulatory Mechanisms

The integrated goal and self-regulatory theories (Wright, 2004) suggest that employee motivation to participate is affected by certain task characteristics and attitudes that determine the effectiveness of the implementation by ensuring adequate involvement. Kahn's model (Kahn, 1990) finds three conditions necessary for engagement to occur: meaningfulness, psychological availability, and psychological safety. The following three constructs identified from the integrated goal/self-regulatory literature are expected to act as moderators between ecological routines and collective engagement because of the extent of their influence on the level of meaningfulness, psychological availability and psychological safety experienced by employees while performing environmental tasks. The three constructs are:

- Green goal difficulty
- Green goal specificity
- Self-Efficacy

We plan to conduct more interviews to achieve theoretical saturation of these potential mediators/moderators discovered during the qualitative analysis.

Finish empirical testing of the revised model by incorporating relevant mediators/moderators that emerge from the qualitative analysis.

Discussion

Theoretical Contributions

The study expects to explain the processes through which organization factors can influence environment sustainability efforts at the individual level through employee green behaviors thus strengthening the micro foundations of green HRM domain which seeks to extend understanding on how environment sustainability can be embedded as part of daily organization actions. A multilevel perspective for understanding the impact

on environment performance is a gap in the green HRM literature (Tang, Ren, Wang, Li, & Zhang, 2021). The research further attempts to identify and validate human factors that play an important role for ensuring successful implementation of environment sustainability initiatives in the organization.

Practical Contributions

Environment sustainability in recent times has attracted considerable attention as a result of stakeholder concerns around value erosion caused by environmental accidents and loss of eco-systems endangering human lives. Organizations are paying greater attention to environment management in an effort to stay compliant and enhance their long-term competitiveness. Practitioners may find the research useful to improve the human dimensions of their environment sustainability efforts in addition to building technical capacity. In addition, HR practitioners may find the research useful in understanding the suitable HRM interventions that can be planned for supporting the achievement of organization environment goals.

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Exploring User Sharing Behaviours on Market-Based Platforms with Regression Tree Analysis

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ABSTRACT: *This study presents an innovative exploration into the intricate interplay between environmental and individual factors influencing actual knowledge-sharing behaviours in market-based platforms. Utilizing machine learning and regression tree analysis, this research overcomes limitations of traditional methodologies like regression analysis and structural equation modelling, which inadequately capture interactions among multiple independent variables. Data was sourced from a rapidly evolving, medium-sized, knowledge-intensive Chinese company. Our approach combines decision trees with an automatic text-based personality assessment toolkit, allowing a nuanced examination of complex relationships and factors collectively impacting users' knowledge-sharing behaviours. Among our many new findings, we identify 'cognitive style' as the primary predictor and highlight the greater role of extrinsic motivators compared to intrinsic ones in a market-based knowledge sharing platform. This research extends existing knowledge by being the first to empirically explore the interaction between person and environment in shaping actual knowledge-sharing behaviours using a regression tree method. More significantly, by automating the process more than before, this study offers practical contributions by highlighting the importance of various combinations of environmental and individual factors in fostering knowledge sharing and automating the assessment process. This key insight can guide the design of personalized interventions for community managers of market-based knowledge-sharing platforms. As a result, this study offers pivotal theoretical and practical contributions to understanding and promoting knowledge-sharing behaviours, standing at the forefront of the literature.*

Keywords: Knowledge sharing, regression tree, machine learning, knowledge market

INTRODUCTION

As firms increasingly acknowledge the critical role of effective knowledge sharing, substantial investments have been made in building comprehensive knowledge management systems. Despite such efforts, numerous organizations continue to grapple with the issue of internal knowledge stickiness, where knowledge sharing among users remains relatively low (Jeong et al., 2013; S. Zhao et al., 2020; Y. Zhao et al., 2020). Argote and Ingram (2000) worried that intra-organizational knowledge sharing can be a "black box", a notion that has subsequently become an integral theme in Management and Information Systems research (Benbya, 2016). Over time, numerous studies have attempted to decipher this "black box", with the concept of knowledge markets emerging as a recent and promising avenue (Serrat, 2017): There has been a small but increasing number of researchers and practitioners interested in using an internal knowledge market to mitigate the problem of internal stickiness (Zhang et al., 2022). A knowledge market is a market-based knowledge management mechanism for distributing knowledge by bringing together knowledge suppliers and consumers who, through interacting, collectively determine the price of commercialized knowledge. Such a market allows participants to evaluate and price knowledge through market mechanisms, and by using these mechanisms, a company running these internal markets can motivate its employees to take advantage of them, increase suppliers'

utility via monetary rewards, support an environment conducive to sharing knowledge, stimulate learning activities, and ultimately reach an optimal point for distributing knowledge resources (Desouza et al., 2006; Zhang & Sundaresan, 2010). As Van Alstyne (2013) argues, a well-designed, launched, and sustained internal knowledge market can enable valuable knowledge resources to speak up and self-identify, which can be used to identify new product development, problems and opportunities, and arbitrage the gap between them. Overall, new knowledge markets focusing on firms' innovation agendas offer a digital space to generate, explore, enrich, and evaluate knowledge, thereby increasing overall economic returns for the firms.

Despite the growing interest and promising potential of knowledge markets, there remains a substantial research gap in understanding the dynamics of knowledge sharing behaviours within these platforms. Many existing studies have focused predominantly on the intention to share knowledge (Cai et al., 2022), but they fall short in exploring the actual behaviours of users within these knowledge sharing platforms. In reality, the gap between intention and actual behaviour can be substantial, and understanding this discrepancy can yield valuable insights for firms seeking to optimize their internal knowledge markets.

Furthermore, a key limitation in the existing literature lies in the lack of consideration for the interaction between environmental and individual factors that influence knowledge sharing behaviours. Much of the research to date has treated these factors in isolation, with limited exploration of how they interact and jointly influence the actual behaviours of knowledge sharing (Kwahk & Park, 2016; Wang et al., 2011). We contend that this limited focus primarily stems from the absence of methods that can holistically and effectively analyze these factors. Most existing research employs parametric methods, with linear regression and structural equation modeling being the most prevalent. However, these parametric models face difficulties in estimating and explicating the complex interactions among three or more variables, and constructing nonlinear models also poses significant challenges (Cai et al., 2022; Giorgi et al., 2016). In their endeavors to examine variables such as knowledge sharing, researchers tend to concentrate on the main effects, typically considering only a limited number of variables simultaneously. However, a user's knowledge-sharing intentions and actual behaviours are shaped by a myriad of factors, and an analysis that accounts for only a limited subset of these variables and dismisses the link between intention and actual behaviours may significantly undermine the external validity of the research conclusions. The conclusions drawn from these parametric methods often lean towards being explanatory rather than predictive and, in the current context of the replication crisis, there is mounting evidence suggesting that numerous findings from empirical psychology studies fail to

be replicated when future experiments and data analyses are conducted following the original study procedures (Rahal et al., 2015; Yarkoni & Westfall, 2017). To address this crisis, Yarkoni and Westfall (2017) proposed that research projects emphasizing prediction, with explanation serving as a secondary objective, might offer more sustainable advantages in the long run.

As a predictive science, machine learning encompasses fundamental principles and techniques that could be beneficially integrated into psychology (Jacobucci & Grimm, 2020; Yarkoni & Westfall, 2017). Within the realm of machine learning and data mining, regression trees, also known as Regression Decision Tree or Decision Tree Regression, stand out as one of the most commonly used classification methods (Ghiasi & Zendehboudi, 2021; Sen et al., 2020). This method utilizes a series of algorithms to identify variables that optimally predict a target variable by partitioning a dataset into progressively smaller subsets that gradually become homogeneous with respect to the outcome attribute (James et al., 2013). This method can offer several advantages: firstly, it is a non-parametric method that does not make assumptions about the distribution of space (Rokach, 2016); secondly, it efficiently handles both categorical and continuous variables; and thirdly, it generates results that can be visualized and easily explained. Regression trees have been effectively applied in psychological research (Yong et al., 2020). A decision tree pinpoints the most influential predictor and the ways in which different predictors interact with each other to distinguish groups relative to the dependent variable (Liu et al., 2011), which aligns with the objectives of our research. Therefore, this study employs regression tree analysis to explore the interplay between environmental and individual factors and their collective impact on users' behaviours of sharing knowledge in the context of market-based knowledge sharing platforms.

Moreover, another important limitation in the extant literature is the over-reliance on self-report surveys, which could present potential issues, particularly when measuring sensitive individual attributes such as personality. Self-reports are inherently subjective, potentially leading to response biases and inaccuracies, particularly when respondents are asked about complex or sensitive topics. This concern is particularly relevant in the context of personality assessment, where self-perception may not align with actual behaviors or traits. Recognizing this, we adopt a novel approach using machine learning methodologies to automatically measure personality. We use a textual based machine learning method that received recent successes in predicting MBTI types, notably the E/I, T/F, and S/N dichotomies, with over 90% accuracy (Li et al., 2018). This objective and accurate assessment allows us to move beyond self-reporting. Moreover, the S/N (Sensing-Intuition) dichotomy in MBTI, reflecting cognitive style, has long been linked to usage and perceived usefulness of knowledge

management systems, including knowledge sharing platforms (Taylor, 2004). Hence, MBTI is suitable for our research aim.

This study aims to uncover how environmental and individual factors work in tandem to influence the actual knowledge-sharing behaviors of users in market-based knowledge sharing platforms. Building upon extant research that has primarily looked at these factors independently, we seek to delve deeper into the complex interplay between the environment and individual attributes, specifically focusing on personality as assessed by the Myers-Briggs Type Indicator. The research question guiding this investigation is: "How do environmental and individual factors interact and jointly influence users' actual knowledge sharing behaviours in market-based knowledge sharing platforms?" Answering this question will enable a richer understanding of the dynamics of knowledge sharing and inform the design and implementation of internal knowledge markets.

Our study offers valuable theoretical and practical contributions. Theoretically, our model extends the current understanding of environmental and individual factors by examining their combined influence on actual knowledge sharing behaviours, moving beyond the focus on independent impacts and mere intentions. To our knowledge, this represents the first empirical exploration of the interaction between person and environment in shaping actual knowledge sharing behaviours, using a regression tree method. Additionally, our study broadens the theoretical landscape of knowledge sharing by integrating machine learning techniques, including regression tree analysis and text-based personality assessment. These methods provide a nuanced approach to predict and categorize different behavioural patterns among user subgroups, shedding light on boundary conditions that underpin the diverse motivational factors driving knowledge sharing. Practically, our research underscores the significance of varied combinations of environmental and individual factors in fostering knowledge sharing. This insight is instrumental for community managers of market-based knowledge sharing platforms, offering guidance in designing personalized interventions that promote knowledge sharing among users.

LITERATURE REVIEW

Knowledge sharing and knowledge market

Knowledge sharing is a multifaceted process that involves the active exchange of both explicit and tacit knowledge among individuals, facilitating goal attainment, problem-solving, idea generation, and policy or procedure implementation (Nonaka, 1994, 2008). The concept of knowledge sharing has been described in various ways within academic discourse (Wang et al., 2014). Some researchers propose it involves active communication of one's knowledge to others or proactive seeking of others' knowledge (Jurišević Brčić & Mihelić, 2015). Others contend that knowledge sharing represents a reciprocal

process, where it is framed as a series of give-and-take behaviours between the knowledge provider and the receiver (Ouakouak et al., 2021). Regardless of the perspective, the central tenet remains that knowledge sharing fosters collective learning, idea exchange, and problem-solving within an organization (Darroch, 2003).

The internal knowledge sharing within an organization encompass vital social processes and mechanisms. By modifying the reward structure and the use of a knowledge platform, we can impact these mechanisms, such as organizational norms, which in turn could significantly influence the overall level of knowledge sharing and transfer within an organization (Benbya, 2016). One of these modifications can be called a knowledge marketisation approach. Recently, the potential of knowledge markets has emerged as an effective knowledge management topic (Apostolou et al., 2002; Joshi & Choudhury, 2022). Some early research claims that a company can increase its performance if it implements a successful knowledge market that allows participants to trade distinctive knowledge, provides an exchange mechanism, maintains both competition and collaboration between knowledge suppliers, and develops standards, protocols, and regulators for both knowledge suppliers and receivers (Sundaresan & Zhang, 2020; Zhang & Sundaresan, 2010; Zhang & Jasimuddin, 2008). Several studies have underscored the benefits of intra-organizational knowledge markets. Some researchers highlighted the superior efficiency of markets with a price structure over those without (Lukashov, 2011), and some showed that factors such as knowledge technology, rewards, and market size can positively influence knowledge trade (Dev et al., 2017). Research also showed that financial incentives can boost suppliers' intent to share knowledge (Burtch et al., 2018), although there are also empirical cautions that such benefits could diminish rapidly or even be counterproductive if excessive (Benbya, 2015). There are also empirical research talking about how firms could leverage expert-based recommendation systems to streamline seller-buyer matching and address potential issues related to excessive pricing and transactional costs, especially in large knowledge markets (Zheng et al., 2018). Overall, in these knowledge platforms, market rules govern knowledge markets inside organizations, and market participants take actions based on market incentive mechanisms.

Individual factors affecting knowledge sharing

Existing literature explores the impact of individual factors, such as motivations and personal traits, on users' knowledge sharing behaviors within online communities (Wang & Noe, 2010; Wang et al., 2011).

Motivation stands out as a pivotal driver of knowledge sharing (Wasko & Faraj, 2005). Typically, motivations for knowledge sharing can be classified into two categories: intrinsic and extrinsic

motivations (Deci et al., 1999; Osterloh & Frey, 2000).

Intrinsic motivations for knowledge sharing vs Extrinsic motivations for knowledge sharing

Intrinsic motivation, derived from enjoying an activity or realizing one's potential, can be a powerful driver for knowledge sharing. It might stem from the desire to provide general assistance, achieve specific goals, or attain a sense of autonomy and self-efficacy (Coon & Mitterer, 2012; Lin, 2007; Reeson & Tisdell, 2007). While studies like Hung et al. (2011) have found significant correlations between intrinsic motivations such as altruism and satisfaction from shared knowledge, the impact on the quantity or quality of knowledge shared has been less definitive. Intrinsic motivation for sharing knowledge come from the freedom, independence, flexibility and autonomy that individuals experience in knowledge-sharing activities (Lai & Chen, 2014). People with a high level of knowledge-sharing self-efficacy, which fuels intrinsic motivation, tend to think that they can support knowledge sharing platforms in addressing relevant problems or that can have an impact on the platforms (Zhang et al., 2019). Conversely, individuals with low self-efficacy might fear misleading others or providing irrelevant information (Zhang et al., 2017).

Extrinsic motivations, on the other hand, involve acting to gain external rewards, such as money or social status (Bartol & Srivastava, 2002; Bock et al., 2005; Hsu et al., 2007; Kankanhalli et al., 2005). However, these motivations can be perceived as controlling and potentially decrease an individual's sense of autonomy (Ryan & Deci, 2020). The effects of extrinsic motivators on knowledge sharing in sharing platforms warrant attention due to their inconsistent impacts, which have been found to be positive, non-significant, and even negative (Liao et al., 2013; Yan et al., 2017). A plausible explanation for these disparate findings could be that additional factors mediate the relationship between economic rewards and knowledge sharing. Granted, the interplay between extrinsic and intrinsic motivations can be complex. While extrinsic motivators can sometimes enhance intrinsic motivations ("crowd in"), they can also undermine them ("crowd out"), as Frey and Jegen (2001) and Osterloh and Frey (2000) found. Whether an extrinsic motivator enhances or diminishes an individual's motivation to share knowledge may depend on how it's perceived. If seen as an acknowledgment of competence, it might foster positive feelings and confidence. Conversely, if perceived as domineering, it could deter contribution and engagement (Bartol & Srivastava, 2002).

Personality

In addition to domain-specific motives, human behaviour is also generally governed by personality traits. Previous studies have demonstrated a positive influence of conscientiousness, agreeableness, and openness on knowledge sharing (Jadin et al., 2013). Research has also suggested that individual differences in cognitive style, which impacts how people process information and learn, can

significantly affect their usage and perceived usefulness of management information systems and their participation in knowledge sharing platforms (Davis, 1989; Taylor, 2004). For instance, people with an analytic cognitive style demonstrated higher usage levels than those with an intuitive cognitive style for general knowledge management system usage. However, cognitive style had no significant effect on the usage of 'yellow pages' and email, although intuitive users showed slightly higher usage levels. As Taylor (2014) explains, people with an analytic cognitive style prefer quantitatively based and step-by-step tools such as data mining. Conversely, intuitive individuals tend to feel more comfortable with text-based and less structured tools such as Lotus Notes and email. Regarding the results for email usage, it's possible that respondents did not clearly distinguish between general email usage and its specific use for knowledge acquisition and sharing, even though this distinction was blur.

Additionally, besides the three factors mentioned above, individual characteristics such as gender, age, working department, personal income, and seniority might also moderate the relationship between motivation and knowledge sharing. For instance, researchers found that females require a more positive social interaction culture to actively perceive a knowledge-sharing culture similar to their male peers (Connelly & Kelloway, 2003). Moreover, a meta-analysis showed that some of the personality factors (e.g., pro-social) in predicting knowledge sharing was stronger for younger participants, and the effect of self-efficacy on knowledge sharing was more prominent among females (Hafeez et al., 2019). Thus, in our study, we incorporate individual characteristics factors, including gender, age, working department and personal income, and seniority, as individual factors affecting their intention to share knowledge.

Environmental factors affecting knowledge sharing

Users' perceptions of such online sharing platforms, as an environmental factor, can also affect usage time and the amount of knowledge users want to contribute and share (Sun et al., 2014). Recently, research has highlighted the role of environmental factors in forming knowledge sharing and many of such factors have been discussed. In this study, we focus on two of these factors, knowledge-exchange-related social interactions and perceived knowledge matching in platform.

Knowledge-sharing-related social interactions

The knowledge market is fundamentally rooted in social exchange and market design theories (H.-C. Huang et al., 2018). As stated earlier, internal knowledge sharing and exchange involve vital social processes and mechanisms. Perceived knowledge-sharing-related social interactions, both in online and offline environments, can profoundly influence these processes and mechanisms, such as organizational norms, which can impact the overall level of knowledge sharing and transfer within an organization (Benbya 2016). A well-functioning knowledge market should foster an environment that satisfies users

by promoting pro-knowledge-sharing-related social interactions. In turn, this would ensure the market is abundant with knowledge products for sale, which maintains a healthy level of knowledge thickness - a market characterized by the active participation of numerous traders dealing in a broad range of products. Moreover, it is crucial for the market to achieve congestion-free conditions, where transactions are swift and offer satisfactory choices to participants (Agrawal et al., 2015; Roth, 2007, 2008). Therefore, perceived knowledge-sharing-related social interactions can be an important environmental factor for predicting knowledge sharing behaviours.

Perceived knowledge matching in platform

According to Van Alstyne (2013), like a normal market, a knowledge market can also encounter prohibitively difficult problems in matching and pairing between knowledge recipients and sources if it doesn't reach critical mass quickly enough, leading to market failures. Market participants need to know how to take part - initial participation may require considerable knowledge, presenting a barrier for some. Therefore, initial seeding and subsidizing the market is important. Prior research suggests participants need an initial portfolio to start trading (Benbya 2015), sponsored by the market owner. Researchers also argue that owners should seed the market with critical knowledge and subsidize key producers to build trust between participants and the owner of the knowledge management system (P. Huang et al., 2018). This leads to greater propensity and capability to contribute. When the owner shows genuine care for participants' well-being rather than pure profit-seeking motivation, beliefs in their benevolence are reinforced, leading to increased willingness to supply more to the market (Guo et al., 2017). Previous research emphasizes the importance of perceived matching and argues that a slowed matching can cause a market failure (especially at scale) (Dev et al., 2018). Therefore, perceived matching can be another important environmental factor for predicting knowledge sharing behaviours.

Regression tree analysis & MBTI personality model

As previously introduced in the Introduction section, Regression trees, also referred to as Regression Decision Trees or Decision Tree Regression, are widely used for supervised machine-learning tasks (Ghiasi & Zendehboudi, 2021; Sen et al., 2020). This method involves dividing the data into subsets, represented by branches, nodes, and leaves. Similar to decision trees, regression trees select splits that minimize the variability in the target attribute values. As a result, the mean values of the target attribute in the leaves can be used to predict its values. One key advantage of regression trees is their interpretability, as they not only predict attribute values but also provide insight into the attributes used and their role in making predictions (Loh, 2011). This method has proven to be useful in have been successfully applied in psychological research, such as predicting smoking cessation attempts, assessing bullying risk factors among adolescents, predicting employees' perceptions of organizational support,

documenting adult suicidal ideations, and assessing posttraumatic stress disorders (Bae, 2019; Moon et al., 2016; Stewart et al., 2016; Yong et al., 2020).

The Myers-Briggs Type Indicator (MBTI) is used in 115 countries, with 29 languages available, and it has been employed by 88 of the Fortune 100 companies in the past five years (Choong & Varathan, 2021). The MBTI is a widely recognized assessment, and practitioners place greater trust in it compared to organizational scholars (Lake et al., 2019). The MBTI is considered, though controversially, by some researchers that it outperforms the Big Five Inventory (BFI) in specific domains (Yi et al., 2016; Yoon & Lim, 2018). The MBTI consists of four pairs of opposing dichotomies: Extraversion-Introversion (E/I), Sensing-Intuition (S/N), Thinking-Feeling (T/F), and Judging-Perceiving (J/P). Due to the prevalence of free personality assessment models online, many individuals now share their personality types using online toolkits. Large-scale self-reported personality assessment results have become conveniently accessible through data mining on all kinds of online platforms. This is demonstrated by Plank and Hovy (2015), who collected a corpus of 1.2 million tweets from 1,500 users self-identifying with an MBTI type within a week. Subsequently, additional datasets on MBTI have become available through social media platforms, emphasizing the ease of data collection (Gjurković & Šnajder, 2018; Shumanov & Johnson, 2021; Verhoeven et al., 2016). This also allows the training of machine-learning-based personality prediction toolkit based on large real, identifiable users-generated-textual-content. Hence, we have seen many scalable and sustainable method for inferring users' personalities is through linguistic features derived from users' interactions now. In recent years, researchers such as Li et al. (2018) have achieved success in predicting the E/I, S/N, and T/F dichotomies with above 90% accuracy. That being said, most researchers have encountered difficulties in predicting the J/P dichotomy from textual data. This will not cause a concern for this study because we concern only the S/N pair.

METHOD

Knowledge market arrangement

In collaboration with Yichen Construction Consultancy, a growing Chinese company, we examined their sponsored knowledge market. We recommended a series of market arrangement: First, we suggest fluctuating pricing model where knowledge suppliers could monetize in two ways: by setting their price for uploaded knowledge items, and by accepting monetary rewards upon a receiver's access to the item, regardless of whether the receiver paid. We established safeguards against market manipulation by ensuring transaction transparency and alignment of individual goals with Yichen's objectives, communicated during weekly meetings. We predicted that the relatively small financial incentive (CNY

200, or approx. US\$ 70) allocated to each employee wouldn't spur excessive competition that might undermine communal motivation. Our monitoring period ran from May 1, 2021, to September 1, 2021, during which we recorded all knowledge contributions and pertinent information regarding the generated knowledge pieces.

Data collection & Measurement

A survey (adapted from Lee et al. (2005)’s and Liu et al. (2014)’s scale) was distributed to all employees with the help of the HR department of the company. In order to maintain overall consistency, we measured all variables that we collected from surveys using a five-point Likert scale that ranged “strongly disagree” (1) to “strongly agree” (5). Table 7 shows the items for each variable. We used Douglas and Craig (2007) method to ensure translation validity. In addition, we addressed all missing cases before we began analyzing the data.

Additionally, prior to the commencement of the field study, we provided all employees with a MBTI personality test. This test was conducted using the Streamlit package, and we trained the model using data from Personality Café (Choong & Varathan, 2021). During this process we used the employees’ contribution to the knowledge sharing platforms as the input for training. The personality report is automatically distributed to all the employees as a gift. We explicitly informed the managers that the MBTI-based personality assessment should not be used for candidate selection purposes and is more appropriate for personal development rather than selection. Participants were also informed that the MBTI-based assessment primarily focuses on individual personality preferences and not on skills or competence. No preference is considered "bad" or grounds for exclusion during the hiring process. Instead, a preference indicates an individual's natural way of approaching things, but individuals can adapt and engage in behaviors outside of their preference when necessary. For instance, someone with a preference for Introversion may excel at public speaking or networking, although it may require more energy for them. We also provided a concise guide outlining the dos and don'ts of personality tests. We collected empirical data from 122 respondents within the company. The survey encompassed all individual and environmental factors except for personality, including motivation type, gender, age, working department, personal income, seniority, perceived knowledge-sharing-related social interactions, and perceived matching. The machine-learning-based personality test provided us with the cognitive style aspect of personality. Table 1 summarizes the variables.

Table 1 inserts roughly here

Regression tree analysis

The primary objective of conducting a decision tree analysis is to identify the most effective

combinations that can predict target variables based on extensive data, which differs from traditional methods that formulate and test hypotheses. The dataset was divided randomly into a training set (90%) and a test set (10%). The training set consisted of 109 observations and was utilized to determine the optimal regression tree model. Subsequently, this model was applied to the test set. As a rule of thumb, having a minimum of 100 observations is often considered a good starting point for regression tree analysis (Hastie et al., 2009). Using the Python package sklearn, we constructed a regression tree model to forecast knowledge sharing behaviors. Once the regression tree was created, the sklearn package was employed once again to assess the model's performance on the test set.

ANALYSIS

The correlations between variables can be found in the Figure 1

Figure 1 inserts roughly here

A regression tree of knowledge-sharing intentions is shown in Figure 2. We limit the depth of the tree to 4 to ensure the clarity and the readability of the regression tree.

Figure 2 inserts roughly here

The decision tree analysis revealed that the most influential predictor of knowledge-sharing behaviours was 'Cognitive Style', which appears at the top of the tree (Node 1). Proceeding from node 1, the tree iteratively divides and searches for the strongest association among the remaining variables. Two distinct pathways emerge:

In the first path, an individual with an intuitive cognitive style who is intrinsically motivated to share knowledge tends to contribute a higher number of knowledge contents to the platform. Within this path, the perceived level of social interaction appears to play a significant role in promoting knowledge-sharing behaviours, while offline interactions do not have a noteworthy impact.

In the second path, an individual with an analytical cognitive style who is extrinsically motivated is likely to exhibit a higher number of knowledge-sharing behaviours on our market-based platform, except when the individual has a relatively high income (i.e., 16,001 RMB ~ ∞ per month, the highest group), or has experienced a high perceived matching rate in the knowledge market. Another environmental factor, perceived interaction, plays a minor role in promoting knowledge-sharing behaviours. However, given the number of cases that fall into the relevant categories, we cannot draw meaningful conclusions from this observation.

Our decision tree provides information about the relative importance of different factors affecting users' knowledge sharing behaviours. Table 2 displays the relative importance of all the independent variables in this study. As mentioned earlier, 'Cognitive Style' carries the highest relative importance, followed by

'Seniority' (a dummy variable) and 'Perceived Matching'. Uniquely, in a market-based knowledge sharing platform, as opposed to a non-market-based one, the relative importance of extrinsically motivated knowledge sharing behaviours surpasses that of intrinsically motivated ones. Additionally, the relative importance of some control variables, such as gender, is generally low, with relative importance scores below 0.0001, suggesting their effects can be largely negligible.

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| DISCUSSION |

Research on the antecedents of knowledge sharing has identified numerous key variables. However, methodologies such as regression analysis and structural equation modeling limit the portrayal of multiple independent variables' interactions. As a machine learning method, decision trees can handle intricate relationships involving multiple independent variables, enhancing the predictive power of such models. Moreover, existing literature frequently over-relies on self-report surveys, which may present potential challenges, particularly when measuring sensitive individual attributes like personality. In this study, we employ decision trees and an automatic text-based personality assessment toolkit to identify the factors that collectively impact users' actual knowledge-sharing behaviours.

Our analysis focuses on the knowledge market, an area of knowledge management that has been receiving increasing interest and is regarded as having immense potential. For this purpose, we collaborated with an emerging knowledge-intensive company in China to conduct our field study.

On such a market-based platform, the regression tree model identified 'Cognitive Style' as the root node. Also, extrinsic motivators have a more significant impact than intrinsic ones. Among environmental factors, the perceived matching level can be crucial, but perceived knowledge-related social interactions, both online and offline, appear to have only a negligible role. However, it should be noted that our sample size is relatively small, and since our focus is on one medium-sized company, the sample does not encapsulate diverse characteristics. Contrary to previous studies, gender does not play a non-negligible role. As Taylor (2004) argues, gender and other individual factors (such as cognitive style) independently influence knowledge sharing behaviours.

Our study offers valuable theoretical and practical contributions. Theoretically, our model broadens the current understanding of environmental and individual factors by examining their combined influence on actual knowledge-sharing behaviours, moving beyond the focus on independent impacts and mere intentions. To our knowledge, this is the first empirical exploration of the interaction between person and environment in shaping actual knowledge-sharing behaviours, using a regression tree method. In addition, our study expands the theoretical landscape of knowledge sharing by integrating machine

learning techniques, including regression tree analysis and text-based personality assessment. These methods provide a nuanced approach to predict and categorize different behavioural patterns among user subgroups, highlighting the diverse motivational factors driving knowledge sharing.

Practically, our research emphasizes the significance of various combinations of environmental and individual factors in promoting knowledge sharing. This insight is crucial for community managers of market-based knowledge sharing platforms, offering guidance in designing personalized interventions that encourage knowledge sharing among users.

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Figure 1: Correlation matrix (INT=Intrinsically motivated knowledge sharing; EXT=Extrinsically motivated knowledge sharing; ONLINE=Perceived knowledge-sharing-related social interactions, online; OFFLINE= Perceived knowledge-sharing-related social interactions, offline; MATCH=Perceived matching; COGN=Cognitive Style; KS= Knowledge sharing)

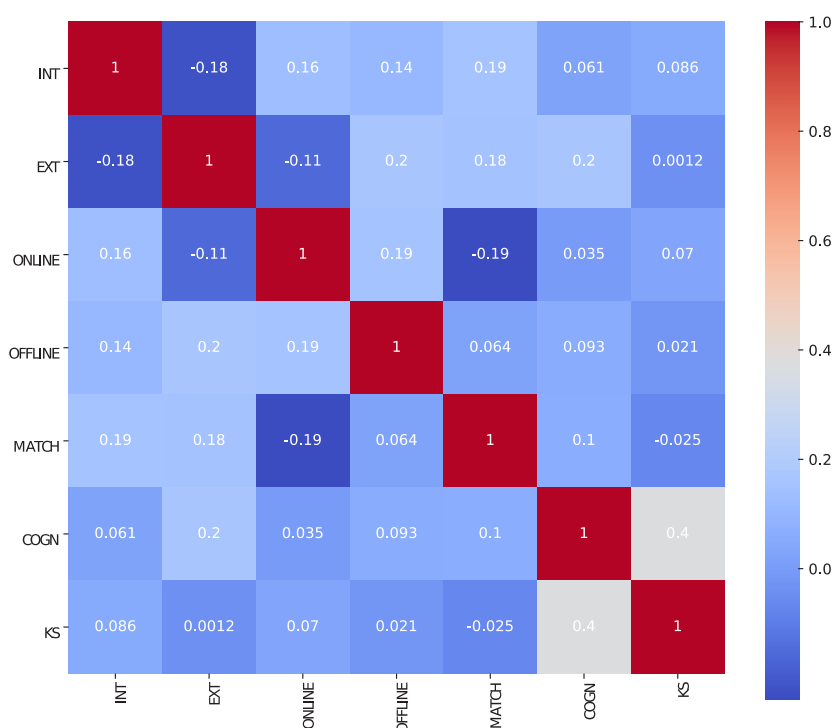


Figure 2: Regression tree predicting knowledge-sharing behaviours

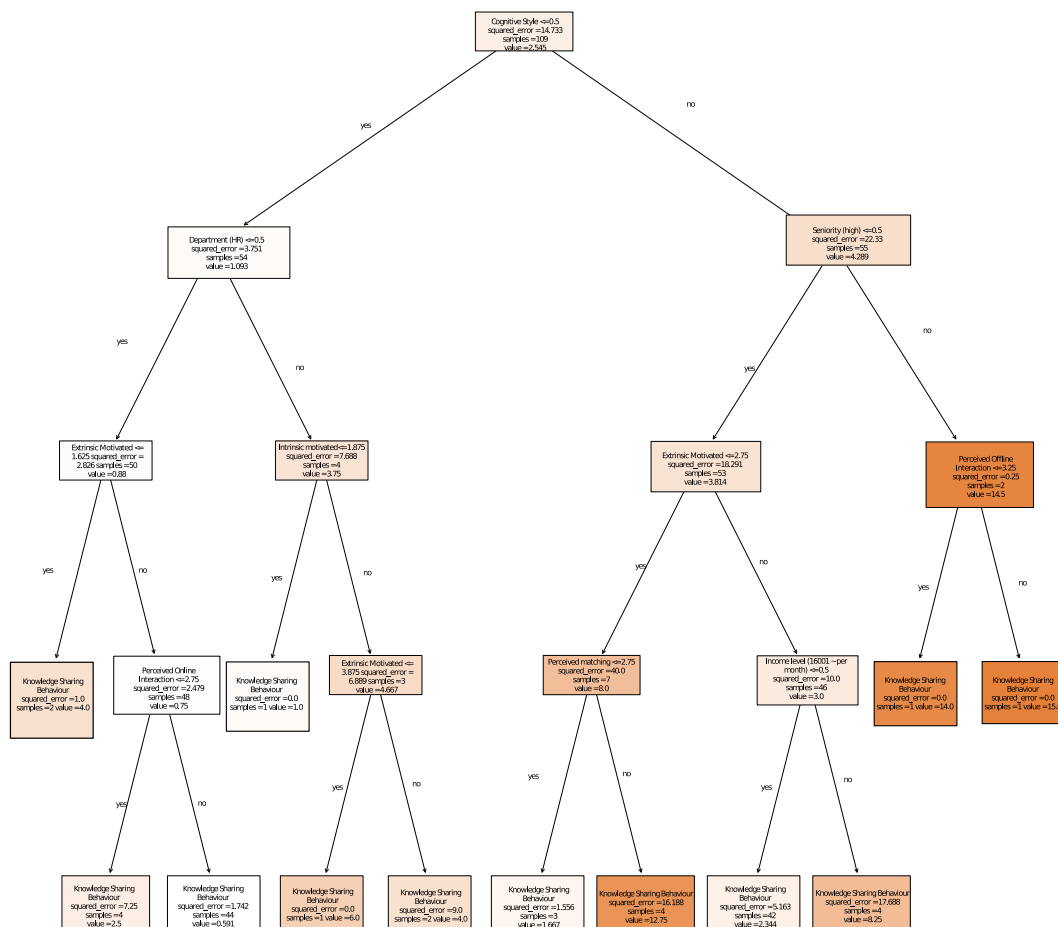


Table 1: The measurement items

| Construct | Item | Range |
|---|--|-------|
| Intrinsically motivated knowledge sharing | Sharing my knowledge with colleagues is pleasurable. | [1,5] |
| | It feels very good to help someone by sharing my knowledge | |
| | I am confident in my ability to provide knowledge that others in my organization | |
| Extrinsically motivated knowledge sharing | I will receive a higher salary and bonus in return for my knowledge sharing. | [1,5] |
| | I will receive increased promotion opportunities in return for my knowledge sharing. | |
| | After sharing my knowledge, I also expect to receive knowledge in return when necessary. | |
| | After sharing my knowledge, I expand the scope of my association with other | |
| | | |

| | | |
|---|---|--|
| | organization members. | |
| Perceived knowledge-sharing-related social interactions, online | I spend a lot of time interacting with some members of the company's online knowledge platform I make frequent communication on the company's online knowledge platform | [1,5] |
| Perceived knowledge-sharing-related social interactions, offline | I have frequent communication with my co-workers and share information and knowledge offline I maintain close social relationships with some co-workers through sharing information and knowledge offline | [1,5] |
| Perceived matching | On my company's knowledge platform, I can find the knowledge resources that I need. I know that I can create knowledge resources that my colleagues need and upload them onto my company's knowledge platform. | [1,5] |
| Cognitive Style | How people process information to make decisions (derived from MBTI). It has two types of Orientation (Analytic Orientation vs Intuitive Orientation) | Analytic Orientation = 1 Intuition Orientation = 0 |
| Seniority | The current ranking of an employee | 1 = interns/casual workers 2 = juniors 3 = team leaders 4 = managers/branch head 5 = CXOs |
| Department | The main department that an employee is working in | 1 = Quantity Survey 2 = Engineering 3 = Accounting 4 = Marketing 5 = General (incl. CEO office) 6 = HR 7 = Others |
| Income | An employee's self-reported current monthly income level | 1 = 0,4000 RMB per month 2 = 4001 to 8000 per month 3 = 8001 to 12000 per month 4 = 12001 to 16000 per month 5 = 16001 ~ ∞ per month |
| Gender | The biological sex of an employee | 1 = Female 0 = Male |
| Knowledge sharing | The number of knowledge | [0, 17] |

| | |
|------------------|---|
| behaviour | contributions a person created and shared on the platform |
|------------------|---|

Table 2: Relative Importance Scores of the Factors Influencing Knowledge Sharing Behaviours (Note: Factors with importance scores below 0.0001 were excluded from this table for clarity)

| Rank | Feature | Relative importance score |
|------|---|---------------------------|
| 1 | Cognitive Style | 0.244047 |
| 2 | Seniority (managers/branch head) | 0.212387 |
| 3 | Perceived matching | 0.204943 |
| 4 | Extrinsically motivated knowledge sharing | 0.164919 |
| 5 | Income (16001 ~ per month) | 0.120709 |
| 6 | Department (others) | 0.02969 |
| 7 | Social interactions online | 0.013006 |
| 8 | Intrinsically motivated knowledge sharing | 0.009813 |
| 9 | Social interactions offline | 0.000487 |

Stream 7. Teaching and Learning

**Teaching Critically and Reflectively: using Students' Family Lens to Teach
Business and Management Concepts**

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Stream 7. Teaching and Learning

Teaching Critically and Reflectively: using Students' Family Lens to Teach Business and Management Concepts

ABSTRACT: *An approach based on using student family experiences to teach business and management concepts is proposed in this paper to bridge the gap between classroom academic learning and applying theoretical concepts to life experiences. Creating a more practical, enriching, and reflective teaching environment is possible by incorporating reflective activities and facilitating discussions about student experiences. The paper emphasizes the importance of teaching students about reflection and its role in learning, particularly in bridging the gap between theory and practice. Reflective thinking can be developed by providing students with a thinking space to reflect upon their experiences. The general purpose of this approach is to make education more practical and enable students to connect their lived experiences with how organizations function.*

Keywords: Business education, classroom reflective activities, family experiences, knowing-doing, learning challenges, practical learning

There is an increase in the number of students admitted in the first year of an undergraduate degree program each year. There are many reasons why students choose to attend universities; employment, a high salary, status, knowledge enhancement, a love for learning, or even to meet their parents' expectations. Having taught at a university in Australia since 2016, I have observed first-hand how students believe that attending university will make them more knowledgeable and enable them to stand out. At the same time, some students also perceive their university experience as just another obstacle to overcome. Experience-based learning has been a part of learning and development in business schools for some time. Association to Advance Collegiate School of Business (2022) accreditation standards advocate engaging students in learning and increasing their educational responsibility. But even after engaging in reflective activities, students often do not understand the value of spending time learning how to reflect and actually reflect. When I introduce students to various discussion topics, such as motivation, leadership, teamwork, culture, organizational structure, and ethics, what concerns me are the questions they ask. "Why cannot we obtain a correct answer?" a few students wonder each semester. One of the most challenging aspects of education is demonstrating students' reasoning in formulating answers rather than focusing on "the" answer. Due to their struggles, they either despise learning management and/or are more concerned with passing the course than learning from it. I find both issues problematic to student learning and continuous development.

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There is a great deal of exposure to the “whats” (the content) and the “whys” (the rationale for the content being taught) but not much exposure to the “hows” (the fundamental techniques to apply knowledge and when to apply it). Most first-year undergraduate students in my management course have never worked before, have entered university straight out of high school, or have taken a gap year and have little to no experience dealing with management at work. As a result, they find the concepts presented in university courses to be useless. It is not my intention to use the word ‘useless’ casually. In this paper, I have elaborated on the use of this dismissive terminology.

Students often benefit from educators sharing their work experiences and case studies to better understand different organizations’ circumstances. While students understand what to do in a case study-based classroom situation (whether in open discussion or an assessment piece), they may not understand how and when to choose which part of their education is appropriate for engaging in different events in their life (in their life and not the life of a case study led business leader). It appears that students know what to do (through examples of case studies) working on assessments but do not know when to apply the same learning in different circumstances (outside classroom life) from those presented in the case studies (Dean, Wright, & Forray, 2020). Knowing and doing are two very different things. We very well know from what Kolb and Kolb (2005) showed us. Kolb and Kolb’s (2005) arguments form the basis of this paper’s primary argument on the need for students to reflect on their experiences to learn from what is taught in the class.

REFLECTING ON REFLECTIONS HAS VALUE

I often reflect on how rewarding it is to help students realize that learning about organizations is similar to knowing their family and personal experiences. Students who lack experience in the workplace can benefit from a university education if they can reflect on their experiences. Since reflections are limited to the past, discussing family experiences becomes more natural than discussing hypothetical or case study problems. The latter teaching methodologies have their merits, but learning from these alone may not be as easy, at least for students with little to no work experience at the undergraduate level. It may not be possible for them to reflect unless we, as educators, assist them in connecting theoretical concepts and their lived experiences. By positioning my teaching

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practices in terms of scholarly discussion, I can explain why discussing students' family experiences as a central theme in class can be highly beneficial for students in understanding business and organizational theory.

LITERATURE REVIEW

Literature is abundant on why management students need more emphasis on skills development and have been discussed for many decades. Still, not much has happened to how the students learn in class (Ungaretti, Thompson, Miller, & Paterson, 2015). Nonaka and Takeuchi (1996) indicate that human ideas are developed much earlier in life, and human actions are based on those ideas (Argyris, 2002a, 2002b). This makes it difficult for students to *unlearn* what they have learned (coming to the class to start their education), further complicating the learning process. After all, to learn is to unlearn; unlearning requires learning too (Kolb & Kolb, 2005).

According to Janssen, Mainhard, Buisman, Verkoeijen, Heijltjes, van Peppen and van Gog (2019), teachers play a crucial role in fostering students' critical thinking skills in higher education. However, they also state that little is known about fostering teachers' critical thinking skills and attitudes toward teaching effectively. Such skills are rarely explicitly taught (Jones, 2007), even though research has shown that students need explicit instruction to improve their critical thinking skills (Abrami, Bernard, Borokhovski, Waddington, Wade, & Persson, 2015). In the current competitive and globalized economy, higher education institutions are responsible for producing graduates with relevant competencies and skills (such as critical thinking) desired by employers (Song, Lee, Liew, Ho, & Lin, 2021). However, Stedman and Adams (2012) suggest that higher education teachers may not have a concrete understanding of what critical thinking encompasses and how they can teach it effectively to students in class.

The ability to apply knowledge and exercise judgment is essential for students to succeed in the unpredictable business environments they will encounter during their careers (Merritt, 2001). Firstly, it is the student's willingness to attend and learn the material presented in the class. Secondly, their ability, focus, and effort determine what they can accomplish (Noe, Wilk, Mullen, & Wanek, 1997). To be successful in business environments, students must be able to acquire knowledge but also learn

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how to apply that classroom-acquired knowledge and exercise the judgment necessary to succeed *on their own* (Merritt, 2001), not only in the assessments as a part of a course but carry that learning with them to all spheres of life. However, finding discussions either too theory-based or too abstract from *their* experiences creates student *disengagement*, *uninspiration*, and *unmotivation* to learn (Auster & Wylie, 2006). This is one of the (possibly many other) reasons why educators need to critically understand the role of self-efficacy in student learning (Mathieu & Martineau, 1997).

Discussing student experiences in class – Why?

Individuals' self-efficacy refers to their belief that they can carry out behaviors that lead to specific performance goals (Bandura, 1977). It is confidence in one's ability to control motivation, behavior, and social environment (Carey & Forsyth, 2009). For educators to understand why students behave the way they do would help them mitigate student issues, such as fear of being undervalued and trivialized, which is one of the reasons for their quietness in class and possible disengagement from the discussion (Atwater, Kannan, & Stephens, 2008). Blasco (2009, pp.183-184) found that in one of the cultural courses, students were taught that "the most plausible solution to a problem depends on the specific situation in question" or that "there is a limit to what you can do and [that you should] respect that there are other perspectives as well" or "not to take everything for granted and to try to be critical." This requires students to reflect on their experiences and be lucid in that learning. This is where the tricky part comes in, at least for the educators, if not only for the students. Students must learn from concrete experiences, which, according to Kolb and Kolb (2005, p. 194), come from the sensory cortex. We accumulate information in our brains over our life based on inherited characteristics, specific experiences, and the environment in which we live (Kolb & Kolb, 2005). Thus, students must reflect upon their experiences and what they have experienced in their lives to develop a sense of self. The possibility for the students to just learn from what is told in class and/or listen to other people's experiences is fairly limited unless they can relate those (others') experiences with their *own* experiences. After all, no matter what you tell students, they can only try to view it through their own lens, which is made of *their* experiences. Isn't this the same for all of us?

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Business education emphasizes graduate attributes, case methods, blended learning, and multidisciplinary learning as some of the teaching methodologies applied in class to prepare students for the challenging job market (Avolio, Benzaquen, & Pretell, 2019). Song et al. (2021) found that learning assessments, analytical skills, interpersonal skills, and interdisciplinary learning significantly influenced student engagement, positively correlated with learning performance. In addition, the case method coaching approach to problem-based learning was perceived as a practical learning tool in the classroom that improved engagement with peers and educators and enhanced students' learning performance. However, more research is needed to determine whether students outside the classroom can retain and apply these classroom learnings in their lives, in addition to the education requirements (e.g., passing assessments and class discussions for participation grades). Though critical thinking, particularly the ability to evaluate evidence and arguments independently of one's prior beliefs and opinions, is viewed as an essential aspect of whether a student has learned to think critically (Sternberg, 2001), it is unclear whether the current teaching methodologies enable students to carry their in-classroom learning to outside-classroom and make use of what they have learned in class, independently, to develop and self-learn from their experiences critically and continuously.

According to Piaget and Vygotsky's theories of cognitive constructivism, people learn and understand by applying their prior knowledge and beliefs (Kolb & Kolb, 2005). To this end, education should emphasize the importance of allowing students to draw from their personal experiences as a learning tool, regardless of whether they perceive a direct correlation between their undergraduate business studies and life experiences. Suppose students' experiences are not integrated into the discussion. In that case, they will be unable to challenge their preconceived notions about how they perceive and value their experiences and view social groups other than their own and those they relate to (Dipadova-Stocks, 2005). Suppose educators fail to cultivate awareness of this learning process (of students reflecting on their own experiences). In that case, graduates may be unable to comprehend the consequences of their decisions on others (Christensen & Carlile, 2009). To help students reflect on the environment they live in (e.g., their family) and try to make sense of what they do, why, and how through the application of theoretical concepts they learn in their classes could help students

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construct the bridge that would enable them to carry the in-classroom learning to outside of classroom lives they live.

Student-Centric Experiential Learning (SCEL)

Dennehy, Sims and Collins (1998) argue that a great deal of complexity is involved in experiential learning exercises. For learners to acquire new knowledge, they need to understand how and why it relates to what they already know. Learners must be taught how to apply the information they learn to various contexts, not only in the classroom but also outside the classroom, for example, in their personal lives. After all, experience in and of itself is not always educative (Dewey, 1933). Students will more likely engage their minds and emotions if the experience is personally relevant.

The abstract conceptualization (knowledge about something) method can be utilized to acquire knowledge, which can broaden the learner's understanding by integrating concepts and theories into the learning process (Kolb & Kolb, 2005). We should remember Kolb and Kolb's (2005) observations about how our brain functions; learning involves taking in, processing, and expressing experiences. It is safe to say that nothing takes root in mind when there is no balance between knowing (listening to the information in class) and doing (applying learning). Some decisive action is needed to establish contact with the realities of the world so that impressions may be so related to facts that their value is tested and organized (Dewey, 1934, p. 45). The seed of knowledge can be sown in the class and the fruits of that seed can be borne outside of it. Thus, students must *own* and *value* their experiences to learn experientially and critically through reflection. That's what I call Student-Centric Experiential Learning (SCEL).

It is common for students to state, 'But I don't have any experience. I don't know how to apply these concepts.' Kolb and Kolb (2005) indicate that such students do not believe that their experience is of any value to the class or their ability to learn the course content. This could be due to their flawed belief that their personal (life) experiences cannot help them understand theoretical business concepts discussed by educators in class. Hence, they find theories and models *useless*. The cognitive constructivist theories of Piaget and Vygotsky suggest that people construct new knowledge and understanding from what they already know and believe (Kolb & Kolb, 2005).

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Experiential Learning Theory (ELT)

According to Kolb (1984), a central premise of ELT is that learning is the primary cause of human development, and how individuals learn determines the course of their personal growth. Through reflecting on experiences, students can understand the process of connecting new information with past experiences, knowledge, and/or feelings (Schmidt-Wilk, 2009). It is essential, however, to recognize that learning is not one universal process but rather a map of learning territories, a frame of reference within which a wide variety of learning methods can flourish (Kolb & Kolb, 2005, p. 200). With this framework, people can learn holistically from and with each other. However, we must remember that each student's skills and knowledge gained from the class exercise will differ. Similarly, how they gain (or make sense of) that information varies. It is, therefore, imperative that students become active experimenters (doers). Once they have experienced the usefulness and meaning of the new skills, they will feel capable of using them because they have experienced competency (Dennehy et al., 1998).

Experiences provide students with a deeper understanding of the role reflective thinking plays in transforming experiences (Kolb, 1984) - in this instance, a real-life problem (their own problems) chosen by the student - into educational experiences (Miller, 2004). Educators must, however, establish trust among their students that students understand educators' perspectives on how student family experiences directly relate to learning the course content and how these relate to what organizations do and why. As Ramsey and Fitzgibbons (2005, p. 354) argue:

All forms of teaching and learning – doing to, doing with, and being – can be effective [...] Being is about letting go, trusting the process, not knowing the outcomes, and being comfortable in this state of not knowing. Letting go requires a great deal of trust that there will be indeed an outcome: trust in the students, trust in the process, trust in the group dynamics, and trust in oneself. Only experience can build that trust. Once the trust is developed, however, the learning far exceeds anything we might have imagined.

This is first required at the educator's level, which then flows to students.

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Teaching and learning challenges: What is missing?

It is common for academics to assign groups to undergraduate students. Students are expected to collaborate, write assessments, work individually and in groups, present their assignments in class, and so on. There are many reasons why classes have groups - educators use them to teach course content, make students engage with each other and exchange ideas, and facilitate learning. Unfortunately, student commitment to teamwork and contributions to the collective task vary significantly (Jassawalla, Sashittal, & Sashittal, 2009). The issue lies primarily in students being taught to view management as a universal activity (Blasco, 2009). It appears animated to students. This makes learning problematic and perhaps causes students to lose interest in learning. This could be one of the reasons why most academics who assign students to groups have received complaints about social loafers - students who do not contribute to a group but receive the same grade as others (Jassawalla et al., 2009).

Pintrich and De Groot (1990) conclude that students who are motivated to learn the coursework (rather than to obtain high grades) and perceive their schoolwork as interesting and challenging are more likely to engage in learning the material. Students who engage cognitively are interested in, satisfied with, and value classroom activities (Cole, Feild, & Harris, 2004; Pintrich & De Groot, 1990). However, the central problem of education, based on experiences, is to select the experiences that will have a fruitful and creative effect on subsequent experiences (Dewey, 1986) and those that everyone can understand and relate to. Over three-and-a-half decades ago, Porter and McKibbin (1988) found that business school curricula disproportionately focused on analytics, emphasized a lack of focus on problem-*finding* compared to problem-solving and implementation, and did not integrate the various functional areas sufficiently. I find these criticisms remain relevant in today's teaching and learning environment.

Further, in practice, a focus on "relevance" tends to emphasize current events, often referred to as "best practices" (Trank & Rynes, 2003), which encourages students to learn how to speak about business without considering much about learning the business itself (Pfeffer & Fong, 2002). What a sham! As Mintzberg and Lampel (2001, p.244) assert:

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Unfortunately you cannot replicate true managing in the classroom. The case study is a case in point: Students with little or no management experience are presented with 20 pages on a company they do not know and told to pronounce on its strategy the next day. Although Mintzberg and Lampel's (2001) argument concerns Master in Business Administration (MBA) program students, this is not so distant from undergraduate studies. The literature has several catalogs of critically essential skills (e.g., effective written and oral communications, critical and creative thinking, leading, problem-solving, personal continuous learning skills, information literacy, and ethical problem-solving) (Ungaretti et al., 2015). However, we fail to adequately develop most of them in our students (Pfeffer & Fong, 2002; Ungaretti et al., 2015), possibly, because the learning remains superficial; *of* the topic of discussion and not so much *in* it.

In my classroom, I discuss with my students who make decisions at home; does your father make all the decisions? Do your parents make decisions after discussing them among themselves, or do they ask for your input, or do you and your parents collectively decide on the outcome after an open discussion around the dinner table? When asked such questions, students are eager to respond and narrate incidents that illustrate why a particular approach was adopted and whether they agreed with their parents. After all, it is their first-hand experience. They have lived it, felt it. They don't need to think and manufacture their answers to fit the course content. They have impressions of those experiences and opinions concerning how their parents are and what their actions mean to them. Through this process, I can bridge their family experiences and feelings to how organizations operate (e.g., top-down and bottom-up approaches; autonomy; tall or flat structure) and why employees are sometimes unhappy with their managers and occasionally satisfied (not-so-dissimilar to how they feel). Initially, suggesting that reflection can be studied by examining one's relationships may seem overly broad. However, such an approach helps connect theoretical concepts to practical applications (Sims & Lindholm, 1993). The educator can provide a valuable opportunity for students to extend their learning beyond the classroom and develop a heightened awareness of their experiences by encouraging them to reflect on their interactions with family members through the lens of classroom content. This approach does not attempt to draw definitive conclusions but instead promotes critical thinking and facilitates knowledge transfer from one context to another. Through this process,

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educators can assist students in understanding how their (students') experiences and understanding of those experiences (through reflection) can be applied to the organization, connecting their family experiences to the activities of organizations and creating a reflection space for students. Perhaps, an avenue for students to develop themselves in their family and *learn to unlearn* as a process to continuously develop, not just for passing assessments and doing well in the courses at university, but to develop their actions based on those ideas (Argyris, 2002, 2002b). Suppose educators can assist students in slowly and gradually developing their mindset. In that case, perhaps, students will tacitly carry their in-classroom learning to their outside-classroom lives, developing themselves as a whole and not just doing well in their education.

Dewey (1986, p. 246) discussed the philosophy of education and called it the "theory of experience." His view was that traditional education does not require much theoretical analysis because the practice was guided by tradition. At the same time, the new experiential approach to education lacks a sound theory of experience, which is needed to guide its *conduct* (Kolb & Kolb, 2005). If educators do not deliver practical knowledge into their classroom, it will not improve the efficacy of solutions they so empower students to come up with (Whitley, 1988). In this case, practical knowledge refers to experiences that students can relate to and educators can share with them, rather than what organizations have encountered over time, which students with little to no prior work experience are not particularly concerned about. Follett (1970, p. 130) argues:

We believe, don't we, that in the straightness and courage of our youth, in their fearlessness, in their search for meanings, often even in their unwise experiments, they are showing a spirit which the teacher should cooperate with instead of dealing with mere surface trends, instead of spending all his strength in combatting that which perhaps after all does not need to be combatted as much as he thinks. The leaders among our teachers today are those, I think, who are recognizing the deeper soul of twentieth-century [or twenty-first-century] youth, its quests and its questionings, who see, beneath what is trivial and often worst than trivial, an underlying greatness. [squared brackets added].

Follett argues that a great deal of higher education is focused on impressing information on students' minds rather than providing opportunities for them to express and *test* what they have learned in

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action (Kolb & Kolb, 2005). This action is a product of their (student) experience. After all, they have a voice and experiences (not necessarily managerial or organizational experiences, but from their life and family). This contrasts the demonstration-practice-critique process model, in which active expression and testing are continuously integrated into instruction (Kolb & Kolb, 2005). In the absence of integration of the student's experience into the discussion, students will be unable to question their presumptions, positive and negative, about how they view their experiences and the values they derive from them, as well as how they view different social groups other than their own and to those they relate themselves to (Dipadova-Stocks, 2005). Educators may lose an opportunity to help students transform their spiral of knowledge from explicit (classroom-based education) to tacit (applying classroom content to their lives) (Nonaka & Takeuchi, 1996). As educators, we will fail to cultivate awareness, cloistering graduates from the consequences of their decisions in the lives of others (Christensen & Carlile, 2009). Educators need to start from the beginning - the student's beginning - their family and friends, to determine how they see their actions affect people around them and *then* bridge what students learn (in classrooms) from reflecting on their experiences to that of organizations' expectations from their employees.

What I find lacking in the current education environment is too much about business and not much about the ways of learning business. Despite playing the game to get through their studies, students can identify when they are exposed to "superficial forms of learning" (Watson 1996, pp. 448). Students see this approach as too vague and all-encompassing to be "really useful in a study/project" and/or in daily life (Blasco, 2009). Consequently, students are prevented from learning and seeing the connection between what they are taught and how it can be applied to *their* lives.

CONCLUDING REMARK

Experiential learning is misunderstood as providing students with experiences from which they can learn. Filling the class environment with a mindless recording of experiences will not help students understand the discussion topics (Kolb & Kolb, 2005). The importance of discussing their personal experiences, especially from their family environment and how those experiences relate to the perceived gap (for each student individually) cannot be overstated. As

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discussed in this paper, reflective activities may seem futile or even frustrating to students who lack access to the functioning prefrontal cortex (Schmidt-Wilk, 2009). As one of the approaches, it may be beneficial to teach students about reflection and its role in learning (Osland, Kolb, Rubin, & Turner, 2001; Sims & Lindholm, 1993) by reflecting on their family and friends (linking theory with *their* practice) and not made-up examples and/or examples of other people. Through reflective practices, educators can facilitate students' recognition of the relevance of their personal experiences, and their understanding of those experiences, in the context of organizational settings. It may be necessary to establish links between student experiences and organizational practices and to create a reflective space for students to engage in critical self-reflection within and beyond the university education environment. This approach would equip students with the tools and skills necessary for continuous critical reflection, fostering lifelong learning and personal development.

As students' academic self-concepts and identities are influenced by the degree to which course materials and activities affect them, there is a need to focus on students' meaning-making and emotional experiences in management education. Moreover, these factors impact students' self-enhancement and self-protection, which are conditioned by the social nature of the classroom (Bartunek & Ren, 2022), which plays a significant role in shaping students' perceptions of themselves and their abilities. Therefore, it is essential to create a learning environment that encourages students to engage with course materials and activities by reflecting critically on their experiences, enabling them to discuss their life experiences constructively. This will allow students to understand the taught management concepts better. Using a family lens to teach business and management course contents would provide students with insight that may bridge the perceived gap between their academic learning and their (real to them) experiences. Perhaps, narrow the gap between knowledge (knowing) and action (doing) that is ever-widening and help students learn management concepts and make their education practical, enriching and reflective stemming from *their* experiences.

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**Why engage? Interactionist perspective within independent
professionals' context**

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Why engage? Interactionist perspective within independent professionals' context

ABSTRACT

This paper presents findings on why Independent Professionals (IPros) engage and disengage with their work using an interactionist perspective. Taking an interactionist perspective within the unique context of IPros challenges the existing assumptions of engagement as a stable psychological state and engagement explained through the reciprocal relationship between workers and employers. Our qualitative multiple-case study provided rich interpretations of context and meanings derived from 12 cases, with data collected through in-depth interviews and participants' qualitative diaries. The paper contributes to understanding professional identity processes. We suggest engaging and disengaging as social processes of presenting and maintaining professional identity through everyday interactions.

Keywords: Identity work, Engagement, Independent professionals, Interactionism

In this paper, we present our findings of why independent professionals (IPros) engage and disengage with their work by suggesting that doing engagement is a form of identity work. IPros refer in this study to highly skilled self-employed individuals (McKeown & Cochrane, 2017). Studies indicate that when IPros are contracted for work they choose and are available and capable of performing, they report higher engagement levels than employed professionals (Hessels et al., 2017; Warr, 2018). However, despite the growing numbers of IPros and their role in organisations, the current understanding of IPros is limited (Bryant & McKeown, 2016; van der Zwan et al., 2020). As a result, IPros' unique work context and the multiple and sometimes contradicting expectations are ignored or considered nonproblematic in the management literature (Cross & Swart, 2021; Petriglieri et al., 2019; Reed & Thomas, 2021). Crucially, the lack of understanding of IPros' self-conception of identity and how they maintain or evolve their identity in response to changing contexts and clients' expectations might limit organisations from tapping into this sought-after talent (McKeown & Cochrane, 2017).

To address the gap in the literature on IPros' engagement, we use interactionist lenses, exploring identity work in everyday IPros' interactions. Identity work is described as a range of activities that allow people to present an image of themselves (Snow & Anderson, 1987), constrained by a range of options already given by others (Alvesson & Willmott, 2002). Hence in studying identity work, we should consider the social context and everyday interactions (Watson, 2008). Our study hence refers to

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two theoretical concepts in interpreting the data, impression management (Goffman, 1959) and ontological security (Giddens, 1991). To support the current study's aim, we designed a qualitative multiple-case study (Stake, 2006), conducting in-depth interviews and participants' qualitative online diaries (Radcliffe, 2013, 2019). The paper contributes to understanding how doing engagement is interrelated with professional identity (re)construction, highlighting the relevance of situational context in understanding why individuals engage and illuminating the processual logic of engaging and disengaging as a form of identity work.

BACKGROUND

For much of the twentieth century, work has typically been full-time employment. However, technological development and demand for flexibility impact the nature of employment arrangements, jobs, and occupations (Bughin et al., 2018; Wegman et al., 2018). Studies suggest that certain types of alternative work arrangements, such as (Bryant & McKeown, 2016) independent professionals (Boeri et al., 2020; Spreitzer et al., 2017). Independent professionals (IPros) are highly skilled professionals (Australian Bureau of Statistics, 2019), self-employed (Bögenhold & Klinglmair, 2016) without employees (Boeri et al., 2020), and hired through direct contracting (Cappelli & Keller, 2013). In New Zealand, IPros work within a tight labour market with an ongoing shortage of skilled workers, heightened by the COVID-19 pandemic workforce mobility restriction (OECD, 2022), and wage growth rebound (Wilson & Fry, 2020). These economic conditions of skill shortages are advantageous for independent professionals (IPros). However, New Zealand employment laws lack clarity on the employment relationship in the context of contractors and contracting organisations. This systemic issue is used by some businesses to unknowingly or deliberately outsource costs and risks to their contractors (Tripartite working group on better protections for Contractors, 2021). Individuals working under these arrangements might experience income, training, and social insecurities, making them vulnerable in economic, work, and personal circumstances (International Labour Office, 2016).

Engagement was initially conceptualised as the holistic effort (physical, cognitive, and emotional) that people invest toward and away from their preferred work role (Kahn, 1990). However, more often engagement is described as a positive work-related psychological state characterised by

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vigour, dedication, and absorption (Bakker & Demerouti, 2008), explained through social exchange (Saks, 2006). The concept of engagement became increasingly important to organisations as research has shown that engaged workers can lead to improved organisational outcomes, such as increased profitability and productivity and is also associated with workers' well-being, measured by reduced absenteeism and turnover (Bailey, 2022; Bakker & Albrecht, 2018; Saks et al., 2021). Most engagement studies consider engagement as a stable noncontextual phenomenon (Fletcher et al., 2020) within traditional employment relations, ignoring emerging work arrangements such as independent professionals (IPros) and the fluid and changing organisational structures and work (McKeown & Pichault, 2021).

The lack of studies on non-traditional work arrangements and ignoring the context when studying engagement suggests no clear understanding of the conditions surrounding IPros engagement (Pichault & McKeown, 2019). For example, scholars argue that workers with better access to resources are more likely to become engaged, giving them additional power to gain further resources therefore, ignoring the work context and who controls it ignores how certain groups gain and maintain the engagement experience (Lemmon et al., 2018; Shuck et al., 2016). Since engagement is explained based on reciprocity (Saks, 2006), optimising the work environment fosters engagement (Bakker & Albrecht, 2018). However, a study of IPros suggests that IPros' relationships with work and their clients might challenge the current understanding of reciprocity and engagement (Bryant & McKeown, 2016).

To summarise, while there is some discussion on IPros as a group of interest for further study, the current understanding of these individuals and their work experiences is limited. Hence, in this paper, we aim to answer the following central question: why do IPros engage and disengage with their work?

THEORETICAL FRAMEWORK

Our study follows Kahn's (1990) conception of engagement as people employing and expressing themselves in everyday lives through performing within their preferred social identity and the critical relevance of context in understanding social processes such as engagement (Fletcher et al., 2020). Individuals preferred social identity can be seen as a result of interactions — “a dramatic effect arising diffusely from a scene that is presented” (Goffman, 1959, p. 252). However, Giddens (1991, p.

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34) argues that “the altered self has to be explored and constructed as part of a reflexive process of connecting personal and social change”. Hence, “the ability of people to transform their selves depends on the sets of negotiations and practices that are institutionalised within specific times and places” (Lawrence & Phillips, 2019, p. 62). In this paper, we have used both impression management (Goffman, 1959) and the concept of ontological security (Giddens, 1991) in analysing and interpreting our data.

Goffman's (1959) view of the self as an outcome of the interaction suggests that when the individual leaves a certain impression on others, it becomes a representation of their professional identity. Furthermore, impression management during interactions can either affirm or disrupt the association between participants' desired self-image (professional identity) and the public image projected to others. In interacting with others, IPros are projecting the desired public image that “incorporates and exemplifies the officially accredited values of the society” (Goffman, 1959, p. 35). Therefore, understanding the nuances of participants' practices during interactions allows for interpretations of their identity work. However, without considering the interactions' context, analysis can become a detached and simplistic view of people's everyday experiences (Fachin & Langley, 2017)). Jenkins (2000) proposes that Goffman's (1983) interactions order (what people do when interacting) is intertwined with the individual order (what goes on in people's heads) and the institutional order (the way things should be done) explained through Giddens' (1984) structuration theory. In specific, we referred to Giddens' (1991) concept of ontological security, defined as “the attitude of trust towards the continuity of the world and of self-implicated in the durée of day-to-day life” (p.35). Humans can explain their behaviours but might become overwhelmed by life choices' endless possibilities and consequences. Hence, in everyday life, people usually ignore life questions and instead rely on taken-for-granted assumptions, habits, and the familiarity of social interactions. Hence while identity can emerge from the interaction, the interactions themselves are shaped by their social context.

METHODOLOGY

The cases

This current study was designed as a qualitative multiple-case study. We purposefully selected twelve cases that provided the most variety for intensive study of understanding participants' lived

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experiences (Stake, 2006). Each case included all empirical data collected from the same person. We published invitations for potential participants through LinkedIn posts, followed by snowball sampling. Potential participants were expected to meet the criteria of working as an IPro at the time of the study and agreeing to participation's time commitment (around 10 hours over three months). The differences in the employment context, contracting type, and industries were valuable for the variety of work interactions in this study. Other characteristics of diversity were also present: age (35-65), gender (60% females, 40% males) and ethnicity (75% NZ/European, 25% other). Table 1 includes details of the cases.

Table 1: Key characteristics of participants

| Nickname | Gender | Age | Ethnicity | Industry | Type of contracting |
|----------|--------|-------|-------------|--|--|
| Craig | Male | 35-44 | NZ European | Business, Human Resource and Marketing Professional | One main Client, medium term, daily rate |
| Magen | Female | 55-64 | NZ European | Business, Human Resource and Marketing Professional | One main Client, long term renewed contract |
| Jason | Male | 55-64 | Asian | Business, Human Resource and Marketing Professional | One main Client, medium term, daily rate |
| Zara | Female | 45-54 | NZ European | Business, Human Resource and Marketing Professional | Concurrent clients (1 - 3), Statement of Work |
| Natalie | Female | 45-54 | NZ European | Design, Engineering, Science and Transport Professionals | Concurrent clients (1 - 3), Statement of Work |
| Michael | Male | 55-64 | Other | ICT Professionals | Concurrent clients (4 - 6), Statement of Work |
| Claire | Female | 55-64 | NZ European | Education Professionals | One main Client, long term renewed contract, daily rate |
| Kim | Female | 35-44 | NZ European | ICT Professionals | Sub-Contractor, Concurrent clients (4 - 6), Statement of Work |
| Hayden | Male | 35-44 | NZ European | ICT Professionals | One main Client, long term renewed contract, daily rate |
| Jane | Female | 45-55 | NZ European | Arts and Media professionals | Concurrent clients (1 - 3), Statement of Work |
| Kate | Female | 45-55 | NZ European | ICT professionals | One main Client, medium term, daily rate. Sub-Contractor, hourly rate |
| Sam | Male | 45-55 | African | ICT professionals | Sub-Contractor, one client, Statement of Work Concurrent clients (1 - 3) short term Statement of Work |

Data collection and analysis

In collecting the data, we adopted an interview–diary–interview approach, addressing quantity, variety and quality considerations in answering the study's questions. Interviews provided context and participants' interpretations, while the diaries provided almost real-time rich and diverse writing of work situations and everyday experiences. Qualitative diaries are particularly useful in a case study to help understand the complexity and interplay between context and experiences, offering immediacy and in-depth details and offsetting problems with retrospective accounts (Radcliffe, 2013). Over a four to six

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weeks, participants took part in two interviews each and provided eighty detailed diary entries, used in the analysis ranging from 3 to 20 entries per person.

To get a sense of the data, we initially coded inductively line by line the first six cases and followed with sentence/ paragraph coding for the remaining cases. First, we analysed the cases, including data from the first interview, diary entries, and the second interview. Each case was analysed to understand the context of the work in which engaging and disengaging happen and the reasoning for engaging and disengaging. We then approached each case to analyse what people do when engaging and disengaging and relate these to the case's motivations, outcomes, and context. We further used a comparative analysis technique (Alvesson & Kärreman, 2007; Thornberg, 2012), comparing activities across and within cases to identify themes surrounding context, identity work and engagement.

FINDINGS AND DISCUSSION

Contradicting context of autonomy and precarity

The first section of our findings helps to situate individuals' experiences by understanding participants' subjective experiences of being IPros. All participants considered their work arrangement as means of exercising choice and autonomy and having control of work, career, and income. Most participants highlighted schedule flexibility as the most common expression of autonomy by controlling their availability to work. For example, Kim explained: "I love the fact that if I can financially work for forty weeks of the year, then I can choose to have twelve weeks of the year off provided it works with my clients" (Kim, Int01)¹. Another expression of autonomy was to be detached from organisational power and "not being tied in" (Kate, Int01), "there to do a certain job" (Jason, Int01). However, while participants valued having flexibility and maintaining some distance from the organisations' internal politics, they also raised that clients' expectations and financial considerations constrained their autonomy. Therefore, while contracting allows participants to set the terms aligned with their work and personal situation, the nature of the work itself was not always within their control.

¹ Participants' citation format: Pseudonym name, data source: Int01= first interview, Int02=second interview, Diary=a diary entry

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The inherent conflict between autonomy and doing the work for the clients became particularly salient when participants experienced income insecurity. All participants, regardless of their type of professional work or financial position, talked about their work as having a certain level of precarity. By precarity, we refer to uncertain, unstable, and insecure work, as Kate (Int01) explained: “The one fear I have always is, I’ll never get another job again”. Workers in precarious work take the risks of work instead of the employers and receive limited social benefits and statutory protections (Kalleberg & Vallas, 2017). We noted that the tension between autonomy and precarity was heightened for participants by the COVID-19 pandemic. None of the participants suggested that these concerns necessarily eventuated into financial hardship. However, the pandemic caused major worries because participants felt they might be left with no choice but to find alternative ways of securing income. To handle the tension, most participants prioritised ongoing focus on securing the next contract. In creating the opportunities for the next contract, participants relied on their professional networks, which they described as their professional connections to other individuals. Michael (Int01) explained, “Being on your own is about you, and it’s about the perception in the market of who you are”. An independent professional public image portrayed through the network was seen as critical for participants’ success.

The nature of IPros’ work meant that participants’ autonomy was often conditioned by their clients’ expectations and an ability to negotiate their valuable contributions. Pichault et al.’s (2020) reported similar findings in a study on IPros’ identity conducted in Australia. We suggest that the conflicting nature of IPros’ work may be more salient than other contextual considerations, such as the different countries’ labour markets and employment laws. We also suggest that the contradicting context of autonomy and precariousness that drove IPros’ identity tensions becomes prominent for other professionals in traditional employment, such as the expectations of work flexibility post COVID-19 (Gaude et al., 2021) and the constant concern of earning insecurity in a world of restructuring and redundancies (Newman & Freilekhman, 2020).

IPros strategically constructed professional identity

We next present the findings related to participants’ perspectives of their professional identity, emphasising using their professional identity as a strategic approach to navigating their work context.

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Findings suggest that credible and trustworthy are the two themes that serve IPros in managing their conflicting context. Credibility emerged as having specialised knowledge and relevant experience that participants could offer to their clients that other workers could not provide. Craig (Diary) paraphrased, “I can contribute things that other people wouldn’t be able to, or simply couldn’t do”. Participants discussed credibility as being the best in a particular knowledge area, meaning they have spent the time and effort to become an expert. Working as an IPro allowed participants to present their expertise and credentials because IPros’ work is characterised by working with multiple clients across different assignments. For example, Zara (Int01) explained why she turned to work as an IPro: “I think it was proving to myself and getting that recognition of what I bring to the table”. While credentials allowed for the initial introduction as an expert, receiving ongoing recognition for their credibility was some of the participants’ engaging in everyday interactions.

As part of presenting themselves as credible, participants discussed objectivity. Objectivity was offered to the clients as an advantage of contracting an impartial individual, where the quality of the work was not affected by the organisation’s internal processes and policies. Being objective leads to credibility: “Because I’m not seen as one of the staff so they could tell me things” (Claire, Int01). This description suggests that objectivity allows clients to assign IPros tasks that they were not expecting people within their organisation to do. Most participants considered the advantage of being detached from organisational life as Chris (Diary) noted: “We are kept away from the sinuous sticky complexities of everyday business life, yuck. Especially the ever-shifting sands of politics”. However, being detached meant limited influence on work. As Zara (Int02) said: “I want to take pride in the work I do, but I have to stay detached from the decisions they make, all the overlapping projects or people doing the same stuff as me”. Hence, Zara's reflection raises the ongoing tension between autonomy and client expectations.

All participants identified trustworthiness as another critical part of the identity they wanted to present to their clients and colleagues. Participants described trustworthiness as always being trusted to perform to clients' satisfaction and narrated as being reliable, helpful, invested, and hard working. Most participants suggested they can be relied on to do the job on time, with quality, and to meet expectations.

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In addition, they could be trusted to deliver value to their clients or clients' organisations. Michael is a management consultant to medium and large organisations. For him, client trust is essential, as he explained:

No one ever hired Michael before because of the badge and the comfort it gave them. People hire me because they believe ... they believe in me. That sounds a bit Winky. They believe in me, and they believe in the value that I've made to them. (Michael, Int01)

Jane (Int02) explicitly suggested that trustworthiness was needed for the network to operate. People only refer to new contract opportunities if they "trust [her] enough to say if you pay this person to do this, they'll deliver a product you'll [the potential client] be happy with, and [the person recommending] can be happy with".

Helpfulness was another subtheme identified under trustworthiness. In constructing trustworthiness, participants place themselves closer to the client organisation to provide better value and to the extent of being (almost) unreplaceable. It was not just that clients could rely on participants' work, but they could also expect help to be on offer all the time. In other words, being helpful also meant responding to requests even if they seemed unreasonable: "he's paying for the hours I'm working. If he wants me to rework, then I would" (Claire, Int01). Kate even suggested that being helpful is the standard expectation of IPros in New Zealand as it differentiates them from other workers. As she reflected, "I think it becomes expected of me to say yes to a request because people want the job done in a relatively short amount of time" (Kate, Int01).

Participants suggested that trustworthiness can be assessed by being rewarded with the subsequent contracted work. However, while trustworthiness is fundamental to an IPro's identity and often leads to further opportunities, it can also have problematic aspects that impact performance and well-being. For example, it might blur role boundaries and expectations and overstep other people's jobs within the client organisation. It can also create an additional workload that impacts original commitments, sets unrealistic expectations, or waste time. Ultimately negatively impacting credibility as it is constructed through task performance.

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Crafting an ideal professional identity produced a synthesis between credibility and trustworthiness. According to Alvesson (2010), this synthesis is achieved by relating the authentic self and the ability to adapt to professional expectations. In other words, adopting a professional identity that conveys credibility and trustworthiness requires negotiation of personal choices and considerations of external expectations from clients, colleagues, and other stakeholders (Stets & Burke, 2000). However, despite efforts to present a consistent professional identity, individuals may find it challenging to control how others perceive their performance (Jenkins, 2000). Overall, greater awareness and capability in effectively managing and presenting one's professional identity appears crucial for success in today's precarious work environment.

IPros engaging and disengaging

In navigating a conflicting context of autonomy and precarity, IPros present themselves as credible and trustworthy, maintaining a public image that serves them in securing the next contract. In presenting a consistent professional identity, our findings suggest a complex and nuanced identity work practices of engaging and disengaging in everyday interactions. Participants differentiated between engaging with tasks and engaging with others. Engaging with tasks was described as practices directed at task performance while engaging with others was described as practices to maintain trusted relationships. Maintaining task performance and relationship trust presented participants' professional identity of being credible and trustworthy. Our findings also suggest that when engaging practices were ineffective at presenting the preferred identity, participants took different strategies for protecting their identity, ultimately disengaging from the tasks and their clients.

Participants described engaging with tasks as doing the work with priority, focus, and a high energy level. When discussing engaging with tasks, participants suggested three main interpretations: engaging as directing energy, engaging as seeking and giving meanings, and engaging as self-expression. First, doing tasks is a large part of participants' everyday work. When engaging, participants were "challenged" (Jason, Int01) and "stretched" (Magen, Int02), focusing and in the "flow" (Michael, Int01) and "going above and beyond, doing extra work" (Kim, Int01). Participants considered engaging with tasks as an intense, focused directing of energy that required energy management and necessitated

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not overdoing it. Second, engaging with tasks was also discussed as seeking and giving meaning and purpose. Participants described this aspect of engaging as internalised, reflective activity, making it worthwhile to perform a task or interact with others: “There is a level of having a vision of what I am trying to achieve as to whether I will really engage with it or not” (Zara, Int02). Finally, engaging with tasks was also captured as a form of self-expression. Jane (Int02) described her work as a writer: “It’s like breathing, like if you are not writing on something, you are not actually breathing ... I need to be doing that”.

Engaging with others was described by participants as the actions they took to stage and maintain relationships of trust with paying clients, decision-makers, and colleagues. Relationship and engagement were tightly linked in participants’ descriptions as they saw working with others as the main feature of their work: “I’ve always been about the people. Everything people” (Jason, Int01). Engaging with others requires copresence with others in nonformal, semiformal and formal gatherings, face-to-face, hybrid, or via technology. Participants staged interactions to achieve mutual work-related outcomes of task performance and relationship trust. When interacting with others, participants were provided with a confirmation that their work was valuable.

For participants, disengaging meant undoing engaging by deliberately removing oneself from a situation, either tasks or interacting with others, which meant task performance or relationship trust could not be achieved. Findings suggest that participants disengaged from tasks or others when there was a threat to their professional identity, and they had to temporarily remove themselves (emotionally, cognitively, or physically) from the situation. While participants suggested, engaging and disengaging were two opposites of doing and undoing, further analysis of activities within interactions suggested that before disengaging, participants attempted to protect their identity by controlling and managing interruptions to bring interactions back on track. When these protecting actions were ineffective, such as criticising others in public or arguing, disengaging as removing self from the situation was often unavoidable. To summarise, participants described engaging as actions (doing, thinking, talking) taken to interact with tasks and others with the intent to achieve specific outcomes, while protecting and disengaging were the actions taken to protect their professional identity.

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We suggest that individuals continuously reflect and adjust their behaviours in navigating this complex world. However, their everyday actions are embedded within familiar social routines to maintain ontological security and ensure they are not overwhelmed (Giddens, 1991). We suggest that the social routines of engaging, protecting, and disengaging are used by people who enter work interactions to consistently impress their audience with a positive image of themselves, maintaining congruence between self and other perceptions of their professional identity (Goffman, 1959).

CONCLUSION

The findings described in the paper presented participants' construction of a positive professional identity of being credible and trustworthy to impress their clients and secure future work. Shaping and maintaining a professional identity required participants to bring their identity to the front so it could be presented and expressed in a controlled and consistent manner, using engaging, protecting and disengaging practices. This paper contributes to knowledge in three main ways. First, the current paper appears to be the first to focus on doing engagement from an interactionist perspective, understanding (dis)engaging as a social process of identity work. In addition, the study adds new insights into extending existing knowledge of independent professionals' lived experiences and understanding of their professional identity. Finally, the findings provided the foundations to discuss implications for practice and HRM policies.

Independent professionals are primarily invisible to human resource (HR) departments as these are not considered employees. However, independent professionals play critical roles, acquire and maintain valuable institutional knowledge, are relied on for critical business operations or project successes, and in some cases, influence executive decisions. We argue that HR departments can no longer ignore independent professionals. Hence, policies and practices should be considered for the benefit of relationship trust and in support of IPros' valuable contributions. This study also emphasises the organisation's critical role in interactions and effective achievement of task performance and relationship trust for independent professionals with relatively fixed and short tenure and specific focus and outcomes. Finally, our study also highlights implications for independent professionals. As IPros are solo operators running a business (even though they are the only people working in this business),

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the implications of the public image go beyond interactions to maintain sustainable future earnings and well-being.

Engagement, in its multiple current interpretations, has its roots in understanding people's everyday life experiences that lead to task performance and presence and to reducing stress causing burnout. We approached this study wondering, in a world of professional work that is more precious and distributed, do we know why individuals engage? What surfaced was a complex, multilayered experience of being an independent professional negotiating self and public image through an array of engaging and disengaging practices and routines.

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Critical discourse analysis of corporate governance anomalies, financial irregularities, and fraud characteristics: The study of a private sector commercial bank in an Emerging Economy

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Abstract

The study aims to examine the interaction of financial irregularities and corporate governance anomalies in a commercial bank in Bangladesh. This is a case study of Farmers Bank, a private sector commercial bank that emerged in Bangladesh in 2013 but failed to sustain as a going concern in its own name due to revelations of financial irregularities and corporate governance anomalies during 2013-2019. The study makes a critical discourse analysis (CDA) of financial irregularities in Farmers Bank and its corporate governance anomalies published chronologically in the media, in particular in The Daily Star, a leading English newspaper in Bangladesh. Data are also collected from published annual reports of Farmers Bank.

We find several characteristics of fraud, analysing and interpreting the financial irregularities and corporate governance anomalies of Farmers Bank in the light of three social-psychological theories which are white-collar crime theory, fraud triangle and control fraud theory. As found in the study, the loan scam, accounting fraud and other financial irregularities were carried out in Farmers Bank with revelations of self-interest, weak internal governance, and lax external oversight by the regulators. The senior persons in the governance demonstrated several rationalisations to neutralise the allegations of financial irregularities and corporate governance anomalies.

The study provides important insights into the role of corporate governance and financial irregularities in the banking sector and has implications for policymakers, regulators, and practitioners. It highlights the importance of transparency, accountability, and ethics in ensuring the sustainability of banks and the financial sector as a whole.

Keywords: Corporate governance, Developing country, Control fraud theory, Critical discourse, Fraud triangle, Loan scam, Rationalisations, White-collar crime

1. Introduction

In the last three decades, the concepts of “corporate governance” and “sustainability” have attracted enormous attention from policymakers, regulators, corporate enterprises, researchers, and learners in educational institutes. Both concepts imply accountability, ethics, social responsibility, and transparent reporting. A lack of these attributes at an institutional level may result in corporate governance anomalies, financial irregularities, and fraud (Islam, 2014). This negative perception can have adverse effects on stakeholders.

This study focuses on the banking sector in Bangladesh, which has faced numerous challenges in recent years. Despite Bangladesh's efforts to achieve sustainable economic growth, the country has faced political instability, governance issues, and various scandals in the capital and money markets, resulting in failures in corporate governance (Ahmed et al., 2022, p. 2). Several banks in Bangladesh have made headlines due to corporate governance anomalies and financial irregularities. The diagram below unfolds why the banking sector in Bangladesh repeatedly draws serious public criticism.

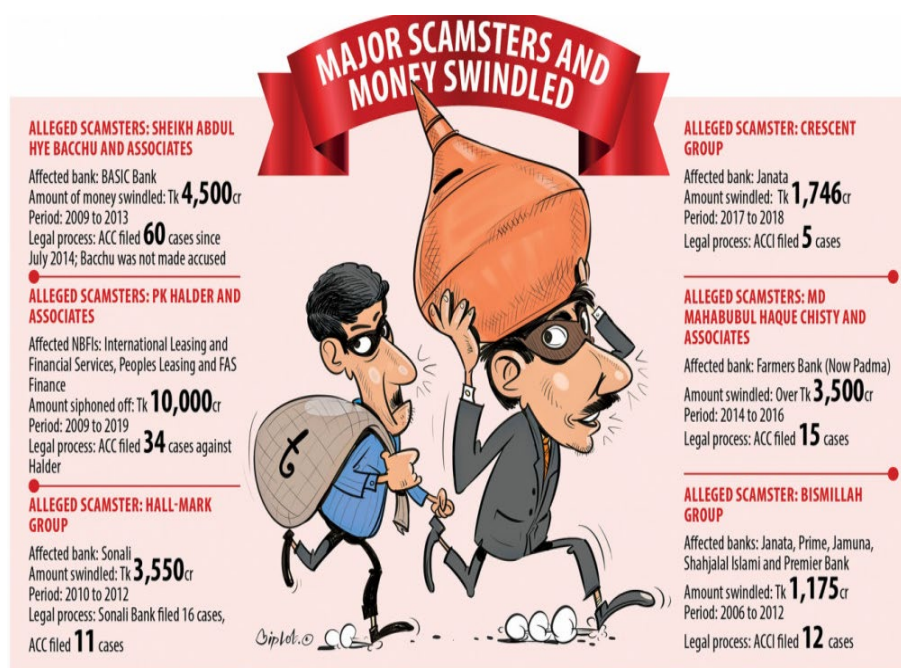


Figure 1: Source: The Daily Star, Wednesday, 2022, 27 July.

There are only a few studies on loan scams, money laundering and misappropriation of fund by individuals in Bangladesh (Adhikari, 2006; Nurunnabi, 2018). In a recent study, Ahmed et al. (2022) investigated the loan scam and corporate governance failure in four state-owned banks in Bangladesh. These are Sonali Bank, Janata Bank, Rupali Bank and BASIC Bank. However, corporate governance anomalies and fraud may occur in both state-owned and private sectors (Black, 2005).

Likewise, some private sector commercial banks in Bangladesh raised concerns of the media and regulators due to loan scam and corporate governance anomalies. The Farmers Bank Limited (hereafter Farmers Bank) and National Bank Limited are two of those banks. Ahmed et al. (2022) have not examined these banks. Further, they used only control fraud theory of Black (2005). There are other theories, such as the fraud triangle and white-collar crime theory that provide insights about corporate governance anomalies, financial corruption and fraudulent reporting. The present study conducts a case study of Farmers Bank by applying three theories including white-collar crime theory (Sutherland, 1949), fraud triangle (Cressey, 1953) and control fraud theory (Black, 2005). The reason for using a case study approach is that it is a holistic approach that can unfold complex-interrelated phenomena about a firm (Islam, 2014). Farmers Bank emerged in 1913 as a private sector commercial bank but lost its reputation owing to corporate governance anomalies and financial irregularities which shortly expedited the failure of this bank to operate as a going concern in its own name after 2018. Farmers Bank was renamed as Padma Bank Limited in 2019.

This study also significantly differs from prior studies on banks and financial organisations in Bangladesh due to the reason that this study is unique in using Fairclough's "critical discourse analysis" (hereafter CDA) as a methodological approach. CDA has been used to analyse various written and spoken texts (text and talk) published in the media relating to corporate governance anomalies and financial irregularities in Farmers Bank.

The study contributes to the literature by investigating the interactive factors of the failure of Farmers Bank, a new bank on which there is a dearth of academic research. The regulatory oversight bodies, bank management and investors would be able to know from this study what ought to be done for protecting the interests of the stakeholders of a bank.

The paper comprises five sections. Section two explains the theoretical underpinnings. Section three discusses the methodological approaches. Section four analyses the research findings. The findings of the study are further discussed in section five to draw conclusions and suggest policy implications.

2. Theoretical Underpinnings

This section first presents discussions about the theories relating to corporate governance anomalies and financial irregularities that promote financial fraud. "Critical Discourse Analysis (CDA)" that underpins the methodological approach of this study is explained at the second phase.

2.1 Theories relating to corporate governance anomalies and financial irregularities

"Corporate governance" as a term has got heightened importance in the twenty-first century after many companies collapsed before and during the global financial crisis. Conceptually corporate governance is an approach to directing and controlling a firm with accountability, ethics, integrity

and transparency. In the absence of effective corporate governance, a firm may expose to financial irregularities resulting in fraud including embezzlement of fund and non-transparent reporting. Traditional agency theory (Jensen and Meckling, 1976) and positive accounting theory (Watts and Zimmerman, 1978, 1986, 1990) in the accounting-finance literature provide insights about some corporate governance attributes, such as the role of financial incentives and dominant position of senior managers on making creative accounting choices producing misleading information for stakeholders. A number of sociologists-criminologists also developed theories to provide a social-psychological interpretation of the link between corporate governance anomalies and financial irregularities.

Sutherland (1949) explained the white-collar crime based on his research between 1939 and 1949 about financial corruption (in particular, financial manipulation) committed by the white-collar class. White-collar class refers to the upper-class people in the society who have connection with the law-enforcing agencies and thus have ability to exercise power in the self-interest. The top-level managers of firms are considered to be well-positioned in the white-collar class in the course of occupation. They have the decision-making power in the company. They may have incentives for financial manipulation, such as embezzlement of corporate fund, excessive salaries and bonuses, stock market manipulation and fraudulent financial reports. In congruence with the agency theory (Jensen and Meckling, 1976), white-collar crime assumes that corporate executives may violate trust not by acting ethically to protect the interests of stakeholders but acting in the self-interest while there is inadequate oversight over them by the independent directors and external monitors including securities regulators and the government.

Cressey (1953) advanced the knowledge offered by the white-collar crime theory by providing a more articulated explanation of the self-interest driven behaviour of the people in the profession. He introduced the concept of “criminal violation of financial trust” to explain financial manipulation based on a presumption and test of hypothesis that a person who has accepted a position of trust in good faith has committed a crime if that person must have violated that trust. Cressey drew a framework of crime that stems from violation of financial trust (such as embezzlement of other people’s money) having due consideration of three interactive conditions: there is a non-shareable financial problem (pressure or incentive) that motivates to violate trust, there are opportunities for violation of trust and there are arguments rationalising the crime committed for solving non-shareable problem. In the post-Cressey fraud or literature, Cressey’s three-angular framework has been accepted as the fraud triangle (for example, see Choo and Tan, 2007; Wells, 2011; Albrecht et al., 2004; Albrecht, 2014; Morales et al., 2014; Islam, 2014, Islam, 2022).

The fraud triangle has been adapted by the accounting profession setting the auditing standards globally. For details, see SAS 99 (AICPA, 2002); ISA 240 (IFAC, 2004) and ASA 240 (AUASB, 2006). All these auditing standards assume that corporate financial fraud (asset misappropriation and

fraudulent financial reporting) may occur where there are incentives and pressures (motivation) for financial fraud, opportunities to carry out financial fraud and simultaneously, the fraud perpetrators can rationalise fraud through justifying arguments or behaviour. At the firm or corporate level, the interactions of these three factors are assumed in the presence of several corporate governance anomalies and financial irregularities a number of which are also unfolded in the white-collar crime theory (Sutherland, 1949) and fraud triangle (Cressey, 1953).

- (1) Corporate executives may commit fraud (misappropriation of assets or fraudulent reporting) if they have financial pressures (such as poor financial conditions or bad reputation of the firm) or self-incentives (expectations for excessive remuneration, such salary or stock options).
- (2) Corporate executives have dominant positions (internal and political) and power to make and execute decisions in the firm and violate regulations (corporate laws and corporate governance rules) in the presence of negligent or ineffective oversights (monitoring) by directors, audit committee and external regulators (law-enforcing government bodies, financial regulators and securities regulators).
- (3) Corporate executives have the ability to demonstrate deviant behaviour and arguments justifying their actions that lead to corporate governance irregularities and financial irregularities.

Another theory called “Control fraud theory” is comparatively a recent theory introduced by Black (2005). This theory assumes several attributes of corporate governance anomalies and financial irregularities in financial and non-financial organisations in both public and private sectors. As argued by Black (2005), control fraud is presumed to be committed by persons of trusted responsibility who control firms or the nation in the self-interest using the entity (a company, a corporation or a state) to defraud a range of stakeholders including customers, creditors, shareholders, donors or the general public. In the organisational context, control fraud has strong similarities with Sutherland’s (1949) white-collar crime. Black explains with reference to Wheeler and Rothman (1982) that a corporation is a “weapon” and “shield” in white-collar crime. The incentives of top-level executives (such as CEOs), their influential position in the society, political connections and ability to violate regulations are omnipresent in white-collar crime, control fraud and also in the fraud triangle. Similar to these two other theories, control fraud assumes “information asymmetry” which implies stakeholders do not know what the insiders (managers) know about the entity. That is, accounting is designed to produce fictitious, non-transparent information that mislead stakeholders and increases the opportunities for the insiders (dominantly managers) to increase their incentives (such as bonus, stock options). The government and public know the key players of control fraud but are unable to prevent them from occurring fraud. More specifically, although control frauds are destructive, they succeed for their ability to convince the

regulators, investors, the press, academics and firm's employees by appearing to be legitimate (Black, 2005). That is why, "like "vectors" that spread viruses, control frauds can infect outside professionals, politicians and regulators, weakening the immune system controls against them and magnifying the size of the ultimate loss" (Black, 2005, p.5). Black also assumes the negligence of the board and audit firm in assessing, detecting and preventing fraud. It is argued that "the blessing by the top tier audit firm of the fictional profits provides "cover" to the CEO against fraud prosecutions that would never exist were he simply to embezzle funds. The false profits also aid the CEO's ability to enlist political aid and provide immense psychic value" (Black, 2005, p. 735).

The applicability of control fraud theory in analysing the banking sector has also been examined in Black (2005). In two decades (1980s and 1990s) prior to the introduction of the control fraud theory, the world witnessed widespread corporate upheavals in the wake of loan scandals. Academics and regulators showed immense interest to explain loan scandals. Black did not miss to consider the causes and effects of loan scandals in setting the scope of the control fraud theory. He referred to William Crawford, the former savings and loan commissioner of California, who explained, "the best way to rob a bank is to own one" (U.S. Congress 1988, p.34: cited in Black, 2005, p. 735).

Overall, the theories discussed above have some common features in explaining the interaction of dysfunctional governance, financial irregularities and fraud in firms.

2.2 Critical discourse analysis (CDA)

Fairclough (1985, 1989, 1992, 1995) played pioneer role in introducing the theoretical constructs of critical discourse analysis. In a broader term, discourse is "a practice not just of representing the world, but of signifying the world and constructing the world in meaning" (Fairclough, 1992, p. 64). Therefore, discourse refers to the content that is structured with thoughtful communication. Fairclough argues, "I use 'discourse representation' rather than the more familiar 'speech reporting' because writing, as well as speech, may be represented, and rather than a transparent 'report of what was said or written, there is always a decision to interpret and represent it in one way rather than another" (Fairclough, 1995, p. 54).

There are various discourses in social science, such as academic discourse, government discourse and media discourse (Zhang and Andrew, 2016). Representation of media discourse may comprise direct speech or indirect text (Fairclough, 1995). It contributes to critical linguistics (Fowler et al., 1979; Fairclough, 1985, 1989, 1995), because discourse representations in newspapers have tendencies to "accord with ideologies which are implicit in practices of new production" (Fairclough, 1985, p. 54). As concluded by Fairclough, "the representation of discourse in news media can be seen as an ideological process of considerable social importance, and that the finer detail of discourse representation, which on the face of it is merely a matter of technical properties of the

grammar and semantics of texts, maybe tuned to social determinants and social effects (Fairclough, 1985, p. 65).

As social identities and social relations are consolidated and contested through discourse (Zhang & Andrew, 2016), Fairclough further explained discourse by adding a critical intent and using the concept called “Critical discourse analysis” (CDA). CDA is a three-dimensional analytical (conceptual as well as methodological) framework of discourse representation, analysis and interpretation. The three dimensions are (a) text, (b) discursive (discoursal) practice and (c) social practice. According to Fairclough (1995, pp. 1 -26):

- The text is identified as written and spoken representation of language;
- The analysis of discourse (discursive or discoursal) practice involves attention to processes, that is, how the text is produced, distributed and consumed at a societal level; and
- Social approach seeks to study language concerning power and ideology.

In conclusion, CDA is practical but informed, reasoned and collaborative action (General editor’s preface to Fairclough, 1995, p. x). The features of discourse are inherent in CDA. Discourse represents ideology (Van Dijk, 2006) while ideologies are defined “within a multidisciplinary framework that combines a social, cognitive and discursive component” (Van Dijk, 2006, p. 115). Ideological presuppositions that are linked to the social and cultural problems are hidden under the surface constructions of language choices in the text (Machin & Mayr, 2012). Because of this conjuncture, “both text itself and the discursive practice need to be understood within their economic, political and institutional contexts and with an awareness of their ideological implications” (Zhang & Andrew, 2016, p. 5). According to Van Dijk (1993), critical discourse analysis could instead have been called “socio-political discourse analysis”, because discourse is analysed to understand the connection of discourse to a wide range of socio-political issues such as power, dominance and social inequality.

The study of discourse in the meantime has got wider acceptability in a range of fields including politics, geography, economics, sociology and architecture (Zhang & Andrew, 2016). The topics on discourse are becoming familiar in accounting research as well. In “After virtue? Accounting as a moral and discursive practice”, Francis (1990) explained that accounting discourse is not simply reporting of facts, because of the accountant authors the discourse. Studies on the birth of accounting (Preston, 1992), accounting practice and discourse of ethics (Schweiker, 1993), Enron discourse (Craig & Amernic, 2004), globalisation discourses and performance measurement (Cooper & Ezzamel, 2013), the evolution of the IASB/FASB conceptual framework (Murphy et al., 2013), adaptation and application of fair value accounting in a country of dualistic ideology (Zhang & Andrew, 2016) and discourse of the professions (Annisette, 2017) are some of the seminal works regarding discourse analysis in accounting literature. Discourses on corporate social ir/responsibility have attracted attention in business journals (see Herzig & Moon, 2013).

This study uses discourses regarding dysfunctional governance, loan scam and other financial irregularities in a private sector commercial bank in Bangladesh. Discourses published in media are analysed to perceive and explain how loan scams is not an isolated individualistic failure of a loanee, somewhat broader corporate, socio-political and ideological factors impact upon the occurrence of loan scams. There are examples of using media discourse in unfolding corporate upheavals. Miller (2006) extended public discourse in the media regarding accounting fraud. He argues that the press (media) fulfils the role as a watchdog or monitor “by rebroadcasting information from other immediacies (analysts, auditors, and lawsuits) and by undertaking original investigation and analysis” (Miller, 2006, p. 1001). A critical question here is why issues uncovered in the media need to be analysed further. The difference is in the depth of research and interpretation of facts. Several researchers support an argument that “press caters to the lowest common denominator, does not provide in-depth research or analyses, and focuses on sensationalising issues to sell papers” (Jensen, 1979, Core et al., 2005, and DeAngelo et al., 1994, 1996: Cited in Miller, 2006, p. 1002).

3. Methodological Approaches

This is a case study. The study proceeds with a specific objective to explain the unique circumstances that led to the failure of a single case (bank) “The Farmers Bank Limited” (commonly known as Farmers Bank). Farmers Bank was one of the third-generation banks established in Bangladesh in the second decade of this century. It commenced business as a private-controlled commercial bank in 2013 but experienced several traumas in subsequent 5 years until 2019. Various loan scams and corporate governance irregularities of this bank grabbed headlines in the media. Eventually, the bank was renamed in 2019 as “Padma Bank” - a new bank that emerged with responsibilities to protect the interests of depositors and other stakeholders of Farmers Bank. Relevantly, applying the case study approach, this study intends to provide an in-depth analysis of the loan scam, other financial irregularities and corporate governance anomalies of Farmers Bank. It is argued that a case study promotes an understanding of complex and inter-related phenomena, uncertainties and value conflicts (Smith et al., 1988; Cooper & Morgan, 2008; Yin, 2009).

The study predominantly uses secondary data. These include annual reports of selected bank and media articles. Although the study does not rely on interview, this does not undermine the quality of research approach. The reason is that the direct and indirect opinions expressed in the media by bank executives, board members and bank regulators (responsible personnel from Bangladesh Bank and Government officials) have been used to analyse the research findings.

The method of analysis of data is mainly qualitative-interpretive. As discourses (written and spoken texts) captured and analysed in the media regarding the corporate governance mismatch and financial irregularities are critical to the analysis of findings, the study uses Fiarclough’s “critical discourse analysis” (CDA) as a methodological approach.


An independent Bangladeshi English newspaper “The Daily Star” published between 2015 and 2019, grabbing headlines for Farmers Bank has been used to structure discourses. The discourses are categorised into three types:

- (i) Media discourse (MD): opinion of the journalists
- (ii) Executive discourse (ED): direct and indirect opinion of the executives (board chair and CEO)
- (iii) Government discourse (GD): direct and indirect opinion of the responsible personnel from Bangladesh Bank and Ministers (regulators).

All these discourses are linked to the “discursive themes” which are identified in this study as corporate governance anomalies (dysfunctional corporate governance attributes) and financial irregularities leading to fraud.

Epistemologically, the discursive themes (overall fraud characteristics) are defined based on the corporate governance anomalies (irregularities or mismatch) and symptoms of financial irregularities in the light of white-collar crime, fraud triangle and control fraud theory. Both dysfunctional corporate misgovernance attributes and financial irregularities captured and explained in white-collar crime, fraud triangle and control fraud theory represent the symptoms of fraud. According to these theories, ineffective board and inactive audit committee and regulatory weaknesses lead to their ability to avail available opportunities for financial irregularities in their self-interests and to support those financial irregularities demonstrating rationalising behaviour and attitudes. In the occasion of a bank, insiders or influential owners may use their positions to loot the bank. Given the circumstances, depositors’ stake may remain unprotected. They may endure confidence crisis. A bank in these circumstances may fail to run as a going concern. The three types of discourses, such as MD, ED and GD have been categorised in Table 1 in appendix on the basis of the following discursive themes relating to Farmers Bank (see Figure 2).

Figure 2: Discursive themes about fraud characteristics

| Corporate governance anomalies | | Financial irregularities |
|---|---|--|
| <ul style="list-style-type: none"> • Inefficient management. • Ineffective board. • Inactive audit committee. • Internal control anomaly. • Power/influence of executives. • Power/influence of board chair. • Political connection of board chair. • Frequent changes in governance process. • Concerns/knowledge of regulatory bodies. • Regulatory failure/weak oversight. • Non-compliance/violation of regulation. • Rationalisation (promise, arguments and deviant attitudes). |  | <ul style="list-style-type: none"> • Loan scam/corruption/self-interest in looting the entity. • Loan default culture. • Liquidity crisis/insolvency issues. • Failure to pay interbank loans. • Lack of profitability. • Exploration of alternative sources of fund at high cost. • Accounting fraud/information asymmetry. • Failure to protect depositors/confidence crisis. • Regulatory change favouring bank. • Bail-out (political interest). • Collapse/renaming of bank. |

4. Research Findings

4.1 Financial irregularities in Farmers Bank

While Farmers Bank was established in 2013, a major financial irregularity in this bank was revealed with several loan scams due to bad lending practices since 2015. Bangladesh Bank's (the Central Bank of Bangladesh) special inspections into three branches of Farmers Bank located at Gulshan, Motijheel and Shyampur found irregularities in loans amounting to taka 400 crore during September-November 2015 (Rahman, The Daily Star, 2016). At the influence of bank's executive committee chair Mahabubul Haque Chisty, a loan of taka 20 crore was granted to an entity whose assets and equity were worth much lower than this loan (Rahman, The Daily Star, 2016). Loans were sometimes disbursed to business entities that were little-known or non-existent (Uddin, The Daily Star, 2017). Bank also provided loan to its own directors (Uddin, The Daily Star, 2017). As such, bank's credit-deposit ratio appeared 88.70 percent in June 2017 and this ratio was above the limit 85 percent set by Bangladesh Bank (Uddin, The Daily Star, 2017).

Loan default was an inevitable outcome of lending process of Farmers Bank as well. Loans amounting to approximately taka 500 were granted to 11 companies in violation banking procedures and "Of the amount, loans of more than Tk 367 crore that the bank's Motijheel branch gave to 10 of the companies from November 2013 to November last year have become defaulted" (Uddin, The Daily Star, 2018, 24 March). Loan default had caused an accounting fraud, because the bank concealed huge, classified loans to overstate profit and disguise financial irregularities (Rahman, The Daily Star, 2006, 19 January).

As revealed in a report to the Parliamentary Committee, the resulting capital inadequacy and liquidity crisis had created pressure on the bank to survive with "mobilisation of funds from general people and other banks, offering interests higher than the market rate" (see Azmir Uddin, 2017). As media unfolds, "trouble-hit Farmers Bank has twice failed to honour a cheque worth Tk 35.44 crore presented by Bangladesh Telecommunications Company Ltd, in what can be described as the latest episode in the four-year old bank's spiral towards insolvency" (Alo, The Daily Star, 2017). At one stage, "left without a choice, the troubled bank was forced to pay off loans from the four banks with its securities -- treasury bonds and bills -- with the Bangladesh Bank" (Uddin, The Daily Star, 2017, 14 December). After this, the bank had no securities with Bangladesh Bank to meet the Statutory Liquidity Requirement (SLR).

Serious liquidity problems and crisis of depositors' confidence in Farmers Bank resulted in bank's inability to smoothly run as a going concern from the middle of 2018. Given the circumstances, the Government of Bangladesh came forward to bail-out Farmers Bank.

Four state-owned banks and a financial institution have signed share purchase agreements with the Farmers Bank to inject new capital amounting to Tk 765 crore into the beleaguered bank.

Sonali, Janata, Agrani, Rupali will inject Tk 165 crore each and the Investment Corporation of Bangladesh (ICB) will give Tk 55 crore as fresh equity in line with the government instruction. (Daily Star Business Report, 2018, 18 May)

Stakeholders did not appreciate this bail-out process following looting of public money. The reason is that:

This move speaks more of politics than economics. There is no explanation why an investment company that should look after the investors' interest and put money in profitable ventures chose Farmers instead. Why the state-owned banks which run on public money should squander their funds on a sinking bank? In simple terms, this became a classic case of transferring people's money into scamsters' pockets. (Alo, The Daily Star, 2018, 21 December)

Despite the bail-out process, Farmers Bank encountered several financial and governance risk factors. It was on the brink of collapse in the beginning of 2019. Politics played the role here again to see a bank not to fail.

Farmers Bank has been renamed as Padma Bank as the troubled lender looks to sweep the gross irregularities and loan scams under the carpet and get an image makeover.The bank, which was established in 2013, became a hotbed for financial irregularities in less than three years of operation. More than Tk 3,500 crore was siphoned out from the bank, according to the Bangladesh Bank. (Daily Star Business Report, 2019, 31 January)

Bangladesh Bank assessment paper about Farmers Bank renaming process reveals the rationale for such renaming on the ground that “clients have been in a confidence crisis on the bank as it had faced large-scale corruptions and liquidity crisis” (Uddin, The Daily Star, 2018, 24 December).

4.2 Corporate governance anomalies

In the loan scam and related corruption cycle of Farmers Bank, the involvement, lack of accountability and unethical exposure of the persons charged governance functions cannot be underestimated. The board of directors of Farmers Bank was virtually inactive in controlling financial irregularities. Even the bank granted loans to its own directors and directors of other banks by violating the credit discipline (Uddin, The Daily Star, 2017, 13 November). Board's independence was compromised due to influential role of the board chair in the bank's governance process. The board chair, Muhiuddin Khan Alamgir, was a Vattern political leader of Awami league, the ruling political party in Bangladesh since 2009. He was a former Home Minister, parliament member and chairman of the parliamentary standing committee on public accounts. There is a societal practice in Bangladesh that corporate fat cats who have political connections can exercise power and demonstrate rationalising attitude, behaviour and arguments to neutralise their irresponsibility and corruption. Media reported allegations that the board chair Muhiuddin Khan Alamgir had

involvement in the loan scams in Farmers Bank and he transferred taka 13 crore to his personal account from a client's account (Daily Star Staff correspondent, 2018, 13 February). However, Muhiuddin, as per media report by this Daily Star correspondent (2018, 13 February), rationalised with denial of these allegations. He argued that media reports on his involvement on Farmers' loan scams was based on imagination, "no such money entered my account" and such allegation was a "barrier to creating a healthy atmosphere in society". On a point of order in a session of National Parliament, he blamed the media:

"Three newspapers of Dhaka in the last three days have published false news against me with an ill motive. They said I have taken commission in disbursing loans when I was the chairman of the bank. I never heard such a lie in 77 years of my life". (Daily Star correspondent, 2018, 13 February)

The audit committee of Farmers Bank grappled with conflicts of interest and discharged lax oversight over financial irregularities in the bank. Mahbubul Haque Chisty alias Babul Chisty was a former chairman of bank's audit committee. On a different tenure, he also worked as a chairman of the executive committee. Nobody was there in the bank to rival his influence. Anti-Corruption Commission (ACC) of Bangladesh found that Mahbubul Haque Chisty and his family members (son and wife) were involved in systemic embezzlement of bank fund.

"The central bank has held the private bank's former chairman Muhiuddin Khan Alamgir and ex-chairman of its executive committee Mahabubul Haque Chisty largely responsible for the scams. The irregularities are gross -- some of those outright fraud -- ranging from sanctioning loans without any application to taking loans and not using any of that for the purposes those were meant for. Two ex-directors of the Farmers Bank -- Alamgir and Mahabubul -- approved a major portion of the loans, abusing their position and without taking consent from other board members, it mentioned". (Uddin, The Daily Star, 2018, 24 March).

There were recurring changes in the governance process, in particular in CEO (managing director) and board chair positions of Farmers Bank in the years when the bank exposed to severe loan scams, liquidity crisis (insolvency) and confidence crisis. With these fraud symptoms, Farmers Bank first went through bail-out process and then was renamed as Padma Bank in 2019. A new board comprising the managing directors of Sonali Bank, Janata Bank, Agrani Bank, Rupali Bank and Investment Corporation of Bangladesh, four private institutional directors and two independent directors created false hope in a joint statement (Daily Star Business Report, 2018, 18 May):

"Today (Wednesday) the Farmers Bank Ltd begins a new era where public and private institutions join together in partnership to protect a national asset".

“We are fully committed to protecting the interest of our honourable depositors and build a new compliant bank based on the pillars of good governance, prudent management and customer service”.

External oversight by regulators, such as securities regulators, government and central bank in case of banks is a vital requirement for effective governance. Table 1 in appendix reveals that the central bank of Bangladesh knew about gross irregularities in Farmers Bank. But its oversight was not so effective. Other than the resignation of the board chair Muhiuddin Khan Alamgir during the traumatic circumstances of Farmer Bank, till today there is no legal action taken against him by Bangladesh Bank, Anti-Corruption Commission and any other enforcing agencies. He used his political influence to neutralise the regulatory actions against Farmers Bank and against him as an ex-board chair of this bank. For example, “Muhiuddin called upon Speaker Shirin Sharmin Chaudhury, who was presiding over the sitting Parliament, to take necessary measures so that Bangladesh Bank could not reveal private commercial bank's loan disbursement information before the media” (Daily Star Staff Correspondent, 2018, 13 February).

5. Conclusion and Policy Implications

Major contributions of the study are theoretical and methodological. Methodologically, the study used critical discourse analysis (CDA) capturing and structuring three types of discourses, such as media discourse (opinion of the journalists), executive discourse (direct and indirect opinion of the executives, predominantly, the board chair and CEO) and government discourse (direct and indirect opinion of the responsible personnel from Bangladesh Bank and Ministers as regulators). No other study on the banking sector in Bangladesh is found to have used CDA to explain the loan scam, other financial corruption and corporate governance anomalies. Even the recent study of Ahmed et al. (2022) is different from this study in view of the case (sample bank) selection and style of analysing the discourses regarding the major irregularities in the banking sector.

Theoretically, the financial irregularities and corporate governance anomalies are identified and explained in this study in line with the fraud symptoms postulated and evidenced in three social-psychological theories, namely Sutherland's (1949) white-collar crime theory, Cressey's (1953) fraud triangle framework adapted recently in the auditing standards (SAS 99, ISA 240) and ASA 240) and Black's (2005) control fraud theory. Relevant to such a composite theoretical framework, this study finds that loan scam (a major corruption) and loan default culture led to the accounting fraud (information asymmetry), liquidity crisis (insolvency), lack of profitability and crisis of confidence in the bank.

Control fraud theory assumes information asymmetry to be one of the symptoms of accounting fraud. Farmers Bank published its first four years (2013-2016) financial reports. When the bank experienced severe liquidity crisis, loan irregularities and corporate governance anomalies in 2017

and 2018, it's senior executives and board did not publish annual reports post-2016 intending to hide colossal irregularities, corruptions and potential insolvency.

Consistent with the constructs of the fraud triangle adapted in the auditing literature, the study finds that inefficient management, ineffective board, inactive audit committee, and self-interest, power and influence of the senior persons in the governance process (such as the board chair Muhiuddin Khan Alamgir and executive committee/audit committee chair Mahbubul Haque Chisty alias Babul Chisty) created opportunities for loan scam and accounting fraud. These persons had the traits of white-collar class as stated in the white-collar crime theory.

Congruent with the control fraud theory, the bank was owned or governed by the senior persons in the governance process to loot the entity and embezzle other people's money (such as depositors' fund). Similar to the notion of the fraud triangle, opportunities for financial irregularities (loan scam and accounting fraud) and violation of regulation were created not only because of the weak internal governance but also because of political influence of the board chair and lax oversight by the external regulators (central bank and government). Further, consistent with the third component of the fraud triangle, the senior persons in the governance process had demonstrated dominant attitudes and arguments rationalising and supporting their fraudulent actions. In particular, no one was there in the board of directors to rival the board chair Muhiuddin Khan Alamgir and the executive chair (at one stage also audit committee chair) Mahbubul Haque Chisty alias Babul Chisty.

The study has several recommendations for policy implications. Firstly, there should be a separate corporate governance code for the banking sector. This code should be comparable to international corporate governance principles and prescribe provisions for accountability and sufficient independence of the board and audit committee. Secondly, a renewed code of ethics is essential for bank officials so that they maintain integrity in discharging their professional duties, in particular, when they provide and recover loans. Thirdly, there needs to be timely reporting to stakeholders and regulators about banks' disclosure quality, internal governance and going concern issues. The 2017, 2018 and 2019 audited financial reports were not published in the website of the bank. Fourthly, being the custodian of the banking sector, the central bank and Government should protect public interest implementing effective oversight and enforcement over the banking sector without political consideration. Fifthly, as corruption has become a broader societal practice in Bangladesh, the banking sector is not free from this societal disease. Regulatory control alone is not a panacea of this disease. It is critical to developing appropriate academic curricula to provide ethical education in the schools, colleges and universities. At the institutional level, it is imperative that they have appropriate training programmes to continuously educate the staff in the governance positions. Finally, adequate research on loan scam, other corruptions and corporate governance principles and practices needs to be undertaken by accounting, finance and law academics.

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Appendix:

Table 1 Discourses published in the Daily Star (Bangladesh)

| Date | Year | Text and talk (written & spoken) | Type of discourse | Discursive theme |
|--------|------|--|-------------------|---|
| 19 Jan | 2016 | This is part of a long list of irregularities that the newly established bank indulged in. The bad lending practices have now come out in the open after a central bank study. | MD | Loan scam/corruption/self-interest in looting the entity. |
| | | The BB carried out special inspections into the bank's Gulshan, Motijheel and Shyampur branches between September and November last year and found irregularities in sanctioning loans that amount to Tk 400 crore. | MD | Loan scam/corruption/self-interest in looting the entity. Regulator's concerns/knowledge of loan irregularities |
| | | The central bank had warned the bank's directors, including Muhiuddin Khan Alamgir, chairman of the lender's board and a senior leader of the ruling Awami League, on these irregularities. The BB also asked the bank to punish the corrupt officials, but they did not pay heed to the advice. | GD | Political connection of board chair Loan scam/corruption/self-interest in looting the entity. Regulatory failure/weak oversight. |
| | | The investigation found that the bank had concealed its classified loans to inflate profits and resorted to irregularities in recruitment. | GD | Accounting fraud/information asymmetry. |
| | | Influenced by Mahabubul Haque Chisty, chairman of the bank's executive committee, the lender sanctioned Tk 20 crore to MS International that had assets worth only Tk 1.15 crore and equity of Tk 69.56 lakh. (Rahman, 2006) | MD | Power/influence of executives. |
| 17 Nov | 2017 | Trouble-hit Farmers Bank has twice failed to honour a cheque worth Tk 35.44 crore presented by Bangladesh Telecommunications Company Ltd, in what can be | MD | Liquidity crisis/insolvency. |

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| | | described as the latest episode in the four-year old bank's spiral towards insolvency. The development comes after Bangladesh Bank last month in a report to the parliamentary standing committee on the finance ministry said the bank does not have the capacity to pay back funds to depositors and other banks. (Jebun Nesa Alo, 2017) | GD | Liquidity crisis/insolvency. Regulator's concerns/knowledge of loan scam. |
| 13 Nov | 2017 | <p>Farmers Bank continues to worry BB. So much that the bank's credit-deposit ratio stood at 88.70 percent in June -- higher than the limit of 85 percent set by the central bank</p> <p>Earlier in January, the central bank slapped some restrictions on fresh loan disbursement and opening of new branches, with a view to protecting depositors' money given the precarious financial health of the newly established bank.</p> <p>But the bank has frequently breached the central bank's restrictions and disbursed fresh loans, said a senior BB official.</p> <p>"The BB also sought to know why we are disbursing fresh loans despite facing liquidity crisis," Managing Director AKM Shameem added.</p> <p>Established in the second half of 2013, the bank's financial health started deteriorating not long after, and in January last year the central bank appointed an observer in Farmers' board with the view to bringing in loan discipline and improving risk management and internal control.</p> <p>The BB provided the committee (Parliamentary Committee) with reports on the two banks. At Farmers, 13 counts of irregularities were found, which include disbursement of loans to non-existent companies.</p> <p>The bank also gave loans to its own directors as well as those of other banks, violating the credit discipline.</p> <p>"Farmers Bank does not have the capacity to pay back the depositors' money and refund the credit taken from other banks," the BB said in the report.</p> <p>"It is now surviving through mobilisation</p> | <p>MD</p> <p>GD</p> <p>ED</p> <p>MD</p> <p>GD</p> <p>MD</p> <p>GD</p> <p>GD</p> | <p>Liquidity crisis/insolvency.</p> <p>Regulator's concerns/knowledge of loan scam.</p> <p>Regulatory failure/weak oversight.</p> <p>Liquidity crisis / insolvency Regulator's concerns/knowledge of loan scam.</p> <p>Liquidity crisis/insolvency. Internal control anomaly.</p> <p>Loan scam/corruption/self-interest in looting the entity. Regulator's concerns/knowledge of loan scam.</p> <p>Loan scam/corruption/self-interest in looting the entity.</p> <p>Liquidity crisis/insolvency.</p> <p>Liquidity crisis/insolvency.</p> |

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| | | <p>of funds from general people and other banks, offering interest rates higher than the market rate," the report said.</p> <p>Awami League lawmaker Muhiuddin Khan Alamgir, also a former home minister, is the chairman of the Farmers Bank board. He is also the chairman of the parliamentary standing committee on public accounts. (AKM Zamir Uddin, 2017)</p> | <p>MD</p> | <p>Exploration of alternative sources of fund at high cost.</p> <p>Political connection of board chair.</p> |
| 22 Nov | 2017 | <p>Farmers Bank has failed to maintain the statutory liquidity ratio and cash reserve ratio as stated in the Banking Company Act, as a result of which it has incurred penalty of Tk 18 crore so far.</p> <p>(AKM Zamir Uddin, 2017)</p> | MD | <p>Liquidity crisis/insolvency. Non-compliance/violation of regulatory.</p> |
| 27 Nov | 2017 | <p>Muhiuddin Khan Alamgir, chairman and Md Mahabubul Haque Chisty, chairman of the audit committee, were forced to resign from the trouble-hit Farmers Bank's board of directors.</p> <p>Soon after the resignation of Muhiuddin and Mahabubul the board of the bank made Mohammad Masud and Maruf Alam chairman and vice chairman respectively. The bank has also restructured its three vital committees -- audit, risk management and executive -- following a series of meetings between the central bank top officials and the Farmers Bank board. Besides, the central bank has taken a move to dismiss The Farmers Bank's Managing Director AKM Shameem from his job due to his failure to manage the bank efficiently and address the ongoing liquidity crunch of the bank. (Staff Online Report, 2017)</p> | <p>MD</p> <p>MD</p> | <p>Ineffective board. Inactive audit committee Frequent changes in governance process (resignations).</p> <p>Frequent changes in governance process (resignations).</p> |
| 14 Dec | 2017 | <p>The cash-strapped Farmers Bank failed to repay interbank short-term loans of about Tk 700 crore to four banks over the past two months, a development that may further erode depositors' confidence in the scam-hit bank.</p> <p>Left without a choice, the troubled bank was forced to pay off loans from the four banks with its securities -- treasury bonds and bills -- with the Bangladesh Bank, according to BB data.</p> <p>The Farmers Bank had kept the securities with the central bank to maintain its mandatory Statutory Liquidity Requirement (SLR). But now the bank has</p> | <p>MD</p> <p>MD</p> <p>MD</p> | <p>Liquidity crisis/insolvency. Failure to protect depositors /confidence crisis.</p> <p>Liquidity crisis/insolvency (sale of last resort to pay loan from other banks).</p> <p>Liquidity crisis/insolvency.</p> |

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| | | <p>no securities to maintain SLR.</p> <p>The BB has already slapped a penalty of Tk 18.49 crore on the Farmers Bank because of its failure to keep the CRR and SLR between October last year and September this year.</p> <p>A number of senior officials of Bangladesh Bank and commercial bankers told The Daily Star that in their long banking career they never heard of any bank failing to repay the interbank loans due to cash crunch.</p> <p>Former caretaker government adviser AB Mirza Azizul Islam said, "The central bank should take over the Farmers Bank if it fails to pay back depositors' money."</p> <p>Mustafa K Mujeri, former chief economist of the BB, said corruption and a lack of governance turned Farmers into a bad bank.</p> <p>Meanwhile, the BB Standing Committee, headed by its Deputy Governor Abu Hena Mohd Razee Hassan, yesterday grilled Farmers Bank Managing Director AKM Shameem, asking him to explain why he should not be removed from his post for failing to manage the bank efficiently and address its liquidity crisis. (Sajjadur Rahman and AKM Zamir Uddin, 2017)</p> | <p>MD</p> <p>GD</p> <p>GD</p> <p>GD</p> <p>GD</p> | <p>Non-compliance/violation of regulation. Regulatory action (penalty).</p> <p>Liquidity crisis/insolvency. Failure to pay interbank loan.</p> <p>Liquidity crisis/insolvency. Collapse/renaming of bank.</p> <p>Loan scam/corruption/self-interest in looting the entity.</p> <p>Inefficient management. Frequent changes in governance process (Removal of CEO).</p> |
| 20 Dec | 2017 | <p>Seeking anonymity, a BB official told this correspondent, "The bank's managing director [Shameem] has failed to discharge his responsibilities to protect the interests of depositors as well as the funds of the shareholders."</p> | GD | <p>Inefficient management (CEO) Failure to protect depositors' interests/confidence crisis.</p> |
| 5 Jan | 2018 | <p>Trouble-hit Farmers Bank has appointed veteran banker Md Ehsan Khasru as its new managing director with an aim to regain the confidence of depositors and clients.</p> <p>A former managing director of Prime Bank, Khasru said, "Regaining the confidence of depositors and clients is the biggest challenge for me."</p> <p>But he knows that it would not be so easy for him.</p> <p>He said the shareholders will have to inject further equity into the bank. "And, if we can bring institutional strategic</p> | <p>MD</p> <p>ED</p> <p>MD</p> <p>EG</p> | <p>Frequent changes in governance process (Appointment of new CEO)</p> <p>Rationalisations (Promise to regain confidence of depositors and clients)</p> <p>Failure to protect depositors/confidence crisis (difficulty to regain confidence).</p> <p>Liquidity crisis/insolvency.</p> |

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| | | investments into the bank in the shortest possible time, we will be able to run the bank efficiently," he told The Daily Star. (Star Business Report, 2018) | | |
| 16 Jan | 2018 | <p>The board of the bank had taken the decision on Sunday in line with the central bank's recommendation, Sarafat (Chowdhury Nafeez Sarafat) told The Daily Star yesterday. "I will serve as chairman of the bank as an institutional representative of 12 organisations. The board's decision will take effect after it gets go-ahead from the central bank."</p> <p>Strengthening the capital base of the trouble-hit bank is one of the major challenges for him, according to Sarafat. "Besides, the bank has to immediately repay deposits worth Tk 147 crore to the clients. I will try my best to repay the depositors' amount within the shortest possible time."</p> <p>(Star Business Report, 2018)</p> | <p>ED</p> <p>Frequent changes in governance process (appointment of new CEO).</p> <p>ED</p> <p>Rationalisation (Promise to regain confidence of depositors and clients).</p> | |
| 25 Jan | 2018 | <p>Finance Minister AMA Muhith on Thursday told Parliament that Farmers Bank is unable to return its client deposits due to its liquidity crisis. "Now the Farmers Bank can't return the deposits of its clients as the bank faces liquidity crisis," he said responding to a starred question from Jatiya Party MP Selim Uddin (Sylhet-5).</p> <p>Despite taking various measures taken by the central bank on various occasions, the overall condition of Farmers Bank is gradually getting worse, Muhith said.</p> | <p>GD</p> <p>Liquidity crisis/insolvency. Concerns/knowledge of regulatory bodies.</p> <p>Rationalisations.</p> <p>GD</p> <p>Regulatory failure/weak oversight. Rationalisations.</p> | |
| 8 Feb | 2018 | <p>A move has been taken to save Farmers Bank, said Finance Minister AMA Muhith. However, it is still under discussions, he told reporters at the secretariat yesterday. Muhith said the government can't allow a bank to fail. "Bank failure is a horrible thing for any country," he said.</p> <p>A few months back, the board of Farmers Bank decided to raise capital amounting to Tk 1,100 crore by offloading shares through private placement. But it didn't get the expected investors, said a senior executive of the bank. Under these circumstances, the central bank advised the state-owned banks to invest into the scam-hit bank as part of a bail-out package, he said.</p> | <p>GD</p> <p>Collapse/renaming of bank.</p> <p>Rationalisations (not to fail).</p> <p>MD</p> <p>Bail-out of bank.</p> | |

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| | | (Star Business Report, 2018) | | |
| 13 Feb | 2018 | <p>The newspapers mentioned that he (Board Chair Muhiuddin) transferred Tk 13 crore to his account from a client's account on July 17 last year.</p> <p>Ruling Awami League lawmaker Muhiuddin Khan Alamgir yesterday claimed that the media reports against him over the Farmers Bank loan scam were based on imagination.</p> <p>Speaking at the Jatiya Sangsad, he also denied all the allegations of his involvement in irregularities in disbursing loans from the bank when he was its chairman.</p> <p>"Three newspapers of Dhaka in the last three days have published false news against me with an ill motive. They said I have taken commission in disbursing loans when I was the chairman of the bank. I never heard such a lie in 77 years of my life," he said while speaking on a point of order.</p> <p>He claimed that nobody could prove that any money entered his account with the Farmers Bank from those who took loans.</p> <p>"No such money entered my account from July 17 to the next seven to 10 days," he said, adding that such allegation was a "barrier to creating a healthy atmosphere in society".</p> <p>Muhiuddin also called upon Speaker Shirin Sharmin Chaudhury, who was presiding over the sitting, to take necessary measures so that Bangladesh Bank could not reveal private commercial bank's loan disbursement information before the media.</p> <p>(Staff Correspondent, 2018)</p> | <p>MD</p> <p>ED</p> <p>ED</p> | <p>Loan scam/corruption/self-interest of insiders in looting the entity.</p> <p>Rationalisations (denial of allegation of involvement in loan scam by board chair).</p> <p>Political connection of board chair.</p> <p>Rationalisations (deviant attitude of board chair).</p> |
| 23 Mar | 2018 | <p>Md Ehsan Khasru, managing director of Farmers Bank, told The Daily Star that his bank had already renewed the majority of the fixed deposits after it failed to refund the money in due time. "The bank will repay the money within the shortest possible time as it has already recovered a large amount from defaulters."</p> <p>(AKM Zamir Uddin, 2018)</p> | ED | <p>Liquidity crisis/insolvency.</p> <p>Rationalisations (promise to refund depositors).</p> |
| 24 Mar | 2018 | <p>Bangladesh Bank has unearthed another string of scams at the Farmers Bank involving loans of around Tk 500 crore that were sanctioned to 11 companies in violation of banking norms and procedures.</p> | MD | <p>Loan scam/corruption/self-interest (loan to little-known companies).</p> <p>Ineffective board (lack of accountability of board chair)</p> <p>Ineffective audit committee (lack of accountability of audit committee chair)</p> |

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| | | <p>Of the amount, loans of more than Tk 367 crore that the bank's Motijheel branch gave to 10 of the companies from November 2013 to November last year have become defaulted. Some of the firms are either obscure or little-known. The central bank has held the private bank's former chairman Muhiuddin Khan Alamgir and ex-chairman of its executive committee Mahabubul Haque Chisty largely responsible for the scams. The irregularities are gross -- some of those outright fraud -- ranging from sanctioning loans without any application to taking loans and not using any of that for the purposes those were meant for. Two ex-directors of the Farmers Bank -- Alamgir and Mahabubul -- approved a major portion of the loans, abusing their position and without taking consent from other board members, it mentioned.</p> <p>Contacted, ex-Farmers Bank chairman Alamgir, also an Awami League lawmaker, said he had not sanctioned any loans, using his executive power. "The board of directors of the Farmers Bank officially sanctioned all the loans. The defaulted loans of the bank were below 4 percent when I was the board chairman." (AKM Zamir Uddin, 2018)</p> | <p>MD</p> <p>MD</p> <p>ED</p> | <p>Loan default culture (loan default by obscure or little-known clients).</p> <p>Loan scam/corruption/self-interest (abuse of power in loan sanction). Ineffective board. Inactive audit committee.</p> <p>Rationalisations (denial of involvement of board chair in loan scam).</p> |
| 11 Apr | 2018 | <p>Former chairman of Farmers Bank Audit Committee Mahabubul Haque Chisty, his son and two officials of the bank landed in jail yesterday after the Anti-Corruption Commission arrested them in a Tk 160-crore laundering case.</p> <p>The ACC found that between November 18, 2013 and January 30 this year, Tk 138.82 crore was deposited with the current accounts of Bakshiganj Jute Spinners Ltd, owned by Mahabubul's son, wife and daughter, at Farmers Bank's Bakshiganj and Gulshan branches.</p> <p>Besides, at least seven suspicious transactions of more than Tk 13 crore were made involving bank accounts of Mahabubul and his son, according to the ACC. (Staff Correspondent, 2018)</p> | MD | <p>Loan scam/corruption/self-interest (involvement of audit committee chair and his family in looting entity). Inactive audit committee (accountability & independence issue).</p> |
| 18 May | 2018 | <p>Four state-owned banks and a financial institution have signed share purchase agreements with the Farmers Bank to inject new capital amounting to Tk 765</p> | MD | Bail-out of bank. |

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| | | <p>crore into the beleaguered bank. Sonali, Janata, Agrani, Rupali will inject Tk 165 crore each and the Investment Corporation of Bangladesh (ICB) will give Tk 55 crore as fresh equity in line with the government instruction.</p> <p>The Farmers Bank also reconstituted its board as the managing directors of Sonali, Janata, Agrani, Rupali and ICB got directorship under the clauses of the latest agreement. Besides, four private institutional directors and two independent directors were also appointed as board members of the problem-ridden bank.</p> <p>“Today (Wednesday) the Farmers Bank Ltd begins a new era where public and private institutions join together in partnership to protect a national asset,” the new board stated in a joint statement. “We are fully committed to protecting the interest of our honourable depositors and build a new compliant bank based on the pillars of good governance, prudent management and customer service.”</p> <p>Earlier this month, the central bank relaxed three articles of the Bank Companies Act 1991 to facilitate the purchase of shares of Farmers Bank. (Star Business Report, 2018)</p> | <p>MD</p> <p>ED</p> <p>MD</p> | <p>Frequent changes in governance process (Reconstruction of board with chair). Ineffective board (Independence issue).</p> <p>Rationalisations (Board’s promise/commitment to regain confidence in bank).</p> <p>Regulatory change favouring bank.</p> |
| 21 Dec | 2018 | <p>With Farmers Bank, no-one knows when the woos will end. And as days go by, more and more depressing statistics are coming out. Since it was hit by massive corruption and irregularities a year ago, much of which is blamed on its former founder chairman, the bank has never been able to turn any profit and its bad loan portfolio is continuously swelling as more and more loans, even the good ones, are failing. It seems even the good borrowers, and very few were there, have suddenly realised that being delinquent is a better option.</p> <p>The Bangladesh Bank had squarely held its former chairman Mohiuddin Khan Alamgir, an AL lawmaker who got the ticket to run in the upcoming elections, responsible for the scam. Alamgir resigned from the board in the face of controversy although he denied his involvement in the scam.</p> <p>Neither the regulator nor the anti-corruption commission further pursued the scam as if the mere resignation ended</p> | <p>MD</p> <p>MD</p> | <p>Loan default culture Corruption Lack of profitability Liquidity crisis/insolvency (going concern issues).</p> <p>Political connection of board chair. Rationalisations (resignation by board chair and denial of his involvement in loan scam).</p> <p>Regulatory failure/weak oversight.</p> |

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| | | <p>the matter.</p> <p>When it sank with corruption and irregularities, the government made a bailout attempt by forcing the four state-owned banks and state investment company..... . This move speaks more of politics than economics. There is no explanation why an investment company that should look after the investors' interest and put money in profitable ventures chose Farmers instead. Why the state-owned banks which run on public money should squander their funds on a sinking bank? In simple terms, this became a classic case of transferring people's money into scamsters' pockets.</p> <p>With such gloomy pictures emerging from the books, the managing director of the bank Md Ehsan Khasru at a recent event in Dhaka has said "one person more powerful than the central bank" is responsible for the systematic corruption in the bank. (Jebun Nesa ALo, 2018)</p> | <p>MD</p> <p>ED</p> | <p>Bail-out (Political interest and misuse of public money) Loan scam/corruption/self-interest in looting people's money.</p> <p>Power/influence of board chair (Bank's inability to take actions).</p> |
| 24 Dec | 2018 | <p>"Clients have been in a confidence crisis on the bank as it had faced large-scale corruptions and liquidity crisis," said a central bank assessment paper of the Farmers Bank renaming process.</p> <p>"We are trying to rescue the bank and as part of that move we have decided to rename it," Chowdhury Nafeez Sarafat, chairman of the bank, told The Daily Star. (AKM Zamir Uddin, 2018)</p> | <p>GD</p> <p>ED</p> | <p>Self-interest/Corruption Liquidity crisis/insolvency Crisis of confidence</p> <p>Collapse/renaming of bank (Going concern issues). Rationalisations.</p> |
| 31 Jan | 2019 | <p>Farmers Bank has been renamed as Padma Bank as the troubled lender looks to sweep the gross irregularities and loan scams under the carpet and get an image makeover.The bank, which was established in 2013, became a hotbed for financial irregularities in less than three years of operation. More than Tk 3,500 crore was siphoned out from the bank, according to the Bangladesh Bank. (Star Business Report, 2019)</p> | <p>MD</p> | <p>Loan scam/corruption/self-interest in looting the entity. Collapse/renaming of bank (Going concern issues).</p> |

Stream 4. Gender, Diversity, and Indigeneity

A study of hostility, sexual harassment, intimidation, and conflict: onsite versus offsite women leaders' lived experiences in the Australian construction industry

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Stream 4. Gender, Diversity, and Indigeneity

A study of hostility, sexual harassment, intimidation, and conflict: onsite versus offsite women leaders' lived experiences in the Australian construction industry

This study presents interim findings from a larger research project looking at the lived experiences of women working in both offsite and onsite leadership roles in the construction industry. Semi-structured interviews were conducted with 13 female participants working within the Australian construction industry; 6 worked in offsite leadership roles, while 7 worked in onsite leadership roles. This paper provides an insight into gendered incivility (sexual harassment, hostility, intimidation, and conflict) by classifying it into three major categories (physical, psychological, and personal). Onsite women leaders experienced more types of gendered incivility than offsite women leaders, who mainly experienced personal incivility. Onsite leaders also experienced a much higher prevalence of physical incivility. The larger research project will interview 20 women.

Key words: construction industry, gendered incivility, offsite, onsite, women

INTRODUCTION

Hostility, intimidation, discrimination, sexual harassment, and conflict have been identified by many researchers as key deterrents to women working in the construction industry (Afolabi, Oyeyipo, Ojelabi, & Tunji-Olayeni, 2019; B. Bagilhole, 2002; Cregan & Kelloway, 2021). Further, research has identified that these detrimental issues are a by-product of the 'macho' industry that has enabled such behaviour to intensify over the years (Bridges, Wulff, Bamerry, Krivokapic-Skoko, & Jenkins, 2020; J. M. Galea, Mallia, Rothwell, & Diedrichsen, 2015; Naoum, Harris, Rizzuto, & Egbu, 2020; Navarro-Astor, Román-Onsalo, & Infante-Perea, 2017). Previous limited research has demonstrated that hostility, intimidation, and conflict are challenges that women face working in the construction industry, particularly when they are in onsite management roles (Amaratunga, Haigh, Shanmugam, Lee, & Elvitigala, 2006; B. M. Bagilhole, Dainty, & Neale, 2000; Jacquelinen H Watts, 2007). Such research has touched upon these factors being deterrents for women in the industry but have not delved deeply into how these factors affect women. In the interests of gender equality, if more women are to be supported to attain leadership roles in construction, it is imperative to understand the gendered-based challenges they experience both offsite and onsite.

This paper presents the interim findings from preliminary data collection which forms part of a larger study of women in onsite and offsite project leadership roles in the construction industry. The larger study has identified that there is a gap in research around women leaders' lived experiences regarding gender-based violence.

Stream 4. Gender, Diversity, and Indigeneity

LITERATURE REVIEW**Masculine Culture**

Historically, the makeup of a building site has not changed significantly; it remains a male dominated realm where a hierarchy of authority reigns (Jacqueline H Watts, 2007). The vocational obstinance has resulted in a culture of burly ‘macho-ness’, aggression, and conflict; a place where women are seen as minority workers who are often subjected to varying forms of workplace harassment and intimidation. Engrained stereotypes and workplace culture often place men as the ‘natural’ site leaders (Watts, 2009). When a woman is placed in a leadership role, she is commonly regarded as an ‘outsider’ and her leadership worth is questioned (Knights & Kerfoot, 2004). As a result, a woman must work harder, and appear tougher to both prove herself as a worthy leader, and to combat the harassment and hostility that frequently comes her way (Watts, 2009).

Female leaders in construction

Women are under-represented at the leadership level in construction (Andrew R Dainty & Lingard, 2006; Lu & Sexton, 2010), occupying only 17% of Australian managerial positions (Government, 2022). Similar to many other developed countries (Andrew RJ Dainty, Bagilhole, & Neale, 2000; Lu & Sexton, 2010), even fewer women work in site-based management roles. The challenges that women face in the building sector have been well-documented both in Australia and overseas (N. Galea, Powell, Loosemore, & Chappell, 2020; Olofsdotter & Randevåg, 2016) (Clarke, Michielsens, Snijders, & Wall, 2015), however most studies have examined women working in offsite professional roles such as engineering, architecture, and quantity surveying, example (Bryce, Far, & Gardner, 2019; Mills, Franzway, Gill, & Sharp, 2013; Moore & Gloeckner, 2007) . Little research has been undertaken on women in senior leadership roles (Watts, 2009), and even less is known about the experiences of female leaders working onsite, due to their underrepresentation in these roles. Several exceptions to the paucity of information on senior women are (Watts, 2009, 2012) studies of female civil engineers working onsite; Lu and Sexton (2010) research on women who own small construction firms; and Secatore and Scott-Young (2016) study of early career construction women.

Stream 4. Gender, Diversity, and Indigeneity

Gendered violence, hostility, conflict, sexual harassment, and intimidation

Work-related gendered violence is covered under Section 21 of the Victorian Occupational Health and Safety (Victoria, 2004). It includes harassment, and relates to ‘any behaviour, directed at any person, or that affects a person, because of their sex, gender, or sexual orientation, or because they do not adhere to socially prescribed gender roles, that creates a risk to health and safety.’ The Australian Human Rights Equal Opportunity Commission (Australian Human Right Commission, n.d.) defines a ‘hostile work environment’ as one where a person is adversely affected by the conduct of others in their workplace to the point that their conditions of work are also adversely affected. With regards to sexual discrimination and harassment, this covers conduct such as behaviours where women are treated differently in the workplace because of their gender; where there is gender-based harassment, banter, innuendos etc.; and in instances where women have been undervalued with relation to promotion prospects being limited because of the masculinised nature of the workplace (Australia, 1987). Gender hostility is common in male dominated industries. In the case of *Hill v Water Resources Commission*, Hill was the first woman to be promoted in the sector in which she worked. Following her promotion, she endured daily workplace harassment by her subordinate male employees whose intention was to make her feel an unwelcome outcast, and ultimately to push her out of her role because she was a woman, and in charge. This type of hostility is rampant in the construction industry as well (B. M. Bagilhole et al., 2000; Andrew RJ Dainty, Bagilhole, Ansari, & Jackson, 2004; Andrew RJ Dainty et al., 2000; Watts, 2009), where women in leadership roles are often isolated and seen as a minority, and because of the masculine culture, become the target for hostile behaviour (Andrew RJ Dainty et al., 2004; Jacqueline H Watts, 2007; Watts, 2009).

Conflict has been seen as a common thread with regards to interpersonal interactions between men in the construction industry, particularly since research has shown that a male centric communication style predominates, whereby when disputes happen, they typically do not diffuse, but rather become confrontational (Loosemore & Galea, 2008). The general demeanour and tone of the communication on construction sites is quite informal and vernacular, often sprinkled with vulgarities and obscenities. Most women who work on site tend to accept this language as the norm, even adapting this as their own communication style in order to fit in (Loosemore & Galea, 2008).

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Although they are accepting and adaptive to the site communication style, many women continue to struggle with the aggression and conflict that often manifests on site. Studies have shown that women tend to be more emotional and inclined to compromise with regards to disputes, whilst men are more confrontational and less likely to compromise (Loosemore & Galea, 2008). It is the belligerence and conflict-ridden nature of the industry that tests many strong women's fortitude to a point beyond endurance.

Intimidation has also been identified by many scholars as a barrier for women on construction sites (Andrew RJ Dainty et al., 2004; Fielden, Davidson, Gale, & Davey, 2000; Greed, 2000). Cregan and Kelloway (2021, p. 33) define physical intimidation in the workplace as:

physical acts or verbal statements that result in the target individual feeling physically threatened... it could comprise single events as well as repetitive behaviours over time...the acts of physical intimidation may be perpetrated by individuals who are external to the organization, in addition to organizational members.

The breadth of knowledge regarding the threatening nature of the acts or statements that were targeted at women in the industry, as well as who the perpetrators were, is limited. What is known is that women on site refer to being subjected to different forms of intimidation from male counterparts and sub-contractors. These experiences are often intensified where they are responsible for the decision-making and the management of others (Cregan & Kelloway, 2021), and for all the project delivery aspects, including challenging the workmanship and performance of sub-contractors and co-workers (Watts, 2009).

Research has touched upon issues of gendered incivility previously towards women in the construction industry. What is apparent is that these detrimental factors are a byproduct of an industry that has allowed this behaviour to manifest. It is not limited geographically, as researchers have identified that this occurs globally (Aulin & Jingmond, 2011; Andrew RJ Dainty et al., 2004; Fielden et al., 2000; Greed, 2000; Lekchiri & Kamm, 2020; Navarro-Astor et al., 2017; Phua, Loosemore, Teo, & Dunn, 2011). Cregan and Kelloway (2021) identified that there is a gap related to detailed studies of physical intimidation and bullying in the workplace, and the adverse effects these have both on a personal and organisational level.

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METHODOLOGY**Sample**

As previously noted, this paper reports on the interim analysis of one part of a larger research project that will interview a total of 20 women working in onsite and offsite leadership roles within the Australian construction industry. To be an eligible participant in the study, all the women needed to be working in a leadership role (either onsite or offsite) in the Australian construction industry. These participants were identified both through referral, and through the LinkedIn contacts of the authors. The current paper analyses interviews conducted with 13 female participants. Six (46%) of the participants worked in offsite leadership roles in the construction industry that included project manager, senior project manager, contract manager, architect and executive director. The remaining seven (54%) of the participants were employed in onsite leadership roles, including maintenance manager, construction manager, project manager, OHS manager. Participants who worked as project managers made up the largest portion of the sample (38%), followed by construction managers (23%). Two participants worked in a health and safety roles, one worked as a maintenance supervisor, and another as an executive director.

Data collection

The adoption of semi-structured interviews was used as this type of interview is useful for evoking a more open and richer narrative and discussion (Corbetta, 2003) regarding the participants' gendered experiences in the construction industry. All participants were provided with a detailed information pack and consent form. The semi-structured interview protocol included the following questions: Have you experienced or witnessed mistreatment in your career? Can you tell me about it? (Probes- Can range from jokes, ignoring, isolation, to sexual harassment and even assault).

Given the spread location of the participants across Australia, the participants were given the option of meeting either face to face or online via Microsoft Teams. Face to face interviews were recorded on an MP3 recorder, whilst Microsoft Teams interviews were recorded using the recording function of this software program. The audio recordings were later transcribed.

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Data analysis

Detailed notes along with transcriptions of the interview recordings were used for the analysis of the study questions. Key findings within the interview notes were categorised and analysed according to whether the participants worked onsite or offsite. Thematic analysis of the detailed notes and interview transcripts was performed to discover emerging themes relating to the participants' experiences with regards to gendered incivility. The findings are reported in the next section.

FINDINGS

Thematic Analysis

Three themes emerged from the analysis of the participant interview responses regarding the gendered incivility they experienced in their careers. Three codes were assigned to the participant's experiences and responses, whereby the coding categorised these responses according to the type of harassing behaviour, i.e., physical, psychological, and personal.

- i.) Physical – included threats, assaults, inappropriate behaviour, touching, assault, and rape.
- ii.) Psychological – included emotional abuse including intimidation, discrediting, gaslighting, undermining, and ignoring.
- iii.) Personal/bullying – included derogatory comments, jokes, being overlooked, and excluded.

Table 1 below categorises the incivility according to the emergent themes and coding.

Table 1 Categories of harassment experienced by women in construction leadership roles

| Physical | Psychological | Personal |
|---|--|--|
| Threats of violence <i>"I was screamed at in the face on site on multiple occasions because I was trying to do my job. I was threatened to be bashed if I did not concede to a contractor's demands."</i> (P11 Construction Manager Onsite) | Gaslighting <i>"I had a manager who played mind games and gaslit me. He would get off on it."</i> (P9 Senior Project Manager Onsite) <i>"I was gaslit by a manager and made to feel like I was bad at my job because he was threatened by how experienced and credentialled I was."</i> (P11 Construction Manager Onsite) | Derogatory comments <i>"I often experienced sly comments and gestures."</i> (P2 Lead Architect Offsite) <i>"I experienced occasions where snide and derogatory comments were made to me."</i> (P7 Construction Manager Onsite) |

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| | | |
|--|--|---|
| Verbal abuse <i>"I have been verbally abused multiple times by subbies on site."</i> (P12 Project Manager Onsite) | Gender discrimination <i>"I was called 'gay' and 'tomboy' by manager and then ridiculed for being too girly and crying on site due to stress."</i> (P12 Project Manager Onsite) | Invisible woman <i>"I would be ignored and not taken seriously."</i> (P1 Contracts Manager Offsite) |
| Intimidation <i>"I was stood over and intimidated by a senior male manager."</i> (P8 Construction Manager Onsite) <i>"I was intimidated by a 'heavy'."</i> (P11 Construction Manager Onsite) | Innuendos/disparaging comments <i>"I have innuendos made about me and disparaging comments about my personal life."</i> (P3 OHS Advisor Offsite) | Token female <i>"I was treated as a novelty by my manager as I was the only female."</i> (P6 Executive Director Client Side Offsite) |
| Inappropriate touching <i>"I was touched by a senior manager at a Xmas party who thought it was acceptable because of his drunken behaviour."</i> (P5 Project Manager Client Side Offsite) | Discredited <i>"I was discredited and talked over."</i> (P3 OHS Advisor Offsite) | Poster/graffiti <i>"I found a nasty poster about me in the men's toilets."</i> (P11 Construction Manager Onsite) <i>"I have seen comments/pictures of 'me' on toilet doors."</i> (P7 Construction Manager Onsite) |
| Severe sexual assault <i>"I was raped on site 3 times on different jobs. Two were on a Tier 1 contractor's site."</i> (P10 Senior Project Manager Onsite) | Verbal <i>"I had a subby sing 'Sexual Healing' to my face."</i> (P5 Project Manager client side Offsite) | Favouritism <i>"I have personally seen male favouritism with regards to promotion and the type of work divided out."</i> (P13 Maintenance and Warranty Manager Onsite) |
| | Toughen up <i>"I was told to toughen up or get out of the industry."</i> (P7 Construction Manager Onsite) | Name calling <i>"I have been called 'love, darling, sweetie' by some of the older contractors on site."</i> (P12 Project Manager Onsite) |
| | Mansplaining <i>"Men interrupting or speaking over you because they think I don't understand."</i> (P2 Lead Architect Offsite) <i>"Sometimes men would talk over me."</i> (P3 OHS Advisor Offsite) | Wolf whistling <i>"I was onsite for an audit and was wolf whistled by one of the subbies."</i> (P3 OHS Advisor Offsite) |
| | Uncomfortable <i>"There was often sneering and times where I was made to feel uncomfortable and out of place."</i> (P9 Senior Project Manager Onsite) | Belittled <i>"I was belittled and afraid to speak up."</i> (P3 OHS Advisor Offsite) |

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| | | |
|--|---|--|
| | <p>Discredited and ignored <i>"I was often ignored and discredited because I was a women leader."</i> (P8 Construction Manager Onsite)</p> <p><i>"I was ignored and discredited – had to work twice as hard to prove my point and be respected as my equivalent male."</i> (P10 Construction Manager Onsite)</p> <p><i>"I have been discredited and ignored because I am a young woman."</i> (P12 Project Manager Onsite)</p> | <p>Jokes <i>"I have had jokes made about me behind me back."</i> (P10 Construction Manager onsite)</p> |
| | | <p>Parenting <i>"I had a boss tell me I was a bad mum because I had a child and went back to work fulltime."</i> (P9 Snr Project Manager Onsite)</p> |
| | | <p>Boy's club <i>"I found often that there was a boy's club attitude whereby if you challenge the 'boys' you are treated as a threat and left out."</i> (P4 Health and Safety Manager Offsite)</p> |

All 13 participants had experienced some level of harassment and incivility in their working careers in the Australian construction industry. Of the 13 participants, 38% had experienced only one form of gendered incivility, 38% had experienced two forms, while 24% had experienced all three forms (all of whom were onsite leaders). Specifically, of the total sample, 85% had experienced some form of personal incivility, 62% had experienced some form of psychological incivility, and 38% had experienced some form of physical incivility.

The types of gendered incivility experienced by participants is reported in Table 2.

Table 2: Participants and type of gender incivility experiences

| Context | # | Age | Role | Category |
|---------|---|-----|-----------------------------|-------------------------|
| Offsite | 1 | 44 | Contracts Manager | Personal |
| | 2 | 47 | Lead Architect | Personal, Psychological |
| | 3 | 63 | OHS Advisor | Personal, Psychological |
| | 4 | 55 | Health and Safety Manager | Personal |
| | 5 | 32 | Project Manager client side | Psychological, Physical |

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| | | | | |
|--------|----|----|-------------------------------------|---|
| | 6 | 56 | Executive Director client side | Personal |
| Onsite | 7 | 37 | Construction Manager | Personal, Psychological |
| | 8 | 42 | Construction Manager | Personal, Psychological, Physical |
| | 9 | 42 | Senior Project Manager | Personal, Psychological |
| | 10 | 46 | Senior Project Manager | Physical |
| | 11 | 49 | Construction Manager | Personal Psychological Physical |
| | 12 | 28 | Project Manager | Personal, Psychological, Physical |
| | 13 | 31 | Maintenance and Warranty Manager | Personal |

With regards to the participants working in offsite leadership roles (P1 - P6), 83% had experienced personal incivility, 50% had experienced psychological incivility, and only 16% (1 woman) had experienced physical incivility. Of the 6 offsite participants, 3 had experienced more than one type of harassment behaviour in their construction careers. With regards to the participants working in onsite leadership roles (P7-P13), 86% had experienced personal incivility, 71% had experienced psychological incivility, and 57% (4 of the 7 women) had experienced physical incivility.

The interview question around gendered incivility in the construction industry indicates from the interim findings that 100% of the participants experienced some form of gendered incivility in their construction careers. The prevalence of gendered incivility reported in this study far exceeds that reported in other Australian studies. For example, a recent study conducted by the Australian Human Rights Commission (2022) found that approximately 2 in 5 women (41%) had experienced sexual harassment in their workplace in the previous five years. Furthermore, the construction industry was not identified by the Australian Human Rights Commission (2022) survey as one of the Australian worksites where sexual harassment is most prevalent.

The findings of this current study show that the most common type of gendered incivility was personal, and this was experienced both by women working onsite and offsite. The least common form of gendered incivility was physical, however this was likely because almost half the participants worked offsite, where physical incivility was rare. Although one offsite female leader had experienced

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unwanted sexual touching, it occurred at an office Christmas party, rather than during normal working conditions. In contrast, physical incivility was experienced by over half the women who held onsite leadership roles, with one onsite project manager experiencing multiple rapes on the worksite in different projects.

Upon comparing the two cohorts, what is apparent is that the offsite female leaders experienced mostly personal incivility, whilst the onsite female leaders experienced all three types. Further, the majority of these onsite women had experienced more than one form of gendered incivility in their careers. These findings are consistent with those of Timmerman, Gruber, and Morgan (2005) who found that women working in the construction industry (particularly onsite) are subject to the harshest forms of harassment over and above any other male-dominated industry.

Limitations of current study and future research directions

This study includes the analysis of preliminary data collected for the purposes of a larger research project looking at the gendered incivility experiences of women in the Australian construction industry. The limited sample size of 13 means that the results need to be treated as provisional only. The larger research project will seek to interview a total of 20 participants (10 onsite and 10 offsite) across Australia. Another limitation of this research is that the participants are all Australian based so the findings will be centric to the Australian construction industry only. A practical implication of this study is that it can highlight to Australian construction organisations that gendered incivility of some form is still prevalent within the Australian construction industry and that if there is any hope of change, it needs to happen at an organisational level. However, disconcertingly these recommendations are not new. Over 20 years ago both Andrew RJ Dainty et al. (2000) and Fielden et al. (2000) identified that robust organisational gender equality policies led by larger influential construction companies and targeted at removing the masculinised culture of the construction industry, was the only hope the industry had with regards to mitigating gender discrimination (Andrew RJ Dainty et al., 2000). A future direction for research would be to undertake more detailed research into physical intimidation and bullying in the workplace, identifying who is likely to be the recipient, and who is the perpetrator, and exploring the adverse effects gendered incivility has both on a personal, team, and organisational level. Studies could also be conducted to

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identify effective interventions to reduce the incidence of gendered incivility in the construction industry.

In conclusion, this exploratory comparative study of offsite and onsite women leaders in the Australian construction industry is to the authors' knowledge one of the first of its kind. The findings reveal that all women leaders in construction experience some form of gendered incivility, with personal harassment being the most common form of abuse. However, women leaders onsite are more likely to experience multiple types of gendered incivility. Onsite women leaders also experience more severe physical forms of harassment, including major sexual assault, indicating that more research is needed on the understudied experiences of women leaders who work onsite in the construction industry.

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Prioritizing Enablers for Design Thinking in the Healthcare Sector: An Imperative for Successful Implementation

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Prioritizing Enablers for Design Thinking in the Healthcare Sector: An Imperative for Successful Implementation

ABSTRACT: *Design thinking (DT) has become a valuable approach for healthcare organizations to address challenges and enhance patient outcomes. Successful application requires identifying and prioritizing crucial factors. This study reviewed literature and consulted experts to identify twelve enablers complementing the effective use of DT in healthcare. The Decision-Making Trial and Evaluation Laboratory (DEMATEL) method analyzed the interrelationships and impact of these enablers, providing valuable insights into their importance and relationships. Findings prioritize enablers, contributing to the implementation of DT and encouraging innovation and patient-centred care in the healthcare sector.*

KEYWORDS: Design thinking, Healthcare, Enablers, Innovation, DEMATEL

INTRODUCTION

In the fast-paced and ever-evolving healthcare landscape, there is an increasing need for groundbreaking solutions to address the complex challenges faced by healthcare practitioners, providers, and patients (Ginter, Duncan, and Swayne, 2018). Over the past few years, the healthcare industry in India has witnessed remarkable growth and transformative changes. It incorporates a wide range of healthcare entities such as clinics, hospitals, pharmaceutical companies, and medical device manufacturers. According to the NITI Ayog report, the Indian healthcare sector has experienced notable growth, with a strong compound annual growth rate of around 22% since 2016. With this remarkable expansion, the industry is prepared to reach a significant milestone, estimated to surpass USD 372 billion in value. In line with this progress, several innovative initiatives have been launched to foster the adoption of design thinking (DT) across various sectors, including healthcare. Despite notable medical technology and infrastructure advancements, the sector encounters numerous hurdles in delivering high-quality care to all population segments. Challenges, including limited accessibility, affordability concerns, shortage of skilled healthcare professionals, and inefficient service delivery across a diverse and expansive landscape, persist. (Motkuri and Mishra 2020; Turner 2018; Walton-Roberts et al. 2017). The World Health Organization (Selvaraj S 2022) reports highlighted that the Indian healthcare system is grappling with the escalating demand for quality healthcare. In this context, DT is crucial in addressing these challenges effectively.

DT, an empathetic and iterative problem-solving approach, has gained prominence in various industries, including healthcare (Micheli et al. 2019). This human-centred methodology, pioneered by IDEO, a global design and innovation firm and popularized by institutions like Stanford University, has recently garnered significant attention. It emphasizes collaboration and places end-users, such as patients and healthcare professionals, at the core of the problem-solving process. By embracing DT in the healthcare sector, we can foster the development of innovative solutions that elevate the patient experience, enhance healthcare outcomes, and optimize care delivery (Carroll and Richardson 2016). This user-centric approach fosters empathy, encourages creativity, and promotes experimentation, paving the way for more impactful and sustainable solutions (Carmel-Gilfilen and Portillo 2016).

Implementing design thinking principles in the healthcare domain can yield numerous benefits. Firstly, it fosters active patient participation and empowerment by involving them in the collaborative development of healthcare solutions (Hendricks et al., 2018). By comprehending patients' needs, preferences, and obstacles, healthcare providers can create services that align with their expectations. Secondly, DT promotes interdisciplinary cooperation among healthcare professionals. By engaging stakeholders from diverse fields, including physicians, nurses, administrators, and patients, organizations can harness collective expertise to generate innovative ideas and solutions (Roberts et al. 2016). The iterative DT process allows healthcare organizations to test and refine their solutions in real-world settings, leading to more effective and customized interventions (Altman, Huang, and Breland, 2018). In conclusion, the Indian healthcare sector confronts significant hurdles in delivering high-quality care to its populace. Embracing DT approaches presents a promising solution to address these challenges.

Despite its immense promise, the extensive integration of DT in the healthcare domain, specifically within the Indian landscape, encounters significant challenges, impeding its widespread adoption and obstructing the realization of its full benefits. Chief among these challenges is the persisting presence of conventional hierarchical structures within healthcare organizations, which frequently impede collaborative endeavours and stifle the cultivation of innovation. Moreover, constraints pertaining to limited resources, time limitations, and a prevailing resistance to change within the healthcare system all contribute to the underutilization of DT methodologies. Consequently, numerous healthcare institutions need to harness the immense potential of DT to instigate profound and enduring enhancements in patient care, hindering the realization of its transformative power.

This study aims to ascertain the critical enablers of DT in the healthcare domain by employing a DEMATEL (Decision Making Trial and Evaluation Laboratory) technique. By understanding the distinct hurdles encountered within the Indian hospital landscape and devising strategies to surmount obstacles to the efficient implementation of DT, we aim to pave the way for its successful integration. Through this research, we aspire to illuminate the paramount importance of DT in healthcare and ignite a sense of inspiration among healthcare organizations and practitioners, urging them to embrace this emerging methodology to elevate patient outcomes and shape the future trajectory of the healthcare sector. Through this study, our primary intention is to achieve the following research objectives:

RO1: To identify the key enablers facilitating the implementation of design thinking in the healthcare sector.

RO2: To understand the interrelationship dynamics among the enablers of design thinking in the healthcare sector.

Our study is amongst the initial studies on the enablers of DT in the healthcare sector using multi-criteria decision-making (MCDM), i.e., the DEMATEL approach, to determine the interrelationships between the enablers (Raghuvanshi et al. 2022). DEMATEL appreciates the intricate connections among criteria or alternatives, while traditional MCDM often simplifies by assuming independence (Zhou, Huang, and Zhang 2011). It introduces visual clarity through cause-and-effect diagrams, fostering better comprehension. DEMATEL unveils hidden feedback loops, aids in criteria prioritization, and enables robustness assessments (Lin et al., 2018). It displays remarkable versatility by accommodating both qualitative and quantitative data. When confronted with complex, interwoven decision scenarios, DEMATEL shines, offering a more authentic representation than traditional MCDM methods. The findings of this study will contribute to the existing literature on the domain of strategic planning in the healthcare sector. In addition, identifying enablers and developing a causal relationship of enablers help decision-makers to develop and implement effective strategies for DT in the healthcare sector. The further sections of the study are systemized as follows: In the next section, a review of the pertinent literature in the domain of design thinking has been explored in the 'LITERATURE REVIEW.' The methodology adopted for the study has been discussed in the 'METHODOLOGY' section; after that, results and practical as well as theoretical implications of the work have been discussed in the 'RESULTS AND DISCUSSIONS' section, following the same the findings limitations and future research directions are presented in the 'CONCLUSIONS' section of the study.

LITERATURE REVIEW

To ascertain the prospective enablers, we have reviewed past literature on enablers of DT implementation in different contexts. According to the research conducted by Hendricks et al., 2018, the active engagement of all stakeholders in the decision-making process contributes to the development of health solutions that are more effective and promote fairness and long-term viability. Furthermore, their study presents a comprehensive framework for evaluating stakeholder involvement, which can enhance participation rates and facilitate innovative solutions' adoption and long-term success.

Similarly, Birken et al. (2015) contend that garnering support from top-level management is essential to foster middle managers' commitment when implementing DT within healthcare organizations. The top management plays a pivotal role in surmounting the obstacles encountered during the DT implementation process (Gloppen 2009; Leavy 2010). In their research, Cuddihy et al. (2021)

delve into the transformative effects of collaborative engagement with patients and their families, creating an environment conducive to DT. This collaborative approach enables healthcare providers to gain comprehensive insights into problems, generate ideas, establish prototypes, and test solutions. By incorporating the perspectives and experiences of patients, healthcare professionals can harness creative problem-solving techniques to enhance outcomes, reduce costs, ensure safety, and bolster patient satisfaction (Roddy and Polfuss 2020). Adopting a patient-centric approach empowers healthcare providers to implement design thinking methodologies that significantly improve the quality of patient care and overall outcomes.

Furthermore, Zuber and Weberg (2020) highlighted the unique vantage point held by frontline workers within the healthcare system. They possess first-hand knowledge and expertise in patient care and operational processes, which grants them a deep understanding of patient needs, pain points, and operational efficiencies. Leveraging this valuable perspective, frontline workers can actively contribute to developing innovative solutions tailored to address healthcare providers' and patients' specific challenges (Krolikowski et al., 2022). Consequently, their unique insights lead to the formulation of more efficient and effective approaches to healthcare delivery.

In their study, (Eckman, Gorski, and Mehta 2016; Kimbell 2011; Overmyer and Carlson 2019) underscore the significance of resource availability in facilitating the seamless operation of DT. For instance, when designing mHealth technologies, resources such as phone or computer technology, internet accessibility, and a reliable electricity supply in the target area influence the design process. Amann, Brach, and Rubinelli (2018) advocated cultivating a culture that encourages risk-taking and garners support from senior management, thus fostering an environment conducive to innovation and experimentation. Moreover, Vassallo et al. (2023) highlighted the importance of cultivating a culture of flexibility, which empowers healthcare professionals to adapt to evolving patient needs and preferences and remain receptive to novel ideas and approaches. Further, it drives the development of healthcare services and products centred around patients' needs and well-being.

The study of Shaygan and Daim (2023) explores a comprehensive model designed to evaluate the maturity of the continuous learning process and technology management within research centres affiliated with university healthcare units. Continuous improvement fosters practical credibility and yields outcomes that resonate with the organization's familiarity (Rauth, Carlgren, and Elmquist 2014). Drawing attention to the significance of training and development initiatives, (McLaughlin et al. 2019) emphasize their role in facilitating the implementation of DT within the healthcare sector. These programs equip individuals with the essential skills and knowledge required to apply DT principles to their work, fostering the growth of problem-solving abilities and interdisciplinary communication skills (Baum 2007; Kurtmollaiev et al. 2018). Highlighting the benefits of collaboration in healthcare, (Morley and Cashell 2017) delve into the advantages of bringing together a diverse team of healthcare professionals, patients, and families to work cooperatively and cooperatively. This collaborative approach not only contributes to reducing the occurrence of medical errors and improving patient safety but also facilitates the integration of activities and knowledge across various healthcare domains (Lindberg, Noweski, and Meinel 2010).

By conducting an extensive examination of existing literature and with expert opinion, we have discerned twelve enablers for the successful execution of design thinking. Most of these enablers are universally applicable and have garnered significant attention in previous research. Table 1 provides a comprehensive overview of these facilitators. Additionally, we deduce that there is a scarcity of studies that explore and prioritize the factors enabling the implementation of design thinking within the healthcare domain.

Table 1: Key enablers of Design thinking (DT) implementation in the healthcare sector

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|----------------------------|
| Insert Table 1 about here. |
|----------------------------|

METHODOLOGY

This study aims to create a distinctive research framework for implementing DT in the healthcare sector. Firstly, the authors identified the enablers that influence DT implementation through online research using phrases like “Enablers of Design thinking implementation in healthcare,” “Promotors of Design thinking implementation in healthcare,” and “facilitators of Design thinking implementation in healthcare” in various databases mainly, Scopus, Web of Science and PubMed. Moreover, the researchers discussed the enablers identified through the literature review with healthcare experts, and ultimately, they narrowed it down to twelve enablers. Table 2 presents the profiles of the experts. All the experts were employed in a multi-super specialty or super specialty hospital in and around Delhi/NCR, India, holding diverse roles within their respective organizations and having a minimum of 5 years of experience in DT. Table 1 lists the twelve key enablers. Furthermore, we utilized the DEMATEL technique to determine the causal relationship between the identified enablers.

Table 2: Demographics of the healthcare experts.

Insert Table 2 about here.

DEMATEL

DEMATEL method, known for its effectiveness in multi-criteria decision-making methods, analyses complex real-world problems (Zhou, Huang, and Zhang 2011). DEMATEL stands as a versatile solution employed across diverse sectors (Li et al., 2021; Lin et al., 2018; Zahedi et al., 2023; Zhou et al., 2021). It finds utility in environmental impact assessment, supply chain streamlining (Khan et al., 2020), healthcare system optimization, financial risk prioritization (Zahedi et al., 2023), and technological innovation assessment. Furthermore, it aids in infrastructural project planning, sustainable energy policy development, manufacturing process enhancement, and human resources management. DEMATEL extends its influence into the realms of market research and consumer behavior analysis. Its power lies in its ability to untangle intricate webs of cause-and-effect relationships, elevating its status as an indispensable tool for informed decision-making in multifaceted domains. It presents the fundamental construct of contextual relationships between system elements. Developed by the Battle Memorial Institute in Geneva, this method aims to solve intricate problems involving interdependent variable relationships (Farooque et al., 2020). It investigates the group of causal factors and measures the relationship on a scale of zero to four (0 - 4). A score of 0 signifies that variable ‘x’ has no impact on ‘y,’ while a score of 4 indicates a significant effect of ‘x’ on ‘y.’ This technique demonstrates the interdependence between two variables. We can summarize the DEMATEL method with the following steps:

Figure 1: Research Framework

Insert Figure 1 about here.

- Step 1: An exhaustive literature review identifies the enablers for design thinking in the healthcare sector. The potential enablers identified are listed in Table 1.
- Step 2: To initiate the direct-relation matrix (A), experts were asked to rank the enablers and construct a pairwise matrix using a comparison scale ranging from 0 to 4. This scale represents the degrees of influence, with 0 indicating ‘no influence,’ 1 representing ‘very low influence,’ 2 denoting ‘low influence,’ 3 indicating ‘high influence,’ and 4 signifying ‘very high influence.’ Utilizing the responses

from the experts, a nonnegative matrix of size $(n \times n)$ is created. To integrate the responses from all the respondents (H), the initial or average direct relation matrix ‘ a_{ij} ’ is formulated using Eq. (1).

$$a_{ij} = \frac{1}{H} \sum_{R=1}^H x_{ij}^R \quad (1)$$

Where, R = number of respondents with $1 \leq i, k \leq H$

Step 3: Construct normalized direct-relation matrix (D):

In the subsequent step, the direct relation matrix is normalized by employing Eq. (2):

$$D = A \times C$$

$$C = \min\left(\frac{1}{\sum_{j=1}^n a_{ij}}, \frac{1}{\sum_{i=1}^n a_{ij}}\right) \quad (2)$$

Step 4: Construct the total relationship matrix (T): The total relationship matrix (T) is calculated by using Eq. (3). Where ‘I’ represents the identity matrix.

$$T = D(I - D)^{-1} \quad (3)$$

Step 5: Constructing a causal diagram: The vectors derived from the summation of rows $[r_i]_{n \times 1}$ and columns $[c_j]_{1 \times n}$ represent the total relation matrix. This results in the establishment of the “prominence” on the horizontal axis ($r_i + c_j$) and the “Relation” on the vertical axis ($r_i - c_j$). If the value of $(r_i - c_j)$ is positive, the enabler is categorized under the causal group. Conversely, if the value of $(r_i - c_j)$ is negative, the enablers are classified under the effect group.

RESULTS AND DISCUSSION

The DEMATEL analysis reveals that top-management support (EN 1), availability of resources (EN 7), training and development programs (EN 11), process visibility and transparency (EN 4), an efficient feedback mechanism (EN 5), data-informed decision making (EN 8), and cross-functional collaboration (EN 12) are part of the cause group, exerting significant influence as the most impactful enablers. The emphasis on top-management support, availability of resources, and training and development programs enhances the understanding of DT in the healthcare sector. Furthermore, process visibility and transparency, effective feedback mechanisms, data-driven decision-making, and multidisciplinary collaboration strengthen the DT in healthcare. These enablers in the cause group can be regarded as the fundamental drivers behind the effect group enablers. Thus, in order to guarantee the effective integration of design thinking in healthcare, it is imperative to prioritize the enablers associated with the cause or influential group. The enablers such as the patient-centric approach (EN 2), empowered frontline staff (EN 3), management reward systems (EN 6), risk-taking culture (EN 9), and continuous learning improvement (EN 10) come under the effect group. The enablers above the x-axis (as depicted in Figure 2) are causal enablers, exerting the most significant impact on the effect enablers below the x-axis. To enable accurate analysis of cause-and-effect enablers, all enablers have been categorized into four distinct zones, namely zones 1, 2, 3, and 4. Zone 1 signifies enablers with minimal significance, indicating weak correlations with other causal enablers. It is worth noting that no enabler falls within this zone in our study. Zone 2 contains enablers with moderate influence on the effect group; however, as illustrated in Figure 2, no enablers fall under this zone. Zone 3 encompasses enablers of utmost importance, generating maximum influence on the effect enablers. These enablers establish strong relationships with the effect group and are considered the most critical causal enablers.

Table 3: Direct relation matrix (A)

Insert Table 3 about here.

Zone 4 comprises effect groups that share significant relationships with causal groups situated in zones 2 and 3. The values of (R+C) and (R-C) provide valuable insights into the interdependencies within the cause-and-effect relationship. The causal group factors play a critical role in influencing the variables of the effect group, showcasing their interconnectedness. Conversely, these causal factors shape and affect the factors of the effect group. According to Table 6, Top management support (EN1) emerges as the most notable enabler among the causal group factors, as indicated by the (R - C) values. Additionally, improvement (EN10) and Continuous learning are the most dependent enablers, considering their prominence value and classification within the effect category based on the relation value. Using the (R - C) values as a benchmark, seven enablers have been ranked based on their positive relational scores in relation to one another: EN1 > EN7 > EN11 > EN4 > EN5 > EN8 > EN12. These causal enablers possess the potential to serve as significant drivers that can exert influence over the entire system. It is essential to prioritize and closely monitor these causal group enablers, as they considerably influence the enablers classified under the effect group.

The top three critical enablers in the cause group for implementing design thinking in healthcare systems are EN1, EN7, and EN11. According to visual representation, Top management support (EN1) significantly impacts effect enablers (see Fig. 2). It provides the necessary resources, aligns initiatives with strategic goals, fosters innovation, and empowers employees, eventually improving patient experiences, improving healthcare results, and causing paradigm shifts in the sector, the findings are supported by the literature (Birken et al. 2015). Availability of resources (EN 7) is the crucial enabler that can impact the effect enablers. In problem-solving approaches for developing a solution, it is critical to possess the resources and capabilities that are highly likely to be effective in finding a resolution (Cummings et al., 2013). DT mandates access to various resources to facilitate the ideation, prototyping, and implementation stages. Adequate financial resources, a diverse and skilled workforce, training programs, design spaces, tools, access to data and research, collaboration opportunities, and a supportive organizational culture collectively contribute to the successful implementation of DT in healthcare. This finding also aligns with the study (Eckman et al. 2016). Developing thorough training and development programs in design thinking for healthcare professionals is crucial to fostering an innovation culture and empowering individuals to apply human-centred approaches to healthcare; the study supports the findings carried out by earlier researchers (Baum 2007; McLaughlin et al. 2019). Process visibility and transparency are essential in implementing design thinking in healthcare; this enabler is vital for stakeholder engagement, trust-building, shared understanding, collaboration, accountability, informed decision-making, and learning. The findings from the respondents support the author's self-contributed enablers to this study.

An efficient feedback mechanism in healthcare is essential since it promotes user-centeredness, allows for continual improvement, and validates design ideas; the findings are consistent with the extant literature (Ogamba and Nwaberiegwu 2020). Data-driven decision-making is a decisive approach to inform and enhance DT in the healthcare sector. By leveraging data and insights, organizations can make more informed and evidence-based decisions throughout the design process. By leveraging data, healthcare professionals can create more impactful solutions that enhance patient experiences and improve healthcare outcomes. The findings from the respondents support the author's self-contribution to this study. Multidisciplinary collaboration in DT involves bringing together professionals from diverse backgrounds, expertise, and perspectives to tackle complex healthcare challenges. By harnessing the strength of multidisciplinary collaboration, healthcare organizations can construct transformative and impactful solutions that address the complex challenges faced in the healthcare industry. The extant literature supports the finding (Morley and Cashell 2017; Vazirani et al. 2005).

Likewise, a thorough investigation needs to be done for enablers that exhibit dependency or are susceptible to other enablers' influence. By embracing a patient-centric approach to design thinking, healthcare organizations can create solutions more aligned with patient needs, preferences, and experiences. It involves actively involving patients and their caregivers throughout the design journey to ensure that healthcare solutions are tailored to their needs. The finding aligns with the extant literature (Cuddihy et al., 2021). Healthcare organizations can benefit from the knowledge and experience of individuals directly involved in patient care by empowering frontline staff in design thinking.

Table 4: Normalized direct-relation matrix (D)

Insert Table 4 about here.

Table 5: Total-relationship matrix (T)

Insert Table 5 about here.

Table 6: Prominence and Relation Values

Insert Table 6 about here.

This strategy boosts staff involvement, gives them autonomy, makes solutions more pertinent and practical, and ultimately improves patient outcomes and experiences. The literature supports the result (Zuber and Weberg 2020). Performance management and reward systems in design thinking refer to mechanisms to recognize individuals’ or teams’ contributions to design thinking initiatives. These initiatives encourage healthcare professionals to participate in design thinking activities actively, contribute to innovative solutions, and drive positive outcomes that enhance patient care, experiences, and organizational success.

Figure 2: Cause-effect relationship among enablers

Insert Figure 2 about here.

The finding aligns with the existing literature (Schmiedgen et al. 2016). Through practicing a culture of risk-taking in design thinking, healthcare organizations can foster continuous innovation and improvement, taking calculated risks, enabling professionals to push boundaries, explore new possibilities, and develop transformative solutions that can positively impact patient care, experiences, and outcomes. The study’s finding is supported by extant literature (Amann et al., 2018). Continuous learning and improvement in design thinking within healthcare refer to acquiring knowledge, skills, and insights and utilizing them to enhance the design thinking approach and its outcomes. It involves actively seeking learning opportunities, enhancing design capabilities, refining solutions, and delivering better patient-centred care. The findings support the study of existing literature (Brouwers et al. 2022; Shaygan and Daim 2023).

Theoretical contribution

Implementing DT in Indian hospitals presents a formidable challenge, influenced by many factors like resource constraints, shortage of skilled professionals, and different regions and healthcare organizations having various readiness levels and receptiveness to DT. The present study addresses a scarcity of studies on DT implementation enablers. This pioneering study explores the influence and intensity of various enablers of DT implementation. Other developing nations aspiring to introduce DT in hospitals may find value in performing comparable studies. Researchers have concentrated mainly on exploring the challenges faced by healthcare organizations, offering a broad understanding. Nevertheless, these discussions frequently fall short of effectively handling the underlying issues.

Furthermore, few studies have explored the facilitators and barriers to implementing DT in healthcare environments (Rahemi et al., 2018). By developing a comprehensive framework, this research aids stakeholders and decision-makers in understanding the pivotal factors that facilitate the effective adoption of design thinking (DT). This study introduces two significant enablers: Process Visibility and Transparency and Data-Driven Decision Making. These two factors positively impact the implementation of DT in the healthcare domain, filling a void in the existing body of research. Process transparency in patient care entails providing patients and their families with a comprehensive grasp of the stages of their healthcare journey. This encompasses elucidating the diagnostic procedures, treatment alternatives, potential advantages, risks, and anticipated outcomes. By ensuring process visibility,

healthcare providers enable patients to make knowledgeable choices regarding their healthcare and actively engage in their treatment plans. Clinical decision-making transparency entails sharing information and the rationale behind medical decisions with patients and involving them in decision-making. It enables patients to comprehend the reasoning behind treatment recommendations, fostering trust between healthcare providers and patients. Administrative process transparency enhances the visibility and comprehensibility of administrative procedures within healthcare organizations. This contains appointment scheduling, billing, insurance coverage, and access to medical records. Transparent administrative processes assist patients in navigating the system more effectively and minimizing confusion or frustration.

Incorporating data-driven approaches in hospital settings involves leveraging patient information, including medical records, laboratory results, imaging scans, and genetic data, to guide individuals' diagnosis, treatment planning, and monitoring. By analyzing this data, healthcare providers can discern patterns, trends, and risk indicators, resulting in more precise diagnoses and tailored treatment strategies. Data-driven decision-making in healthcare administration aims to optimize resource allocation, streamline processes, and enhance operational efficiency. Administrators can identify bottlenecks, optimize workflows, and allocate resources effectively by analyzing patient flow, staff productivity, equipment usage, and financial metrics.

Practical implication

This study has investigated the interconnectedness among these enablers, providing valuable insights for policymakers and decision-makers operating in Indian healthcare organizations. DT is an emerging approach for healthcare professionals to ensure better healthcare services. However, there needs to be more awareness and understanding of DT principles and methodologies, restrictive mindset and culture, training and skill development, limited resources and infrastructure, and patient engagement. Furthermore, it is imperative to cultivate both immediate and enduring awareness of design thinking, considering that most hospitals in India are in the early stages of embracing its principles. Many hospitals are still using traditionally developed interventions rather than DT-based interventions. Hence, it becomes imperative for decision-makers to integrate design thinking (DT) into their strategic approaches and policy formulations. The research framework proposed in this article, which identifies the key enablers of DT, provides decision-makers with a basis to promote DT practices and engage various stakeholders. Key enablers such as a patient-centric approach, top management support, and training and development programs, among others, serve as crucial elements for fostering a seamless DT implementation process. Policymakers should prioritize the inclusion of key enablers when formulating strategies for developing an efficient process of including DT in their hospitals. DT is a game-changer in healthcare strategic planning, with a sharp focus on patient-centricity. It sparks dynamic collaboration between healthcare professionals, patients, and administrators, forging a holistic approach to problem-solving (Rahemi et al., 2018). This creative methodology fuels innovation through rapid testing and adaptive processes. It births patient-centred services, streamlines operations, and elevates quality by iterating solutions and eliminating inefficiencies. Its inherent adaptability aligns seamlessly with the ever-evolving healthcare landscape, fostering enhanced communication and cost-effective strategies. In essence, design thinking empowers healthcare visionaries to craft agile, patient-first, and budget-savvy strategic solutions poised to tackle the industry's ever-changing challenges. This research paper emphasizes that design thinking (DT) can be a realistic approach to steer clinicians, researchers, healthcare designers, and administrators toward a more profound and authentic understanding of the healthcare journey, considering the perspectives of patients, organizations, and other stakeholders engaged in the process.

This research reveals that top management support, availability of resources, practical training and development programs, process visibility, and transparency are essential factors in developing the DT implementation process. In India, private hospitals should shift their focus from solely providing medical treatment to comprehensive care, considering patients' overall well-being. Collaboration between stakeholders is required in DT implementation, which can lead to more inclusive, effective, equitable, and sustainable health solutions. With thoughtful application and acknowledgement of

limitations, it can create innovative solutions that match its patients' and stakeholders' needs and desires, ultimately improving the quality of healthcare services.

CONCLUSION

Over the last decade, hospitals in India have experienced remarkable advancements across multiple domains. There has been a significant boost in healthcare infrastructure, characterized by the establishment of state-of-the-art medical facilities and the integration of cutting-edge technology. However, it encounters obstacles in delivering high-quality healthcare services and patient-centric amenities. The current study identifies twelve enablers of DT implementation based on existing literature and expert opinions. These enablers were evaluated, and interconnections were established with the DEMATEL approach. To the best of our understanding, no prior attempts have been made to determine causal relationships among enablers of DT implementation. This study offers valuable perspectives for professionals and scholars, shedding light on the catalysts that act as drivers or pathways to other enablers. Comprehending these enablers and their interconnections can assist organizations in prioritizing causal factors and, as a result, reduce the emphasis on associated enablers. By concentrating efforts and resources on specific enablers to bolster their impact, overall operational efficiency can be significantly improved.

The findings highlight the crucial role of top management support, training and development program, effective feedback mechanism, process visibility and transparency, availability of resources, data-driven decision, patient-centric approach, empowered frontline staff, performance management, and reward system, practicing a culture of risk-taking, flexibility and freedom, continuous learning and improvement and multidisciplinary collaboration as key enablers for successful design thinking adoption in healthcare settings. By focusing on these enablers, healthcare organizations can navigate the challenges and complexities of implementing design thinking, leading to improved patient outcomes, enhanced healthcare experiences, and sustainable transformations in the healthcare sector. The prioritized enablers provide healthcare leaders and practitioners with a roadmap for enhancing their DT capabilities and fostering a culture of innovation.

The assessment of influence scores in this research paper, obtained from five experts in the industry using the DEMATEL approach, may need to be revised. It is essential to acknowledge that expert bias, perception, and experience are inherent in the modelling and analysis. Therefore, future research should focus on validating these findings through real-life case studies in healthcare organizations that have already embarked on their design thinking journey. Additionally, exploring a Structural Equation Modelling (SEM) approach with a diverse group of respondents could provide further validation for the identified factors.

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Table 1: Key enablers of Design thinking (DT) implementation in the healthcare sector

| Enablers | Brief description | References |
|--|---|---|
| Top Management Support (EN1) | Plays a crucial role in establishing the vision and direction of design thinking implementation | (Birken et al. 2015; Gloppen 2009; Leavy 2010) |
| Patient-Centric approach (EN2) | It establishes a culture that prioritizes patients' requirements and experiences at the centre of the design and delivery of all healthcare services. | (Cuddihy et al. 2021; Roddy and Polfuss 2020) |
| Empowered frontline staff (EN3) | Frontline staff, such as nurses, physicians, and support staff, are at the forefront of patient care delivery and have valuable insights into the challenges and improvement opportunities. | (Krolikowski et al. 2022; Zuber and Weberg 2020) |
| Process visibility and transparency (EN4) | It allows for understanding the status of processes, identifying areas for improvement, and implementing innovative solutions, which are essential to design thinking. | Expert Opinion |
| Effective feedback mechanism (EN5) | It enables the collection of insights, perspectives, and recommendations from those directly affected. | (Ogamba and Nwaberiegwu 2020; Razzouk and Shute 2012; Schmiedgen et al. 2016) |
| Performance management and reward system (EN6) | It gives a culture that encourages innovation, creativity, and perpetual improvement. | |
| Availability of resources (EN7) | Adequate resource availability provides a fertile ground for design thinking to thrive. | (Eckman et al. 2016; Kimbell 2011; Overmyer and Carlson 2019) |
| Data-driven decision making (EN8) | It facilitates a thorough comprehension of obstacles, user-centric solutions, evidence-based validation, risk mitigation, and success measurement. | Expert Opinion |
| Practising a culture of risk-taking, flexibility and freedom (EN9) | It fosters a culture of innovation, agility, and continuous refinement, resulting in healthcare outcomes that are transformative. | (Amann et al. 2018; Kupp, Anderson, and Reckhenrich 2018; Vassallo et al. 2023) |
| Continuous learning and improvement (EN10) | Effectively navigate new obstacles, incorporate feedback, and improve their design thinking practises. | (Brouwers et al. 2022; Rauth et al. 2014; Shaygan and Daim 2023) |
| Training and development programme (EN11) | Investing in extensive training initiatives empowers the employees with the skills and knowledge necessary to implement design thinking. | (Baum 2007; Kurtmollaiev et al. 2018; McLaughlin et al. 2019) |
| Multidisciplinary collaboration (EN12) | It assembles diverse expertise, encourages holistic problem-solving, and stimulates innovation. | (Lindberg et al. 2010; Morley and Cashell 2017; Vazirani et al. 2005) |

Table 2: Demographics of the healthcare experts.

| S. No. | Participants | Designation | Location | DT Experience (In years) | Industry Experience (In years) |
|--------|--------------|---------------------------------|----------|--------------------------|--------------------------------|
| 1 | P1 | VP Operations & Communications | Delhi | 5 | 20 |
| 2 | P2 | HR Head | Gurugram | 6 | 15 |
| 3 | P3 | National Business Head | Gurugram | 8 | 25 |
| 4 | P4 | VP- Business Process Management | Noida | 8 | 15 |
| 5 | P5 | Administrative Officer Health | Delhi | 5 | 10 |

Table 3: Direct relation matrix (A)

| Enablers Code | EN 1 | EN 2 | EN 3 | EN 4 | EN 5 | EN 6 | EN 7 | EN 8 | EN 9 | EN 10 | EN 11 | EN 12 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| EN 1 | 0.0000 | 2.7500 | 2.8750 | 3.0000 | 3.0000 | 3.1250 | 3.1250 | 2.7500 | 3.1250 | 2.8750 | 2.8750 | 3.2500 |
| EN 2 | 1.5000 | 0.0000 | 2.0000 | 1.7500 | 2.1250 | 1.6250 | 1.7500 | 1.3750 | 1.5000 | 2.7500 | 2.1250 | 2.5000 |
| EN 3 | 2.0000 | 3.0000 | 0.0000 | 2.3750 | 2.7500 | 2.0000 | 1.7500 | 2.3750 | 2.6250 | 3.0000 | 2.3750 | 2.3750 |
| EN 4 | 2.3750 | 2.6250 | 2.6250 | 0.0000 | 3.2500 | 3.1250 | 1.8750 | 2.6250 | 2.2500 | 2.1250 | 1.8750 | 2.2500 |
| EN 5 | 2.5000 | 3.2500 | 2.8750 | 2.6250 | 0.0000 | 3.2500 | 1.3750 | 2.8750 | 1.7500 | 3.0000 | 2.8750 | 2.0000 |
| EN 6 | 1.8750 | 2.0000 | 3.1250 | 1.6250 | 2.1250 | 0.0000 | 1.3750 | 1.5000 | 1.8750 | 2.7500 | 2.1250 | 1.3750 |
| EN 7 | 2.2500 | 2.7500 | 2.6250 | 2.0000 | 1.8750 | 1.8750 | 0.0000 | 2.6250 | 2.3750 | 2.3750 | 2.5000 | 2.5000 |
| EN 8 | 2.5000 | 2.5000 | 1.8750 | 2.7500 | 2.1250 | 2.2500 | 2.6250 | 0.0000 | 1.6250 | 2.7500 | 2.2500 | 1.7500 |
| EN 9 | 1.7500 | 2.1250 | 2.3750 | 1.5000 | 1.3750 | 1.5000 | 1.0000 | 1.2500 | 0.0000 | 2.6250 | 1.7500 | 2.0000 |
| EN 10 | 2.1250 | 2.7500 | 3.0000 | 1.8750 | 2.6250 | 2.6250 | 1.5000 | 2.7500 | 2.6250 | 0.0000 | 2.3750 | 2.1250 |
| EN 11 | 2.5000 | 2.3750 | 3.3750 | 2.2500 | 2.8750 | 2.8750 | 1.8750 | 2.6250 | 2.8750 | 3.3750 | 0.0000 | 2.3750 |
| EN 12 | 2.2500 | 2.8750 | 2.5000 | 2.5000 | 2.3750 | 1.6250 | 1.7500 | 2.1250 | 2.1250 | 2.7500 | 1.7500 | 0.0000 |

Table 4: Normalized direct-relation matrix (D)

| Enablers Code | EN 1 | EN 2 | EN 3 | EN 4 | EN 5 | EN 6 | EN 7 | EN 8 | EN 9 | EN 10 | EN 11 | EN 12 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| EN 1 | 0.0000 | 0.0840 | 0.0878 | 0.0916 | 0.0916 | 0.0954 | 0.0954 | 0.0840 | 0.0954 | 0.0878 | 0.0878 | 0.0992 |
| EN 2 | 0.0458 | 0.0000 | 0.0611 | 0.0534 | 0.0649 | 0.0496 | 0.0534 | 0.0420 | 0.0458 | 0.0840 | 0.0649 | 0.0763 |
| EN 3 | 0.0611 | 0.0916 | 0.0000 | 0.0725 | 0.0840 | 0.0611 | 0.0534 | 0.0725 | 0.0802 | 0.0916 | 0.0725 | 0.0725 |
| EN 4 | 0.0725 | 0.0802 | 0.0802 | 0.0000 | 0.0992 | 0.0954 | 0.0573 | 0.0802 | 0.0687 | 0.0649 | 0.0573 | 0.0687 |
| EN 5 | 0.0763 | 0.0992 | 0.0878 | 0.0802 | 0.0000 | 0.0992 | 0.0420 | 0.0878 | 0.0534 | 0.0916 | 0.0878 | 0.0611 |
| EN 6 | 0.0573 | 0.0611 | 0.0954 | 0.0496 | 0.0649 | 0.0000 | 0.0420 | 0.0458 | 0.0573 | 0.0840 | 0.0649 | 0.0420 |
| EN 7 | 0.0687 | 0.0840 | 0.0802 | 0.0611 | 0.0573 | 0.0573 | 0.0000 | 0.0802 | 0.0725 | 0.0725 | 0.0763 | 0.0763 |
| EN 8 | 0.0763 | 0.0763 | 0.0573 | 0.0840 | 0.0649 | 0.0687 | 0.0802 | 0.0000 | 0.0496 | 0.0840 | 0.0687 | 0.0534 |
| EN 9 | 0.0534 | 0.0649 | 0.0725 | 0.0458 | 0.0420 | 0.0458 | 0.0305 | 0.0382 | 0.0000 | 0.0802 | 0.0534 | 0.0611 |
| EN 10 | 0.0649 | 0.0840 | 0.0916 | 0.0573 | 0.0802 | 0.0802 | 0.0458 | 0.0840 | 0.0802 | 0.0000 | 0.0725 | 0.0649 |
| EN 11 | 0.0763 | 0.0725 | 0.1031 | 0.0687 | 0.0878 | 0.0878 | 0.0573 | 0.0802 | 0.0878 | 0.1031 | 0.0000 | 0.0725 |
| EN 12 | 0.0687 | 0.0878 | 0.0763 | 0.0763 | 0.0725 | 0.0496 | 0.0534 | 0.0649 | 0.0649 | 0.0840 | 0.0534 | 0.0000 |

Table 5: Total-relationship matrix (T)

| Enablers Code | EN 1 | EN 2 | EN 3 | EN 4 | EN 5 | EN 6 | EN 7 | EN 8 | EN 9 | EN 10 | EN 11 | EN 12 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| EN 1 | 0.2758 | 0.4133 | 0.4189 | 0.3668 | 0.3930 | 0.3886 | 0.3220 | 0.3672 | 0.3759 | 0.4317 | 0.3712 | 0.3761 |
| EN 2 | 0.2271 | 0.2235 | 0.2824 | 0.2384 | 0.2666 | 0.2476 | 0.2060 | 0.2337 | 0.2358 | 0.3108 | 0.2538 | 0.2606 |
| EN 3 | 0.2843 | 0.3608 | 0.2779 | 0.3001 | 0.3321 | 0.3058 | 0.2435 | 0.3059 | 0.3113 | 0.3733 | 0.3067 | 0.3025 |
| EN 4 | 0.2979 | 0.3550 | 0.3566 | 0.2366 | 0.3491 | 0.3400 | 0.2503 | 0.3161 | 0.3043 | 0.3546 | 0.2975 | 0.3022 |
| EN 5 | 0.3128 | 0.3853 | 0.3779 | 0.3227 | 0.2726 | 0.3565 | 0.2474 | 0.3352 | 0.3039 | 0.3929 | 0.3363 | 0.3079 |
| EN 6 | 0.2431 | 0.2884 | 0.3201 | 0.2413 | 0.2738 | 0.2073 | 0.2012 | 0.2433 | 0.2530 | 0.3191 | 0.2608 | 0.2368 |
| EN 7 | 0.2846 | 0.3462 | 0.3440 | 0.2839 | 0.3015 | 0.2945 | 0.1883 | 0.3058 | 0.2984 | 0.3486 | 0.3031 | 0.2997 |
| EN 8 | 0.2873 | 0.3343 | 0.3196 | 0.2995 | 0.3041 | 0.3017 | 0.2594 | 0.2281 | 0.2740 | 0.3524 | 0.2926 | 0.2752 |
| EN 9 | 0.2179 | 0.2654 | 0.2733 | 0.2157 | 0.2293 | 0.2269 | 0.1726 | 0.2133 | 0.1761 | 0.2882 | 0.2273 | 0.2316 |
| EN 10 | 0.2853 | 0.3512 | 0.3593 | 0.2848 | 0.3261 | 0.3197 | 0.2352 | 0.3131 | 0.3090 | 0.2868 | 0.3045 | 0.2932 |
| EN 11 | 0.3203 | 0.3717 | 0.4003 | 0.3202 | 0.3609 | 0.3540 | 0.2662 | 0.3366 | 0.3423 | 0.4122 | 0.2633 | 0.3256 |
| EN 12 | 0.2758 | 0.3394 | 0.3300 | 0.2884 | 0.3056 | 0.2792 | 0.2313 | 0.2837 | 0.2824 | 0.3471 | 0.2742 | 0.2198 |

Table 6: Prominence and Relation Values

| Enablers | R | C | R+C (Prominence) | R-C (Relation) |
|----------|--------|--------|------------------|----------------|
| EN1 | 4.5005 | 3.3121 | 7.8126 | 1.1885 |
| EN2 | 2.9861 | 4.0345 | 7.0206 | -1.0485 |
| EN3 | 3.7042 | 4.0602 | 7.7644 | -0.3560 |
| EN4 | 3.7602 | 3.3983 | 7.1586 | 0.3619 |
| EN5 | 3.9512 | 3.7147 | 7.6658 | 0.2365 |
| EN6 | 3.0882 | 3.6217 | 6.7099 | -0.5335 |
| EN7 | 3.5986 | 2.8232 | 6.4218 | 0.7753 |
| EN8 | 3.5283 | 3.4822 | 7.0105 | 0.0461 |
| EN9 | 2.7376 | 3.4664 | 6.2040 | -0.7289 |
| EN10 | 3.6683 | 4.2177 | 7.8860 | -0.5495 |
| EN11 | 4.0736 | 3.4912 | 7.5648 | 0.5824 |
| EN12 | 3.4568 | 3.4313 | 6.8881 | 0.0255 |

Figure 1: Research Framework

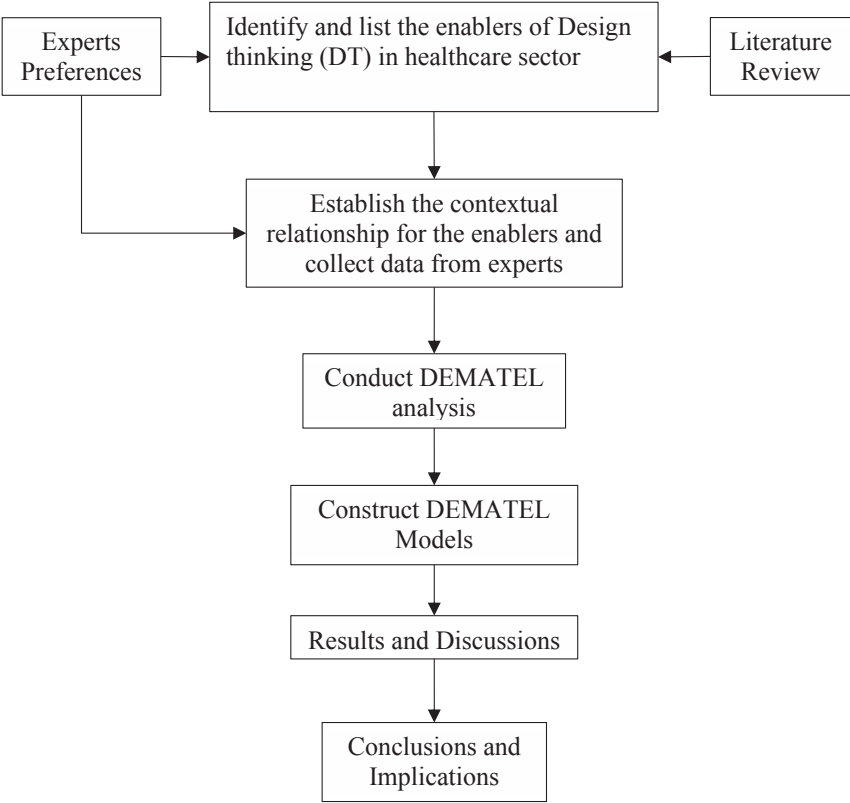
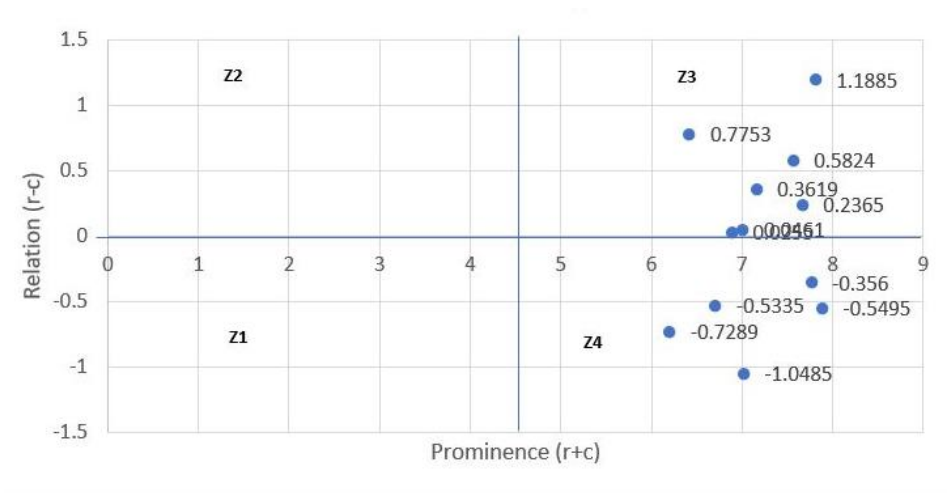


Figure 2: Cause-effect relationship among enablers



Stream 8: Business Processes, Innovation and Supply Chain

**Enhancing business supply chain sustainability performance through
the S&OP process: A Theoretical Framework**

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Stream 8: Business Processes, Innovation and Supply Chain

**Enhancing business supply chain sustainability performance through
the S&OP process: A Theoretical Framework****ABSTRACT**

Supply chain, sustainability and Sales and Operations Planning (S&OP) management have received significant industry and academic focus in recent decades. Supply chains have common processes but diverse objectives. They facilitate operational processes, balancing diverse goals and constraints to convert raw materials into finished products delivered to customers, while managing cross-functional interactions and maximizing value and profit. Challenges from internal and external environments hinder supply chain sustainability performance, and lack of cross-functional integrations affect achievement of profit and environmental objectives.

A systematic literature review (SLT) identified 80 articles, and thematic analysis of the sample underpins existing theories in managing supply chain sustainability performance. This study presents a theoretical framework exploring the relationship between S&OP and supply chain sustainability management factors. Recommendations for future research are provided.

Keywords

Supply chain management, sustainable supply chain management, green supply chain management, sustainable development goals, triple bottom line, sales and operations planning.

1 INTRODUCTION

Supply chain sustainability has been extensively studied across different domains, highlighting its benefits in enhancing business performance (as cited in Parkhi et al., 2015, p. 2), agility, and competitiveness as referred by Machowiak (as cited in Parkhi et al., 2015). Recent literatures have emphasized the importance of responsible and sustainable practices within the supply chain, aligning with the 17 Sustainable Development Goals (Rademacher, 2022). However, further investigation is needed to understand how integrative models and collaborative processes can address various aspects such as risk management, contemporary systems, and tools, and contribute to both business profitability and sustainability (Centobelli et al., 2021).

This study aims to provide a comprehensive analysis and contribute to existing literatures by examining challenges in supply chain processes and their impact on sustainability performance. It explores theories for managing these processes and the role of Sales and Operations Planning (S&OP) in enhancing sustainability and achieving goals. Focusing specifically on supply chain factors the research aims to provide valuable insights for academics and practitioners to improve sustainability practices and align them with organizational goals.

2 LITERATURE REVIEW

2.1 Supply Chain Management

The supply chain is a complex function influenced by factors arising from its connection with global stakeholders. Factors have evolved due to internal business growth and geopolitical disruptions, necessitating a reassessment of modelling processes (Perera et al., 2015). Industries and organizations adopt supply chain management to enhance profitability (Njoku & Kalu, 2015), while sustainability management becomes crucial to balance social, environmental, and economic aspects (Rahardjo et al., 2013). Rahardjo et al. (2013) debate that effective sustainability performance is influenced by the triple

bottom line aspects. S&OP is recognised as integrates people, processes, tools for efficiency (Kumar & Srivastava, 2014).

2.1.1 Definitions of Supply Chain Management

Supply Chain Management have multiple theories when it comes to definitions, from glossaries, papers and books. This study requires a comprehensive definition of supply chain management that encompasses material flow aspects, aligns with existing knowledge, and contributes significantly to the field. The chosen definition must reflect the full scope and be widely accepted in literature and practice.

Although simple but the most appropriate definition that meets these criteria is that Supply Chain involves all activities from the supplier's supplier to the customer's customer, encompassing planning, sourcing, manufacturing, distribution and delivery (Lummus & Vokurka, 1999). Vitasek (2006, p. 154) provides a comprehensive analysis of the definition of Supply Chain Management, investigating its intricacies and details, outlining that encompasses planning, sourcing, logistics, and coordination with partners to integrate supply and demand across companies, driving a cohesive and high-performing business model that links major functions and processes. It includes logistics, manufacturing, and coordination across marketing, sales, design, finance, and technology.

Therefore, supply chain management involves cross-functional relationship management, transforming materials into goods or services, coordinating various logistics activities, and managing the end-to-end flow of information.. (Ballou et al., 2000).

2.1.2 Evolution of Supply Chain Management

It has only been over a half-century since the supply chain management concept has evolved, exploring supply and channel connections, addressing demand variability and constraints (Blanchard, 2021).

The concept of supply chain management originated from logistics management in the military (Habib, 2014), later expanding to address inventory and order fulfillment challenges faced by organizations (Lee & Billington, 1995). It evolved into a model for developing and improving business processes to meet customer needs, with supply chain network integration becoming a key focus in the 1990s (Mukhamedjanova, 2020). Global competitiveness continues to drive the evolution of supply chain management (Parkhi et al., 2015), which is seen as a tool for achieving higher performance, sustainable growth, and profitability (Habib, 2014).

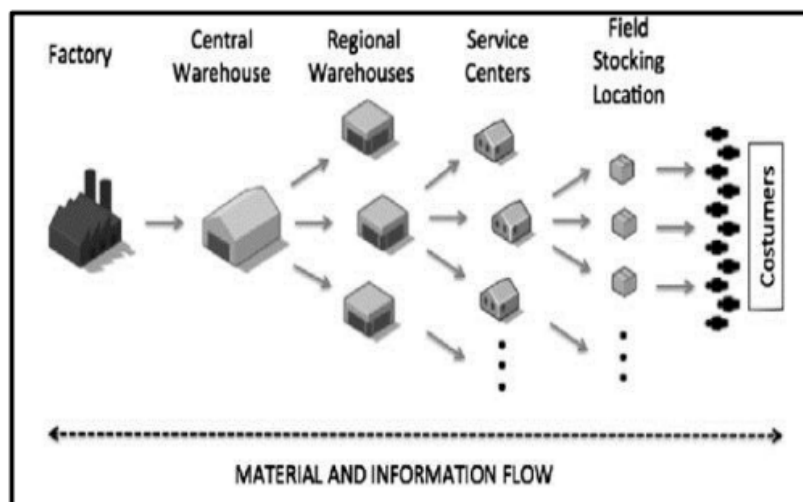
Various theories and frameworks have been developed to optimize supply chain operations (Company, 2022). Systems Theory emphasizes understanding the interconnections and interdependencies within supply chain systems (Wilden et al., 2022). Resource-Based View focuses on leveraging unique resources for competitive advantage (Davis & DeWitt, 2021), while Transaction Cost Economics analyses costs associated with supply chain transactions (Shahab, 2021). Lean Thinking, Six Sigma, and Network Theory are also utilized as frameworks for analysis, decision-making, and process improvement in supply chain management.

These theories and frameworks contribute to enhancing supply chain interactions, reducing waste, improving efficiency, and overall performance in different industries. The constant evolution of supply chain management is driven by the dynamic nature of global supply chains and the pursuit of sustainable growth (Company, 2022).

2.1.3 Supply Chain Framework

The Supply Chain framework comprises multiple layers, including suppliers, manufacturers, distributors, wholesalers, and retailers, with processes, activities, and capabilities driving performance (George & Pillai, 2019). These competencies can be categorized into operational, planning, and behavioural processes, contributing to achieving superior results in the supply chain (Closs & Mollenkopf, 2004).

Figure 1 - Supply Chain framework



Source - (George & Pillai, 2019)

The operational process integrates customers, suppliers, and material flow, while the planning process enables strategies through technology, and the behavioural process emphasizes cross-functional collaboration (Closs & Mollenkopf, 2004). A horizontal strategy further enhances the behavioural process by aligning goals and policies across interconnected business departments for greater success (Blanchard, 2021).

2.2 Current challenges present in the Supply Chain Framework

Over the last 50 years, globalization has driven companies to become more reliant on components from around the world, while also exposing them to external and internal factors (Kaul et al., 1999). Studies in supply chain management focuses on contemporary challenges and drivers (George Papageorgiou, 2020, p. 84) such as disruption, contingency planning, low-carbon operations (Azadegan et al., 2020), Industry 4.0 (Frederico et al., 2019), and knowledge management (del Rosario Pérez-Salazar et al., 2017). Supply chain performance is influenced by factors from the internal and

external environment, including supply chain structure, lead time, information sharing, demand forecasting, inventory policy (George & Pillai, 2019), change management (Blanchard, 2021), digital transformation (Hai et al., 2021), and geopolitical turmoil (Schiffling & Valantis Kanellos, 2022).

These factors have impacted supply chain performance across various markets and industries, creating a competition that goes beyond individual organizations and encompasses the entire supply chain network, in which these and other disruptive events have further highlighted the importance of addressing such factors for successful supply chain management (George & Pillai, 2019).

2.2.1 Internal factors

Despite streamlined supply chain management practices, organizations in various industries often face barriers due to inconsistent implementation during the transformation process. Factors such as technological aspects, project costs, business strategy, and change management play a significant role in impacting successful implementation (Blanchard, 2021). Internal factors include risks that can be transformed into opportunities with proper planning, long process lead times which add complexity, costs, and scope, balancing inventory policies with demand plans to prevent disruptions and variance, and working capital management (George & Pillai, 2019).

Demand forecasting methods and information sharing are critical factors that significantly impact supply chain performance. Accurate data gathering and effective collaboration activities are essential for developing demand plans, reducing uncertainty, and improving decision-making. Transparent forecasting methods and information sharing across stakeholders in the organization lead to cost-effectiveness, affecting inventory costs, production capacity utilization, and customer service (George & Pillai, 2019). However, organizations often face challenges in managing these factors consistently across the supply chain, resulting in inefficiencies and uncertainties (Zhao et al., 2002).

Inconsistent transformation journeys, such as insufficient digital integration, underestimated project costs, undefined business strategies, and inadequate change management, pose unanticipated

challenges for organizations across the supply chain. Working in silos and lacking a shared goal and consistent data source further exacerbate these challenges (Blanchard, 2021).

2.2.2 External factors

Digital transformation initiatives have become crucial for organizational strategies, enhancing agility and competitiveness. Organizations must update their focus and innovate to align with industry trends (Hai et al., 2021). Digitalization offers competitive advantages and promotes sustainability in the supply chain. (Hai et al., 2021). However, excessive emphasis on digital transformation may disrupt stable advantages, creating a turbulent competitive environment (Knudsen et al., 2021). Additionally, Geopolitical turmoil like the Covid-19 pandemic requires adaptations in digital strategies to secure a competitive position and minimize disruptions in supply and demand. (van Hoek & Dobrzykowski, 2021).

Unprecedented outbreaks such as Covid-19 pandemic posed a significant negative impact on supply chains across industries, causing disruptions in the flow of raw materials and finished goods. The Covid-19 pandemic (Sharma et al., 2020), in particular, affected all stakeholders in the supply chain, leading to a surge in demand and widespread supply disruptions (Chowdhury et al., 2021). Similarly, conflicts such as the Russia-Ukraine war have threatened supply chains, as these nations serve as crucial suppliers of raw materials and energy. These events outline the need for organizations to have strategic models that enable them to not only thrive and grow but also survive and stand out during unprecedented times (Schiffling & Valantis Kanellos, 2022, para. 1).

Climate change has also emerged, posing risks and uncertainties for organizations and society at large. It is crucial for organizations to access external information on climate change and use it to influence business leaders in revising structures and contingency management, with the aim of creating agile and sustainable supply chains Furlan Matos Alves et al. (2017). Therefore, an effective process management that anticipates risks and drives mitigation plans is necessary to achieve business targets

and navigate the interconnected challenges arising from both internal and external organizational environments (Jain et al., 2020).

2.3 Supply Chain Sustainability Management

2.3.1 The evolution of sustainability management across the Supply Chain Framework

The integration of sustainability practices into supply chain management arose in response to environmental concerns impacts (Wong et al., 2015). Initially focused on reducing energy consumption, pollution and waste (Centobelli et al., 2021), sustainable supply chain management expanded to encompass environmental considerations throughout the entire supply chain (Rajeev et al., 2017, p. 300). To improve business performance, organizations must integrate economic, environmental, and social dimensions of sustainable development into their supply chain management strategy (as cited in Garcia-Torres et al., 2019, p. 2). By addressing sustainability across the supply chain, organizations can effectively manage their environmental impact and contribute to a more sustainable future (Ahmed & Sarkar, 2018).

2.3.2 The 17 sustainable development goals and their interaction with Supply Chain Management

The 17 sustainable development goals (SDGs) were introduced by the United Nations in 2015 to pursue peace, prosperity, and sustainability. They integrate economic, social, and environmental development and focus on aspects like governance, meeting essential needs, and setting objectives (Biermann et al., 2017, p. 1). Achieving sustainable outcomes requires actions such as minimizing resource consumption, implementing technological innovation, establishing effective policies, and setting robust targets aligned with the SDGs (Fu et al., 2019).

Figure 2 - The 17 Sustainable Development Goals categories



Source - (Fu et al., 2019)

The implementation of the 17 SDGs faces challenges in incorporating them into business plans, requiring discussions and cooperation. Achieving global inclusion and allowing customization of the goals is crucial (Biermann et al., 2017), while understanding risks, management obstacles, and opportunities is vital (Pedersen et al., 2023). Proper integration into business strategy and transformation across various areas, along with measurable performance metrics, are essential for successful implementation of sustainability strategies (Review, 2023).

2.3.3 How the supply chain activities impact sustainability performance

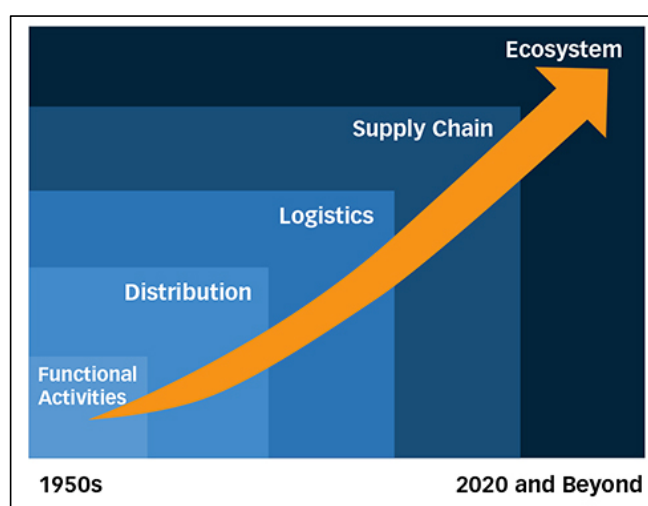
The supply chain, with its complex processes and involvement of stakeholders, contributes significantly to environmental issues such as carbon emissions and global warming (LINDSEY, 2020). The sourcing phase of materials, manufacturing activities (Keoleian & Sullivan, 2012), and logistics, especially transportation, play key roles in environmental impact Ahmed and Sarkar (2018). Poor resource management, low efficiency, and the expansion of logistics driven by digital innovation further worsen carbon emissions, highlighting the need for sustainable practices in the supply chain (Keoleian & Sullivan, 2012).

2.3.4 The key initiatives that industries are engaged with to thrive in supply chain sustainability management

The challenges within the supply chain framework, along with its impact on sustainability, drive industries to innovate and adopt management approaches to address social, environmental, and economic aspects (Azevedo et al., 2012). Models like Lean Supply Chain, Green Supply Chain and Logistic Services practices are widely explored to optimize material flow and manage stakeholders effectively.

Green Supply Chain Management (GSCM) is a strategic model that integrates environmental principles into the entire supply chain, encompassing product design, material sourcing, production, and end-consumer product shelf-life management. It focuses on achieving sustainability performance by considering the triple bottom line (Ahi & Searcy, 2013). On the other hand, Lean Supply Chain (LSC) aims to eliminate non-value-added activities, optimize processes, and reduce costs throughout the supply chain, producing finished products efficiently based on customer demand (Arif-Uz-Zaman & Ahsan, 2014, p. 2). Logistics service has been expanding over the years, and digital innovation initiatives have emerged to enhance efficiency and collaboration within the supply chain ecosystem, ultimately adding value to the end customer (Jr., 2020).

Figure 3 - Evolution of Supply Chain Management



Source - (Jr., 2020)

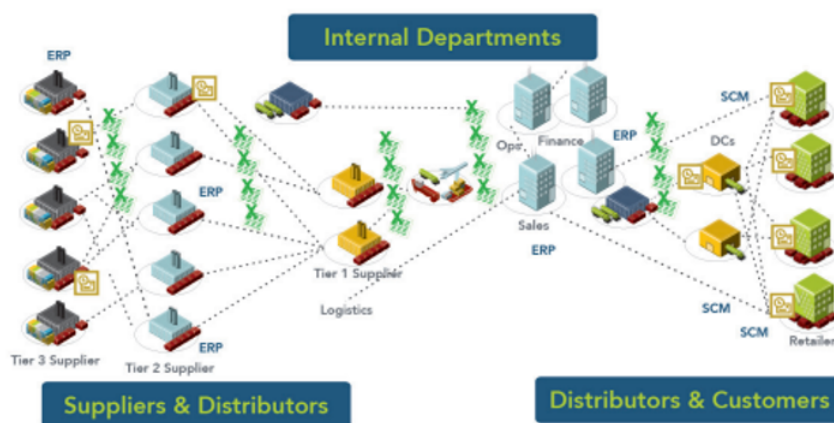
Moreover, sustainable businesses aim to integrate practices that promote the triple bottom line of people, profit, and planet (Azevedo et al., 2012). In addition to Green Supply Chain Management, Lean Thinking and Logistics Service, other theories such as Life Cycle Assessment (Yun et al., 2023), Circular Economy (Di Vaio et al., 2023), Stakeholder Theory (Kayikci et al., 2022, and Risk Management (Landi et al., 2022) provide frameworks for organizations to develop and implement sustainable supply chain strategies, ensuring ethical practices and creating long-term value for stakeholders.

2.4 Sales & Operations Planning

2.4.1 The S&OP model and principles

Globalization creates complexity in business and supply chains, leading to challenges in managing plans due to information fragmentation and inconsistency. Furthermore, various discussions often occur in siloed and ad-hoc forums (E2Open, 2014).

Figure 4 - Globalization challenges: Time, location and complexity

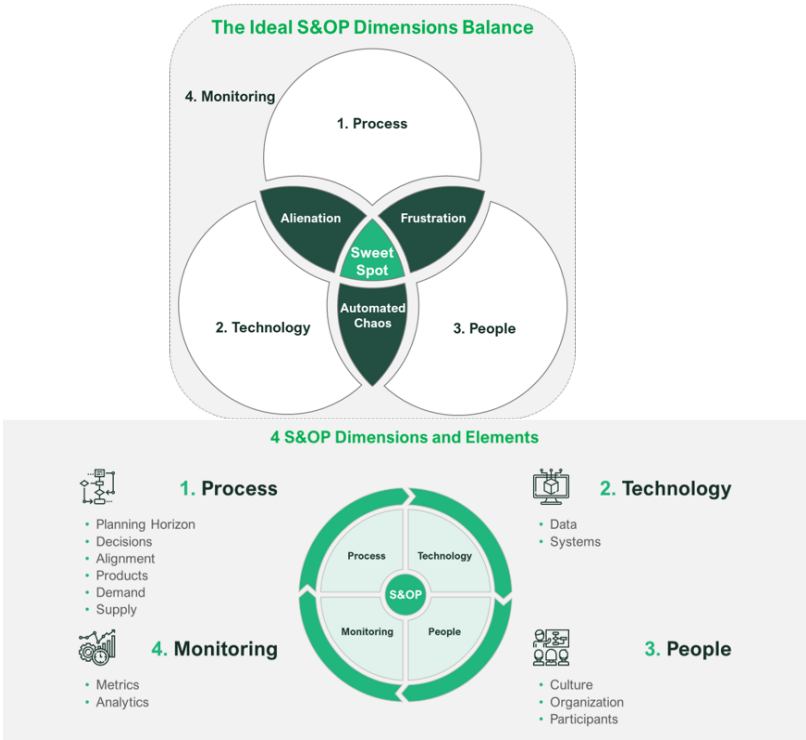


Source - (E2Open, 2014)

Sales and Operations Planning (S&OP) integrates various business plans (as cited in Thomé et al., 2012, p. 2) to manage demand, reduce costs, and enhance customer service . It aligns short and long-term plans to understand supply risks and enables informed decision-making (Kumar, 2016).

Effective S&OP involves cross-functional collaboration, a common language, robust implementation, and the use of key performance indicators (KPIs) (Roscoe et al., 2020). It facilitates sustainability decision alignment and performance management, emphasizing the importance of relationships and a consistent process cycle for a unified business plan and successful stakeholder collaboration effectiveness (Toledo, 2021).

Figure 5 - 4 S&OP Dimensions



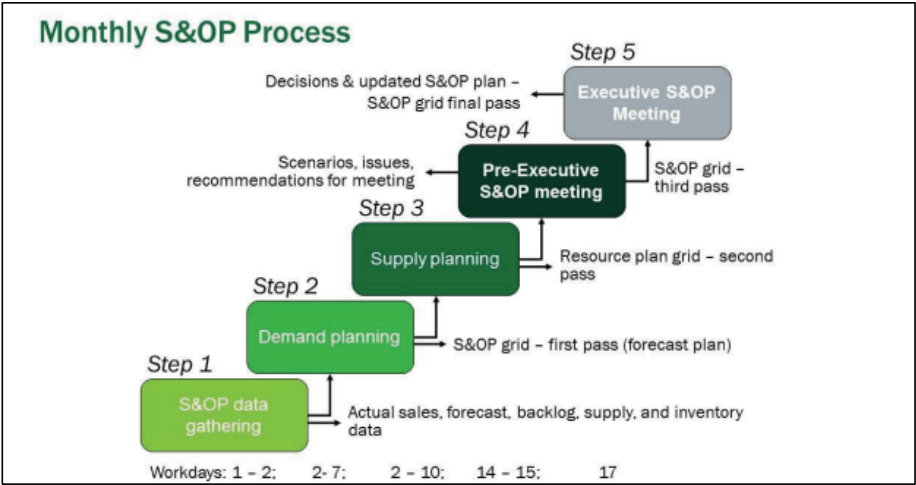
Source (Toledo, 2021)

2.4.2 The S&OP cycle

The primary S&OP steps to support decision-making consists of two streams: Preparatory and Meeting Management (Stahl, 2010). The Preparatory stream involves Data Gathering, Demand Review, and Supply Review. Data Gathering involves consolidating inputs from cross-functional teams, reviewing KPIs, and updating forecasts. Demand Review focuses on sales performance, consensus on the final plan, and addressing risks and opportunities (Stahl, 2010). Supply Review identifies supply constraints and develop a supply plan considering capacity and inventory levels (DemandCaster, n.d.). The Meeting Management stream includes a Pre-S&OP meeting to align the sales plan (Food, n.d.) and an Executive S&OP meeting to approve consolidated results for execution (DemandCaster, n.d.).

Overall, S&OP aims to support decision-making by integrating data, aligning plans, and addressing risks and opportunities through robust collaboration, transparency, and consensus among stakeholders throughout the process.

Figure 6 - Monthly S&OP Process



Source (ASCM, 2020)

2.4.3 The S&OP Stakeholders

S&OP integrates the business and relies on collaboration and alignment among stakeholders to achieve a unified business plan (Pilkington, 2021). The stakeholders are key cross-functional decision-makers from groups such as Executive, Sales & Marketing, Demand, Supply, Finance, Operations (DemandCaster, n.d.) are the key stakeholders groups to be engaged through a robust program for effective S&OP performance.

Change management activities, involving stakeholders from start to finish, listening to their concerns, and demonstrating the benefits and commitment required, enhance their engagement. Clear and consistent communication holds stakeholders accountable (Pilkington, 2021).

2.4.4 Risk management through S&OP

Risk management is an integral part of the S&OP cycle, identifying and mitigating issues that can impact demand, supply, and the overall business plan (Duarte Azevedo et al., 2021). Effective risk management involves measurement, assessment, treatment, and monitoring the risk (Dittfeld et al., 2020). The scope, origin, and likelihood of risks are assessed to determine their impact on the S&OP process. Risks originate from internal operations, external suppliers, or external factors (Dittfeld et al., 2020) such as climate change (Furlan Matos Alves et al., 2017), and pandemics 19 (Sharma et al., 2020) so that monitoring them is crucial to ensure consistent decision-making and a well-balanced business plan. Thus, risk management supports leaders in making effective informed-decisions throughout the S&OP process (Dittfeld et al., 2020).

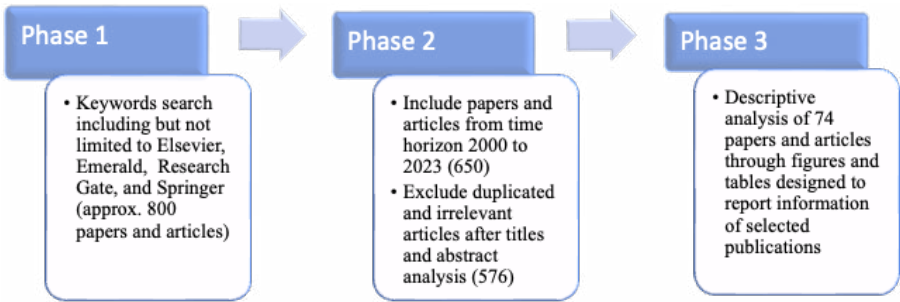
3 METHODOLOGY AND DATA

To ensure a comprehensive and rigorous analysis of the existing body of knowledge in the field of supply chain and sustainability management as well as S&OP principles and applicability, a systematic literature review approach (SLR) was adopted in this study, as it allows for a structured and

replicable process of identifying, evaluating, and synthesizing relevant literature (Durach & Wiengarten, 2017).

The SLR overview is outlined in Figure 10.

Figure 7 - The systematic literature review process



Stage 1 - Identifying papers: Several databases and library services were selected to collect the relevant literature were searched, including but not limited to Elsevier, Emerald Insight, Research Gate and Springer. These databases were chosen based on their reputation for hosting scholarly articles and research papers in the field of business and management (Shashi et al., 2018).

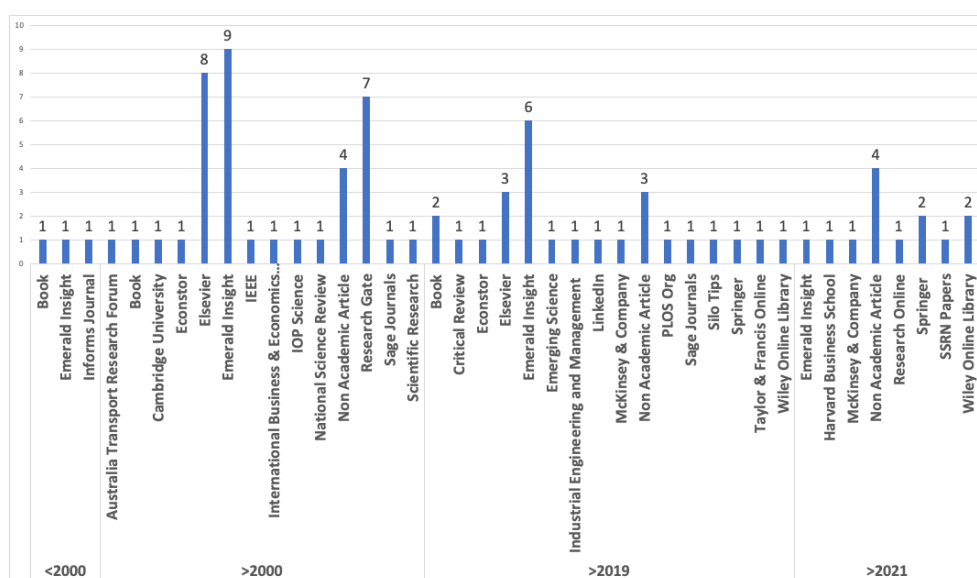
A combination of keywords and Boolean operators was used to develop the search queries. The keywords included terms such as "supply chain management," "sustainability management," "sustainable supply chain management", "green supply chain management", "sustainable development goals", "triple bottom line", "sales and operations planning", "S&OP," "definition", "evolution", and related terms. The search queries were designed to capture articles that focused on the intersection of these areas.

Stage 2 - Paper selection: To ensure the relevance and quality of the selected literature, specific inclusion and exclusion criteria were applied (Durach & Wiengarten, 2017). Aiming to understand the definitions and evolution of theories throughout the last two decades, the inclusion criteria involved articles that were published within a specified time frame between 2000 and 2023, sorted by relevance,

written in English, peer-reviewed literature review papers and full text paper. The search process was a manual search, consolidated into a search log table, and the final selected papers imported into the EndNote software.

The final sample consisted in 80 papers. They were chosen due to excluding papers not associated with management and integration of Supply Chain and Sustainability theories dimensions as well as S&OP principles based on the titles and abstracts. Depending on whether a sufficient sample was reached at the keywords, titles and abstracts level, the selection of papers was narrowed or extended to non-academic articles database and timeframe prior to 2000.

Figure 8 - Paper database after applying inclusion and exclusion criteria



Stage 3 - Analysis and results: After collecting the relevant articles, a thorough analysis was conducted to extract key information and findings. The analysis involved reading the selected 80 articles, extracting relevant data, and organizing them based on the themes and theories addressed in the literature. The findings were synthesized and presented in a coherent theoretical framework, as presented in the following chapter 4.

4 RESULTS AND DISCUSSION

This study aims to understand the scope of Supply Chain and Sustainability Management challenges and practices, and to explore how the S&OP process contributes to improving sustainability performance. This systematic literature review study revealed that many theories have been developed over decades to manage and improve supply chain and sustainability performance across industries. However, many management theories have focused primarily on siloed internal organizational processes and have not considered linking S&OP principles to supply chain sustainability management to overarch business performance management. Furthermore, the existing literature indicates that the use of practice theories for research on supply chain sustainability is limited (Silva et al., 2022). Theoretical frameworks and models that specifically address the relationship between supply chain practices and sustainability performance are lacking. Consequently, management theories have not fully incorporated the dynamic and complex nature of supply chains and their influence on sustainability outcomes.

4.1 A conceptual framework: Enhancing business supply chain sustainability management through the S&OP process

Building on the extended theories of reasoned existing principles and processes management, as support to mitigate challenging factors impacting the upstream and downstream processes, an integrative conceptual framework for the scope of supply chain sustainability management through the S&OP is proposed. The framework outlines the key current challenging factors impacting business' supply chain and sustainability performance, and facilitates to explain the relationships and commonalities between the various key existing theories used to manage such areas through the S&OP process.

A summary of the systematic literature-based framework is visualised in Figure 12.

Figure 9 - Study Conceptual Framework

| Challenging Factors that impact Supply Chain & Sustainability Performance - (Internal & External) | | | | Supporting References |
|---|---|---|---|--|
| Team's Structure (Siloed decision-making) | Information Sharing (Risks and Opportunities) | Demand Forecasting Method | Inventory Policy Control | (George & Pillai, 2019, Zhao et al., 2002, Blanchard, 2021, Hai et al., 2021, Ageron et al., 2020, Knudsen et al., 2021, van Hoek & Dobrzykowski, 2021, Sharma et al., 2020, Chowdhury et al., 2021, Schiffing et al. 2022, Furlan Matos Alves et al., 2017, Jain et al., 2020) |
| Geo-political turmoil (Climate Change/ Covid-19 pandemic/ Wars) | Lead Time & Review Period Length | Change Management | Digital Transformation | |
| Business Management Area | Existing Management Theories | Principles of Respective Theories | Overall Focus | Supporting References |
| Supply Chain Management | Systems Theory | Interconnects systems comprising organizations, processes, and resources | Analysis, decision-making, and process improvement, which contribute to understanding and optimizing supply chain interactions, reducing waste, improving efficiency, and enhancing overall performance | (Nitsche, 2021, Wilden et al., 2022, Davis & DeWitt, 2021, Shahab, 2021, Company, 2022). |
| | Resource-Based View Theory | Identifies and leverages key resources to create a sustainable competitive advantage | | |
| | Transaction Cost Economics | Costs transaction analysis between entities in a supply chain to underpin decision-making process | | |
| | Lean Thinking, Six Sigma, Network Theory | Optimises supply chain interactions, reduce waste, improve efficiency | | |
| Supply Chain Sustainability Management | Green Supply Chain | Integrates environmental thinking and principles into the end-to-end network | Improve transparency, reduce environmental impact, ensure ethical practices, and create long-term value for stakeholders | (Ahi & Searcy, 2013, Arif-Uz-Zaman et al. 2014, Jr., 2020, Azevedo et al., 2012, Yun et al., 2023, Di Vaio et al., 2023, Kayikci et al., 2022, Landi et al., 2022) |
| | Lean Thinking | Optimises the process and reduces costs across the end-to-end process | | |
| | Triple Bottom Line Theory | Evaluates performance based on three aspects: social, environmental, and economic, aiming to create greater business value beyond financial profit | | |
| | Life Cycle Assessment | Evaluates the environmental impacts of a product or process throughout its entire life cycle | | |
| | Circular Economy | Emphasises sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products for as long as possible | | |
| | Stakeholder Theory | Recognizes the importance of considering and addressing the interests of various individuals and groups impacted across the business | | |
| | Risk Management Theory | Systematically identifies, assesses, and prioritises risks, followed by coordinating application of resources to minimize, monitor, and control the probability or impact of negative events, while maximizing the realization of opportunities | | |
| Business diverse functions | S&OP Principles and Fundamentals | Common Goals & Objectives | Aligns an organisation's diverse functions while balancing supply and demand, allowing executives to continuously match high-level financial strategy with day-to-day operational tactics in all departments and keep everything in balance | (E2Open, 2014, Kumar, 2016, Thomé et al., 2012, Grimson & Pyke, 2007, Spittle, 2018, Roscoe et al., 2020, Toledo, 2021, Stahl, 2010, DemandCaster, n.d., Pilkington, 2021, Duarte Azevedo et al., 2021, Dittfeld et al., 2020, Furlan Matos Alves et al., 2017, Sharma et al., 2020) |
| | | Full Integration Monthly Cycle | | |
| | | Involvement from cross-functional stakeholders that drives decision-making process | | |
| | | One Source of Truth = Consistent Data & Transparency | | |
| | | Drive informed decisions and Risks & Opportunities | | |
| | | Clear Outcome = One System, One Process, One Forecast Number | | |
| | | People: Better customer Service & Reduces ambiguity across business | | |
| | | Profit: Provide efficiency and better cost & profit management | | |
| | | Planet: With less impact on our environment | | |

Beyond identifying theories and challenging factors influencing management of organisations’ supply chain sustainability performance, the readiness literature used to develop the theoretical framework suggests the existence of relationships between the referred factors with the S&OP principles and fundamentals, as illustrated in Figure 13.

Figure 10 - Overview of the relationship between supply chain and sustainability theories with S&OP principles and fundamentals

| Business Management Area | Existing Management Theories | Principles of Respective Theories | S&OP Principles and Fundamentals | | | | | | | | |
|--|--|---|----------------------------------|--------------------------------|--|--|--|--|---|--|---|
| | | | Common Goals & Objectives | Full Integration Monthly Cycle | Cross-functional stakeholders engagement that drives decision-making process | One Source of Truth = Consistent Data & Transparency | Drive informed decisions and Risks & Opportunities | Clear Outcome = One System, One Process, One Forecast Number | People: Better customer Service & Reduces ambiguity across business | Profit: Provide efficiency and better cost & profit management | Planet: With less impact on our environment |
| Supply Chain Management | Systems Theory | Interconnects systems comprising organizations, processes, and resources | ✓ | | | ✓ | | ✓ | | | |
| | Resource-Based View Theory | Identifies and leverages key resources to create a sustainable competitive advantage | | | ✓ | | | ✓ | | | |
| | Transaction Cost Economics | Costs transaction analysis between entities in a supply chain to underpin decision-making process | ✓ | ✓ | | | ✓ | | | ✓ | |
| | Lean Thinking, Six Sigma, Network Theory | Optimises supply chain interactions, reduce waste, improve efficiency | ✓ | ✓ | | | | | | ✓ | |
| Supply Chain Sustainability Management | Green Supply Chain | Integrates environmental thinking and principles into the end-to-end network | | ✓ | | | | | ✓ | | ✓ |
| | Lean Thinking | Optimises the process and reduces costs across the end-to-end process | | | ✓ | | | | | ✓ | |
| | Triple Bottom Line Theory | Evaluates performance based on three aspects: social, environmental, and economic, aiming to create greater business value beyond financial profit | | | | | | | ✓ | ✓ | ✓ |
| | Life Cycle Assessment | Evaluates the environmental impacts of a product or process throughout its entire life cycle | | ✓ | ✓ | | ✓ | | | | |
| | Circular Economy | Emphasises sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products for as long as possible | | | | | | | | | ✓ |
| | Stakeholder Theory | Recognizes the importance of considering and addressing the interests of various individuals and groups impacted across the business | ✓ | | ✓ | ✓ | ✓ | | | | |
| | Risk Management Theory | Systematically identifies, assesses, and prioritises risks, followed by coordinating application of resources to minimize, monitor, and control the probability or impact of negative events, while maximizing the realization of opportunities | | | | | ✓ | ✓ | ✓ | | |

4.2 Theoretical Framework & Contributions

This study provides an important contribution to the literature covering existent gaps not yet broadly discussed in this domain.

Researchers of Supply Chain and Sustainability have examined principles and frameworks, but little is known about the integration aspects of these theories with the S&OP principles and model. Although studies have identified that both sustainability and supply chain performance is influenced by the triple bottom line integration aspects as well as its ability to engage and collaborate with stakeholders, a systematic understanding of the scope of sustainability integrated with the S&OP practice is lacking.

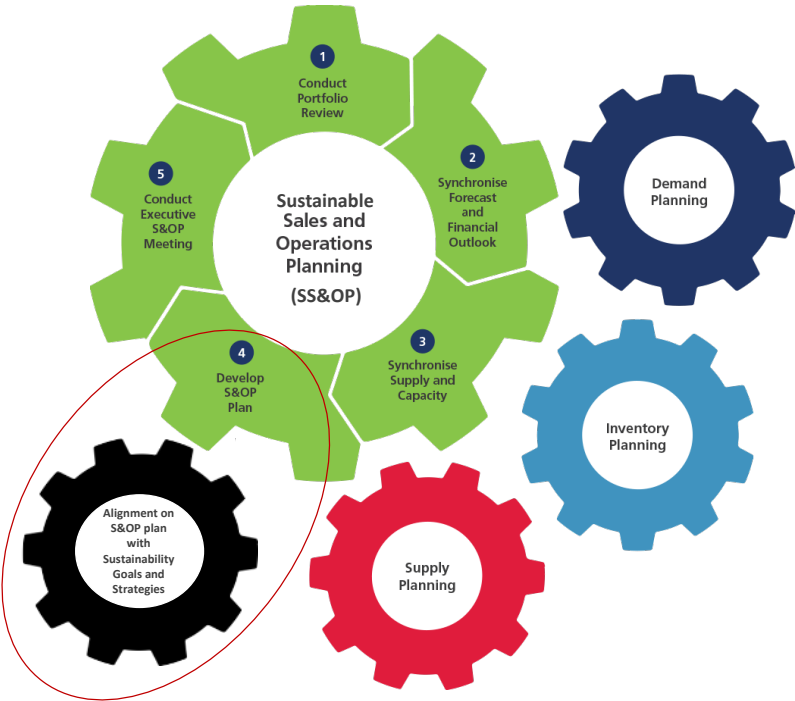
Theoretically, it is important to understand the commonalities between S&OP and Sustainability management, hence this study has identified that resources and stakeholders' management, risk management process, governance, and decision-making process play a fundamental role in managing the the end-to-end organization's supply chain and sustainability processes, in which various and separate theories are used to manage each respective area.

Furthermore, this study contributes to the industry as they will benefit from the findings of this study, providing them access to improved information and the option to determine the applicability of the outcomes of this research in their business processes by integrating sustainability management into the existing S&OP principles and cycle. This conceptual framework highlights the S&OP as a central role to integrate all business decision-making processes into a unified process.

Through analysis and integration of the scattered literature on S&OP and Sustainability practices we have developed a coherent theoretical framework which adds value to literature. This framework enables organizations to comprehend that upon portfolio review, forecasts and financial alignment and synchronizing supply and capacity constraints, the final S&OP plan would incorporate sustainability goals and strategies for an overarching outlook and alignment prior to executive evaluation and approval.

Thus, this study outlines the benefits of using the Sustainable Sales and Operations Planning (SS&OP) model as a single decision-making process management, rather than multiple theories to manage business and supply chain sustainability performance.

Figure 11 - Theoretical Framework



5 LIMITATIONS & RECOMMENDATION FOR FUTURE RESEARCH

Despite paying particular attention to academic rigor, this study has four limitations, which may serve as avenues for future research.

We have identified relevant theories aligning supply chain and sustainability management, however, given the fact sustainability is an evolving field, the conceptual framework was based on limited data considering the S&OP process to manage the supply chain sustainability performance, which may be considered a potential limiting factor. This presents future studies with greater opportunities to investigate deeper into specific S&OP applicability for the purpose of better implementation in the industry.

Although intentional, a second limitation is the narrow inclusion of only Supply Chain factors to systematically analyse the scope and impacts on sustainability. Future studies could expand the research broaden the analyses into other business areas.

Similarly, given this study is conceptual and not based on primary data, another limiting factor is the identification of which industry could this framework be applicable. Thus, we think that a more integrated perspective may help with nuanced understanding success criteria when implementing this practice.

Finally, the current study emphasizes S&OP as an integrated model to manage the business plan from a sales forecast perspective, in which could also contribute to the enhancement of supply chain sustainability performance. However, other practices such as the Integrated Business Planning (IBP) could be explored understanding whether the SS&OP model can be incorporated into it and therefore, result in a more overarching sustainability performance management.

6 CONCLUSION

Supply chain management is challenging due to its constant evolution and the need to consider economic, social, and environmental aspects. The evolving global competition requires supply chains to innovate and pursue continuous growth. Enhancing supply chain processes is crucial as it impacts overall triple bottom line performance and supports sustainability goals.

Additionally, as organizations are confronted with the need to achieve environmental targets, due to the growing emphasis on sustainability performance management agenda, this study analysed associated theories that support the identification, assessment, treatment and monitoring of sustainability performance within the supply chain management. By exploring theories from definitions, evolution, trends and modelling concepts perspectives, it is evident that process integration is a fundamental component of supply chain management connecting various departments and identifying all requirements, risks, and opportunities across the end-to-end process. In addition, process

integration theories have evolved and developed throughout the decades to enable business-enhancement, in which implementation of processes, models, policies, and goals are continuously pursued in organizations.

A successful sustainability management approach requires the collaboration, coordination, and integration of various internal and external stakeholders to evaluate how their processes impact the network sustainability performance and propose solutions that can address them. The S&OP model, however, aims to generate one shared business plan, with a common language and goals by integrating processes where cross-functional stakeholders can connect to align on strategies that will elevate business efficiency.

Bringing together all these findings, the proposed Sustainable Sales & Operations Planning framework aims to provide a comprehensive and structured approach to how organizations can responsibly evolve their performance to enhance profitability and supply chain sustainability.

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Stream 9. Health Management and Organisation

Models of aged care: A scoping review

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Stream 9. Health Management and Organisation

Models of aged care: A scoping review

ABSTRACT: *Recognition of the increasing importance of aged care has seen growing interest in models of aged care. Yet there is limited information about them. To address this, a scoping review was conducted to clarify what is known about models of aged care. From 21,767 articles, 277 were deemed relevant. From these, four key findings are apparent. First, models of aged care are understood in disparate ways and are typically devoid of clear stepwise guidance. Second, most of the articles reported on a multidisciplinary approach. Third, they generally failed to involve carers. Fourth, very few articles reported on studies conducted in a rural area, and none involved Indigenous people. The review concludes with directions for future research.*

Keywords: model of care, aged care, scoping review

As more people live longer, the increasing importance of aged care, worldwide (Rudnicka et al., 2020; WHO, 2022), has seen a burgeoning interest in models of aged care. This is exemplified by research on: ‘a conceptual model of care [of] home staff’s decision-making’ (Harrad-Hyde, Armstrong, & Williams, 2022); models to ‘avoid or improve transitions for older people’ (Testa, Seah, Ludlow, Braithwaite, & Mitchell, 2020), from residential aged care facilities to hospitals; and a model that offers ‘expert outreach services’ to older people who reside in residential aged care facilities (Hutchinson, Parikh, Tacey, Harvey, & Lim, 2015).

While informative, this literature suggests there is limited clarity on what constitutes a model of care for older people. For instance, in their review of ‘models of care for frail older people’ who present to an emergency department, Huang and colleagues (2023) defined a model of care as ‘healthcare delivery’; Wissanji and colleagues (2022) referred to a model of care as ‘care organization and structures’; and while Murphy and colleagues’ (2020) review focused on ‘the virtual geriatric clinic model of care’, it did not appear to define a model of care.

Such opacity reflects other definitions that are not specific to aged care. For instance, in their review of palliative care models, Lockett and colleagues (2014) indicated that models of care provide ‘a framework or system for the organisation of care’; Davidson and colleagues (2006, p. 49) referred to ‘an overarching design for the provision of a particular type of health care service... shaped by a theoretical basis, EBP [evidence-based practice] and defined standards’; and Booker and colleagues (2016) explained models of care with reference to ‘several recurring pillars’ – namely, ‘integrated care models, team functioning and communication, leadership, change management and lean thinking’. While this literature is edifying, it is difficult to ascertain what distinguishes a model of care.

The limited clarity on models of aged care is an issue for personal, social, organisational, and economic reasons (Cullati et al., 2019; Davidson et al., 2006; Hillen, Gutheil, Strout, Smets, & Han, 2017; Recio-Saucedo et al., 2018). At a personal level, unclear understandings can compromise the care of patients and carers, and relatedly, health outcomes. At a social level, they can: obscure the roles and responsibilities of multidisciplinary clinicians, potentially creating opportunities for duplicative effort, burnout, and unmet need. At an organisational level, limited clarity can impair sustainability, effectiveness, and efficiency. And (relatedly) at an economic level, unclear understandings can: create duplicative effort; waste limited resources, including clinician time; or miss opportunities to promote patient and carer wellbeing.

Despite the opacity that surrounds understandings of models of care, one point is apparent – they are processual. That is, a model of care is not represented by a single assessment, treatment, or intervention, but rather, is progressive. As the Agency for Clinical Innovation (2013, p. 3) observed, ‘A “Model of Care” broadly defines the way health services are delivered... for a person, population group or patient cohort as they progress through the stages of a condition, injury or event’.

Given the increasing importance of models of aged care, the aim of this scoping review is to clarify what is known about them. This aim is achieved by: summarising published articles about models of aged care; describing the models depicted in these articles; and synthesising the outcomes and impact presented in the articles.

A scoping review is appropriate because the concept of a model of care and the population of older people are ill-defined. Specifically, there are no universal understandings of what constitutes a model of care (as noted) or an older person (Sabharwal, Wilson, Reilly, & Gupte, 2015). For instance, while the World Health Organization referred to ‘people aged 60 years and older’ (2022), the Organisation for Economic Co-operation and Development (n.d.) suggested that ‘The elderly population is defined as people aged 65 and over’. As such, although relevant academic databases were systematically searched, a scoping review was required ‘to clarify working definitions and conceptual boundaries of a topic or field... [given the] complex, or heterogeneous nature’ of the focus (Peters et al., 2015, p. 141).

METHODS

Guided by Butler and colleagues (2016) as well as the preferred reporting items for systematic reviews and meta-analyses extension for scoping reviews (PRISMA-ScR) checklist (Tricco et al., 2018), a protocol was registered with the Open Science Framework (osf.io/c3mfk).

A search strategy was developed and tested to identify published articles on models of aged care. This

strategy encompassed terms that denoted: the concept of a model of care; the population of older people; and the contexts in which aged care is delivered. For the purpose of this review, a model of care was defined as per the aforementioned definition of the Agency for Clinical Innovation (2013, p. 3). Reflecting international understandings (AIHW, 2022; NHS, n.d.; OECD, n.d.; Office of Disease Prevention and Health Promotion, n.d.), older people were defined as non-Indigenous people aged 65 years and over, and Indigenous people aged 50 years and over (AIHW, 2021). Given the different settings in which aged care can be delivered, context was broadly defined to include acute, secondary, tertiary, and community-based care.

To optimise the relevance of the articles, particularly given the nebulousness of the concept and population, the search was limited to the title or abstract fields. In September 2021, the search strategy was deployed across nine academic databases, given their relevance, via the OVID (EMBASE and Medline) and EBSCO platforms (Business Source Complete, CINAHL Plus with Full Text, Health Business Elite, Health Source: Nursing/Academic Edition, APA PsycINFO, Psychology and Behavioral Sciences Collection, and SocINDEX with Full Text).

Articles were eligible for inclusion if they: presented a model of care for non-Indigenous people aged 65 years and over, or Indigenous people aged 50 years and over; included evidence, broadly defined, about the utility or otherwise of the model, so as to exclude mere descriptions of a model; were published in English, given the translations offered by freely available translation services (e.g., Google Translate) could not be verified; did not represent a letter, a commentary, an editorial, or a protocol; did not represent a review of literature, given the limited detail typically included about specific studies; and were not anonymously authored. As such, to optimise inclusiveness, articles were included, irrespective of publication date, study design, and outcome measures.

Of the 9,394 titles and abstracts singly screened, the full text of 927 articles was singly reviewed. To optimise the veracity of the process, the reviewers: met weekly to discuss exemplars of titles, abstracts, and full texts; as well as cross-screened and cross-reviewed titles, abstracts, and full texts. Following this, 649 articles were excluded with reason, leaving 277 for inclusion. The first author developed a data extraction tool in Microsoft Excel, which the reviewers tested with reference to the full text of included articles and approved following minor modifications. The tool included pertinent information regarding the study and the model of care to address the aim of this review.

RESULTS

Publication Details

Of the 277 articles included in this review, the greatest proportion was published in 2021 (10.1%) with more articles published in this field over the decades. The largest proportion of studies reported in the articles was conducted in the United States of America (33.7%), followed by Australia (11.8%). The top ten nations represented were all high-income nations.

Participants

The total number of participants across all the articles was over 3.7 million ($n=3,787,697$), with study sizes ranging from 3 to 3,181,909 participants. The reported age range was 65 to 106 years; however, some articles did not report participants' maximum age. When a mean age was indicated, the mean of the means was 81 years (mean age range: 71.3 to 92.0 years). None of the articles explicitly focused on Indigenous older people – furthermore, none of the articles explicitly reported on demographic characteristics of Indigenous older people as a separate cohort. Although older people often experience complex comorbidities (Islam et al., 2014; Ramaswamy, 2014; van Dam et al., 2022), over forty percent of the articles focussed on patients with a single condition (e.g., hip fracture, dementia, cardiac disease, surgical disorder) (41.9%, 116/277).

Study Designs

Of the articles that reported the geographical setting of the study (72.9%, 202/277), the largest proportion reported on a study conducted in a metropolitan area (83.7%, 169/202). While few reported findings from a rural setting (5.0%, 10/202), some reported findings from a mixed setting (11.4%, 23/202); in others, the setting was unclear (11.6%, 32/277) or not specified (15.5%, 43/277).

In terms of clinical setting, most articles reported on findings from a hospital (37.9%, 105/277), with a few additional articles specifically reporting findings from the emergency department (1.8%, 5/277). Other settings included the patient's home (11.9%, 33/277), residential aged care (9.7%, 27/277), the community (5.1%, 15/277), other settings (16.6%, 46/277), or multiple settings (13.4%, 37/277). However, the setting for the remaining studies was unspecified (3.6%, 10/277).

The articles reported on diverse study designs, with the highest proportion reporting on a mix of prospective and retrospective observational studies, quasi-experimental studies, non-randomised controlled trials, and pilot studies (49.5%, 137/277). Other articles reported on randomised controlled trials (21.7%, 60/277), pre/post evaluations (12.3%, 34/277), case studies (8.3%, 23/277), cluster randomised trials (5.1%, 14/277), and qualitative studies (3.2%, 9/277). The most commonly reported research methods included the use of clinical measures (54.9%, 152/277) and patient note reviews (45.8%, 127/277). To a lesser extent, articles also reported on the use of surveys or questionnaires (43%, 119/277) and hospital metrics, such as

length of hospitalisation (37.9%, 105/277) or emergency department presentations (23.5%, 65/277). Interviews (36.1%, 100/277) were more common than focus groups (2.5%, 7/277). Sampling methods commonly included convenience sampling (45.8%, 127/277), purposive sampling (32.5%, 90/277), and the inclusion of consecutive subjects (13.4%, 37/277).

Models of Care

Most of the articles reported on a multidisciplinary model of care (80.5%, 223/277), with references to interdisciplinary (7.5%, 21/277), multidisciplinary, (6.9%, 19/277) and comprehensive (4.0%, 11/277) in the titles of some of the included articles. Oft-cited team members included nurses (71.5%, 198/277) and geriatricians (37.5%, 104/277), with other medic involvement comprising non-geriatrician specialists (20.9%, 58/277) and general practitioners (19.1%, 53/277). The most common allied health disciplines represented in the models of care included physiotherapy (29.2%, 81/277) and occupational therapy (20.2%, 56/277), with pharmacists playing a specified role in relatively few models (10%, 28/277). Team members served myriad roles – for instance, they assessed patients, delivered clinical care, coordinated care, and/or provided consultation services to their peers, offering advice. Sometimes team members assumed multiple roles within the model of care. For instance, geriatricians assumed more than one role in 38.6% of the articles that reported on geriatrician involvement (40/104). Similarly, nurses assumed more than one role in 34.3% of the articles that reported on nurse involvement (68/198). Despite the recognised importance of informal carers, very few articles reported on a model of care that explicitly involved them (5.8%, 16). Furthermore, most of the articles failed to present the model of care in a stepwise manner to aid understanding (61.7%, 171/277) – as such, it is unclear whether the models can be readily used elsewhere. For example, in their randomised controlled trial to evaluate an outpatient rehabilitation program, Zusman and colleagues (2019, p. E33) noted that, ‘Participants in the intervention group received usual care plus they received comprehensive assessment and management by the geriatrician, physiotherapist (PT), and occupational therapist (OT). Referrals to other health professionals were on an as needed basis’ – however, there was no additional detail on how the intervention was structured and delivered. Others however, provided detailed stepwise descriptions of team members, intervention, follow-up, and assessment (Arbaje et al., 2010).

Outcomes

Just over half of the articles suggested that the model of care that was examined was beneficial (54.9%, 152/277). Approximately one-third (36.1%, 100/277) reported mixed effects, while some reported no benefit (9%, 25). Benefits included: clinical health outcomes (e.g., adverse reactions, functional decline,

death); patient and/or carer experiences and quality of life; healthcare use (e.g., emergency department presentations, hospital admissions, length of hospital stay, delays to surgery, use of a clinic or community services); as well as the associated costs. Ten articles (3.6%) specifically and primarily addressed feasibility. However, some, whose aim was primarily to assess efficacy, also noted that the described model was feasible (Arendts et al., 2020; Tillou et al., 2014). Another article that aimed to ‘determine if an Emergency Department (ED)-initiated fall prevention intervention can reduce subsequent fall-related and all-cause ED visits and hospitalizations in older adults’ (Goldberg et al., 2020, pp. 1-8), noted reduced six-month ED encounters – however, the authors also indicated that the study was originally designed to ‘evaluate feasibility and initial efficacy to reduce falls’.

DISCUSSION

Given the growing importance of and need for models of aged care (Rudnicka et al., 2020; WHO, 2022), this review clarified what is known about them. This was achieved by scoping the literature to: summarise published articles about models of aged care; describe the models depicted in these articles; and synthesise the outcomes and impact presented in the articles.

From an initial collection of 21,767 articles, 277 articles were identified as relevant to this review. Following an examination of these, four key findings are apparent. First, models of aged care are understood, examined, and reported in disparate ways – furthermore, the articles were typically devoid of clear stepwise guidance on how to implement them. For instance, in assessing the impact of a model of care on clinical and healthcare outcomes, one article reported on the impact of geriatric assessment units via an examination of overarching dimensions of quality of care (e.g., comprehensiveness, informal continuity of care, patient-centred care) across multiple sites (Kergoat et al., 2012). Another reported on a specific structured intervention at a single site – namely the introduction of a discrete novel nurse-led case management approach, without in-depth exploration of the quality of care processes underpinning this (Meisinger et al., 2013).

Similarly, while a small number of articles reported on the feasibility of a model, definitions of feasibility and assessment thereof varied (Eldridge et al., 2016; Lawson et al., 2022). Additionally, some of the articles described the membership of the care team and the delivery of care in replicable detail (e.g., Arbaje et al., 2010), while others painted the picture in broader strokes (e.g., Zusman et al., 2019). Such diversity and the limited instructional advice are likely to cloud how models of aged care are collectively understood.

Second, most of the articles reported on a multidisciplinary model of care. Although current definitions do not explicitly require models of care to be multidisciplinary, this finding might be expected if a

model of care is understood to encompass health services for people as they ‘progress through the stages of a condition, injury or event’ (NSW ACI, 2013, p. 3) – this is because different disciplines are likely to be required to support progress, especially in older people with complex multimorbidities and biopsychosocial needs.

Third, although most of the articles recognised the importance of multidisciplinary care, they generally failed to harness carers’ expertise. This potentially compromises the quality of care offered by the models reported in the articles, given the recognised value of carers (National Academies of Sciences, 2016).

Fourth, although people who reside in rural settings and/or identify as Indigenous typically experience poor health (Henning-Smith, 2020; Power et al., 2020; Probst, Eberth, & Crouch, 2019; Rui, Qiufang, Feifei, Maoni, & Luyao, 2021; Yashadhana, Pollard-Wharton, Zwi, & Biles, 2020), very few articles reported on studies conducted in a rural area, and none explicitly involved Indigenous people. Limited scholarly attention on these priority populations suggests their poor health is unlikely to change.

Despite the importance of the aforesaid findings, four methodological limitations warrant mention. First, although comprehensive, the search strategy might have failed to identify all relevant articles, given the varied terms used to describe older people and models of care. Second, because the articles were limited to those published in English, the review failed to report on articles published in other languages. Third, although a reasonable minority of the articles indicated that the model of care examined was not beneficial, journal interest in positive outcomes (Mlinarić, Horvat, & Šupak Smolčić, 2017) is likely to bias the findings reported in this review. Fourth, the use of a single screening and review process might have compromised the findings, despite the strategies introduced to reduce, if not avert the associated limitations of this approach.

Notwithstanding the aforesaid limitations, the findings reported in this review have clear implications for scholars interested in aged care and/or models of care, generally. Specifically, they offer fertile ground for future research to clarify: what constitutes a model of care and whether the adoption of a standardised definition would be helpful; the factors that help or hinder their positive effects – for instance, the preferred organisational culture(s) and leadership style(s); how carers can be meaningfully involved; and the models that are likely to benefit priority populations, including people who reside in rural settings and/or identify as Indigenous.

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Student engagement in online programmes: Some experiential insights

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Student engagement in online asynchronous programmes: Some experiential insights

ABSTRACT:

Student engagement is strongly associated with improved learning outcomes in higher education. Over the years, emerging digital technologies have helped enrich student engagement processes and outcomes. But the launch of many online asynchronous programmes by universities resulted in new challenges for student engagement. Our submission outlines the design of a new business master's programme launched in 2021. Student engagement is particularly challenging as the programme is delivered in an asynchronous format. Using an autoethnographic approach, the authors share the beneficial student engagement methods and the challenges faced. Our findings will have implications for others delivering online programmes to meet the increasing demand in the current market.

Keywords:

Higher education, student engagement, educational technology, asynchronous learning, online learning, discussion posts.

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INTRODUCTION

Since the COVID-19 pandemic started in early 2020, higher education has increasingly used online platforms to deliver courses. Even as the world settles into the New Normal by coping and adapting to the challenges of the pandemic, higher educational intuitions have embedded online learning formats in regular courses. In some cases, dealing with declining attendance rates became necessary. Parallely, many universities have launched online degree programmes that are taught entirely online and asynchronously to capture the student market segment that consists of people who got used to working from home (WFH) or were not able to take a break from work but seek to improve their employability skills. For instance, higher education institutions such as Harvard, NYU, Boston, Sydney, Auckland, Massey, and Otago have active online and asynchronous formats of offerings.

After completing the degree programmes, graduates are usually propelled into the real world. Remote work and online collaboration have become the main feature of contemporary workforce practices. According to McKinsey Report 2021 on the Future of Work (Lund, Madgavkar, Manyila, Smit, Ellingrud and Robinson, 2021), the pandemic accelerated existing trends in remote work and automation and required people to switch occupations. Therefore, learning skills that are relevant to the industry helps graduates enter the workforce seamlessly. An important aspect of higher education is student engagement which received attention among educators and researchers in the pre-COVID-19 era (Bond, Buntins, Bedenlier, Zawacki-Richter & Kerres, 2020). Some studies have also examined the impact of digital technologies. But what is the role of student engagement when the degree programmes are offered entirely online, and students access resources asynchronously? How do students engage when not meeting their teachers or peers in person? How different is it in terms of its impact? The authors seek to answer these questions by examining the student engagement strategies deployed in the Master of Business Development programme offered entirely online and studied asynchronously by students at the University of Auckland. We believe that the findings will

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have implications for others delivering online programmes and have an opportunity to benefit by sharing our experiences.

We present our paper in six sections. First, we review the literature on student engagement. Second, we present the research question. Third, we discuss the methodology used for this study. Four, we present our findings and discussion. Five, we present the limitations of our study. Finally, we draw implications and future research.

LITERATURE REVIEW

Among others, higher education aims at students' personal development and equips them with the skills to meet ever-changing workforce demands. In this context, student engagement has received increasing attention among educators and researchers as they seek ways to improve student learning outcomes in higher education (Kahu, 2011; Bond et al., 2020). Student engagement brings energy and effort into the learning environment to create a community of learners through collaboration and active learning. Engagement activities help students develop cognitive and behavioural capabilities (Mazer, 2013; Sun, Liu, Lin, & Hu, 2023).

In recent years, new challenges have arisen due to the impact of the COVID-19 pandemic. These include students working online, working in isolation, and with limited opportunities for collaboration. Evidence shows that pandemic lockdowns adversely impacted students' social and communication skills, who fear oral presentations and public speaking (Grieve et al., 2021). Students are also limited in their ability to build relationships and collaboration skills. Other challenges include mental well-being and self-directed learning.

On the other hand, adult learners have increasingly used online tools and social media networks. Given this context, many students prefer studying online for graduate or undergraduate programmes, as it offers flexibility in work and study. In this context, gaining professional skills is critical as increasing remote work demands. Gaining engagement skills relevant to an online environment during their studies will prepare them well for the needs of the future of work. Students

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look to universities to equip them with these skills critical for the modern work environment. This learning should translate to student learning through experience beyond the classroom, and they can begin to self-organise (Coulson & Harvey, 2013). According to Class, an online platform for higher education, students increasingly prefer a hybrid learning style due to flexibility, accessibility, personalisation and preparedness for the Future (Class, 2023). Students could participate in reflection, which helped them make sense of their own experiences and translate it to meaning at the most critical level. It requires students to engage in class activities in person or online actively. Earlier, Nicol and Macfarlane-Dick (2006) proposed providing high-quality feedback, encouraging teacher and peer dialogue, and giving more opportunities to close the performance gap.

Student engagement helps to close the performance gap by connecting it to active learning methods, technology, or assessments (Exeter et al., 2010). As higher education evolves, teachers must consider the diverse student population, the need to recognise students' engagements, and the value of developing knowledge. In addition, new challenges emerge, such as quality, equity and pedagogical issues (Maringe & Sing, 2014). Teachers must engage students using various active learning techniques to address these challenges. These techniques translate beyond the classroom and into the workplace for students. Students must engage and learn beyond the classroom, leveraging learning outside the educational organisation. This engagement means teachers must pivot learning opportunities and connections to assessments to draw students into the content more meaningfully.

Through a student-centred approach, teachers can allow students to explore and have more responsibility for their learning (McCabe & O'Connor, 2013). Teachers must empower students to drive their knowledge and "let go" of more traditional teaching. This approach lends itself well to courses that provide opportunities for students to be flexible and have reflective and adaptable teachers. This teaching method empowers students and allows them space to build knowledge and skills with the teacher as the facilitator.

Student engagement is the time, energy and resources used to enhance learning. In addition, these are the activities designed specifically to achieve student outcomes (Exeter et al., 2010). One of

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the challenges in the online environment is creating a rich space for students to reflect and relate concepts to everyday workplace behaviours. A high level of engagement is required to gain this depth, and in the online, asynchronous environment, it must be carefully curated. Student engagement goes far beyond classroom walls and needs to translate to all future learning modes.

RESEARCH QUESTION

As we focus on emphasising the critical role that student engagement can play in higher education, we seek to address the following research question:

How do we help students have the opportunity to be engaged, think critically, support, and be respectful while increasing their knowledge and skills?

RESEARCH APPROACH

In this study, we used the research approach of autoethnography (McIlveen, 2008). Specifically, we use a collaborative autoethnographic approach to reflect critically on our experiences in teaching on Auckland Online, a fully embedded online asynchronous programme at the master's level. This approach also ensured reflexivity (Delamont, 2009) as each author read/shared others' accounts to include in the paper. In this process, we also use collaborative reflection (Martin and Double, 1998; Elper et al., 2013) to examine our teaching with fresh viewpoints to improve it. Throughout the course design and implementation process, we maintained the reflective practice as followed by Godber and Atkins (2021). Reflective practice can mean many things (Loughran, 2002). To us, it solved the problem of collaboration and engagement in the online classroom. We shared our experience in the Canvas/course design activities and how it ensured students were engaged throughout the course's life cycle.

The experience of teaching the course alone did not provide us with learning; reflection on the experience was an important part of our practice. We could reflect on the assessments and design to see its impact on engagement, collaboration, and student learning. This study of online activities gave us a practical assessment to reflect upon and compare to see if we could replicate it in other

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disciplinary course areas (Mackay & Tymon, 2013). This context could provide us with the frame of reference and conditions for our practice to investigate what students are saying we should do to prepare them, collaborate, and encourage engagement. As we continue to work in environments of uncertainty in academia, this agility and reflection will be an important aspect of teaching to approve upon continuously.

FINDINGS AND DISCUSSION

The purpose of the study is to increase student engagement in online programmes. Both authors were course coordinators for two courses delivered in 2022 and 2023. Through our online course experience, we want to share the best practices of engagement and learning from the experience of the fully online environment based on our collaborative autoethnographic reflections. These courses had diverse ways in which student engagement could occur. We identify and discuss different methods of student engagement and the outcomes of such engagement.

Weekly discussion posts

During the ten weeks of the term, students watch four live one-hour webinars by invited experts such as healthcare, cyber security, startup CEOs, etc. After watching them, each student must make an Initial Post of not less than 150 words on the webinar in the context of the module topics. The following week, they should respond by a Reply Post to others' comments. In the process, they share their knowledge, learning, critical thinking, and respectful academic rebuttal or endorsement of other opinions. This interaction demonstrated their ongoing engagement in the course for at least eight weeks. Students have access to all these Initial Posts and Reply posts for the whole class, which becomes a critical source of information for their learning.

Assessments

There are two assessments: traditional essays/reports on pre-determined topics. However, one of the assignments requires students to select the four best contributions to the discussion forum (Initial Posts and/or Reply Posts) and upload them for assessment. This process ensures the quality of

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their contributions in the discussion forum each week. The students must carefully and critically engage with the four webinars and other resources to maximise their learning and make quality contributions.

Teacher role

Our role as teachers was to remind and encourage students with a 'To-Do List' each week about Posts and Reply Posts. We used this as an opportunity to prompt them to participate and encourage them based on previous performance or activity on the forum. We also send canvas announcements each week about the topic for the week, webinar date/time (with the link) and general encouragement as each student works alone on their own time.

In addition, we had a discussion thread on the LMS (Canvas) for each assignment separately. Students could ask any question. While students could reply to these questions, it is interesting that many students react to them, creating a truly engaged learning community.

Personalised emails

Many students wrote direct emails seeking clarifications, sometimes mentioning that they didn't feel confident writing the question in the class discussion forum for fear of being judged. There were also several requests for guidance or examples, or clarifications. Compared to the traditional face-to-face courses, the volume of these emails is two-three times which was surprising but understandable, in retrospect.

Our experience shows that the students who contributed regularly will have time to reflect on the content, their learning and perform better in the course. In addition, they could demonstrate their learnings differently and more creatively to their classmates. These findings resonate with Bond et al. (2020), who identified that participation/interaction/involvement is the main reason for student engagement. In our classes, we found that some students contributed more than the minimum required number of contributions or words; they were the ones who were more immersed in the conversation and engaged with their classmates to learn from their peers. Sometimes, they addressed them or even

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referred to their posts in the discussion. The lecturers found that engaging students regularly created an enriching environment to foster independence and critical thinking, as evident from the quality of assignments submitted. Students thrive in an atmosphere of clarity and immediacy from the teachers, which impacts their engagement (Mazer, 2013). We found that clarifying post expectations and immediate feedback or prompts effectively kept the engagement levels high. Overall, student engagement allowed students to learn and build rapport even in the virtual classroom without ever meeting each other.

But other challenges need to be addressed; they are identified and briefly discussed below:

Missing/defaulting students

Students need continuous motivation and stimulation assessment tasks to stay engaged in a course (Exeter et al., 2010). These requirements become more challenging in a large course and even more so in an online asynchronous environment. A few students did not meet the weekly contributions requirements to the discussion forums. We had to identify them (particularly difficult in a large class) and encourage them to contribute as required each week on the discussion forum. They also need to be followed up. Usually, some of these students also happen to be the ones seeking extensions for their assignment submissions.

Need for administrative support for large classes

When the class size is large, there will be a need for closer monitoring and a higher volume of email communications. Hence there is a need for dedicated support in assisting the smooth delivery of the course. An important point to note is that student retention was high with these programmes, so typically, students stayed the whole quarter and completed the course. For example, one of the authors' courses had 50 students, and all 50 students completed the quarter and the course. This sustained enrolment meant that we could not account for large courses' attrition and needed continued support throughout the course.

CONTRIBUTIONS AND LIMITATIONS

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It is no wonder that those who regularly contributed were the ones who performed well in the end. Those who wrote to the teachers via email or asked questions came next as they understood the requirements. Those who did not make regular contributions and did not communicate with the teachers are those who lagged in the course outcomes.

Our experience shows that a learning community can be facilitated and developed even on online platforms without ever meeting each other (although this is at the extreme end). The way students access resources and learn is not different from the way they work at work remotely on various projects, where they are given a task and clear guidelines to perform.

As Nicol and Macfarlane-Dick (2006) suggested, we practised regular teacher and peer dialogue, using every opportunity as a key to support and develop the learner's self-regulating ability. In this online environment, it was key for the students to contribute and drive their learning experience by utilising the structure for collaborative learning. We did provide positive encouragement through the prompts or teacher-led posts to stimulate conversation. Although we found that the teacher intervention required was minimal, encouragement was sometimes needed. This intervention would also help close the gap between current and good performance to guide students in clarifying the expectations. As previously mentioned, we used feedback to improve teaching by assessing the forum and discussion activities' success (and learnings).

IMPLICATIONS

As indicated above, the lecturers used the feedback to improve teaching and change the courses based on the learnings from the first iteration. There were a few learnings from the first process of assessing the discussion posts. One key part is that instructors need administrative support to keep track of the posts. Teachers must continually check in to ensure students continue to post, keep the conversation going, and do not feel fatigued. We needed to continue to prompt and remind them to make posts and comments on each other weekly. Also, there must be space to follow up on students falling behind or less engaged. Assessing and identifying these students takes time, so this should be allowed in course planning.

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We propose two suggestions to stretch students' learning further: continued engagement incentives and connection to course outcomes. Firstly, some students dropped out at the end once they were sure they had the 'four best posts'. Giving a small proportion of marks that can affect their grade (5 – 10%) would be advantageous to ensure that students continue to be engaged and contribute till the end of the course.

Secondly, the best posts can be included, and students can then add a section on the key learnings to these posts. A more meaningful connection between the course and the learning outcomes would exist. Students could provide more context and depth on these posts and relate them to the course learning outcomes, which was not something we integrated initially. This connection would provide deeper meaning and reflection for the students when they submit their best posts at the end of the course. They would need to consider it throughout the course and critically think about defending the close ties.

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Cover Page

Exploring the Leadership Galaxy: Understanding the Cohesive Dynamics in Distributed Leadership

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Exploring the Leadership Galaxy: Understanding the Cohesive Dynamics in Distributed Leadership

ABSTRACT

Leadership is frequently misunderstood in the literature, transcends ordinary discussion and operates in an environment characterized by the interaction of individuals for a common goal. Notably, the efficacy of leadership has been a persistent topic of debate, especially during times of crisis.

Understanding the dynamics of a leadership environment is crucial considering the increasing scepticism towards leadership in various fields. The aim of this paper is to explicate the rationale behind the metaphorical reference of the leadership display environment as a 'Leadership Galaxy' and to identify the pivotal force, akin to the sun in a galaxy, that maintains equilibrium within the system. The conceptual paper investigates whether leadership is a purely personal characteristics or it is distributed among multiple stakeholders.

Keywords: Leader, Leadership, Leadership galaxy, Leadership influence, Distributed leadership

Overview

In the current volatile, uncertain, complex, and ambiguous global environment there is a need for creative leaders in agile organisations to meet the challenges of world. 'Leadership in modern organisations is more dynamic then ever' (Kurtulmus, 2019, p.11). Effective leadership is essential in determining strategic agendas, policy development, and actions within an organisation specially in a crisis. However, leadership is complex, and it is an 'essentially contested concept' (Case, 2013, p.60). Grint (2001, p.1) conceded

in 1986, before I first began to study leadership in a serious manner, my knowledge of it was complete. I knew basically all there was to know ... I should have stopped then, because ever since that time my understanding has decreased in direct proportion to my increased knowledge: in effect, the more I read, the less I understood.

Leadership does not exist in vacuum. Apart from leader there are other internal and external stakeholders such as followers, competitors, peers, influencers/ tacit leaders, superiors, and external environmental forces and factors such as the leaders in similar field/industry, industry associations, media, public opinion, global trend, which may also affect how a leader leads.

It is, therefore, imperative to have a clear understanding of what is leadership, leadership dynamics or direction of leadership influence and the central force that holds, influences and drives different stakeholders in the leadership domain. It is crucial to comprehend the way these components are unified by the principles of attraction and the defining factors of the core of the entity that holds these bodies together. Like the aforementioned cosmic configuration, organizations have internal mechanisms that govern their motion, coherence, and operation. In this context, leadership can be compared to the force of gravitation, and henceforth the term 'Leadership galaxy' is used to discuss leadership environment and the dynamics within leadership domain.

Current Understanding

The issue of leadership is much broader than what we discuss and the concept of leadership remains 'elusive and enigmatic' (Meindl, Ehrlich, & Dukerich, 1985, p.78). Leadership has been studied in a wide range of disciplines such as history, theology, anthropology, philosophy, sociology, organisational behaviour, psychology, political science, and public administration to name a few. This led to diverse definitions of leadership in the literature. Three hundred and fifty leadership concepts have been catalogued within the literature of organizational behaviour (Hoff, 1999). Gahan et al. (2016, p.9) argued that 'surprisingly difficult to find an agreed-upon definition of leadership. Furthermore, historically leadership has been viewed in terms of trait (i.e., Cox, 1926; Derue, 2011; Drake, 1944), behaviour (Blake & Mouton, 1964; Stogdill, 1974), situational (Fiedler, 1978; Greenleaf, 1977; Kotter, 1990), contingency leadership (Kriger & Seng, 2005) and value-based leadership (Copeland 2014) perspectives. According to Yammarino, Dansereau, and Kennedy (2001, p. 149), understanding the intricate essence of leadership poses considerable difficulties. Meindl et al. (1985, p. 78) conceded that 'it has become apparent that, after years of trying, we have been unable to generate an understanding of leadership that is both intellectually compelling and emotionally satisfying'. Furthermore, there is a lack of clarity on the dynamics of leadership or the influencing process of leadership if it is considered as an influencing process. Is leadership unidirectional, or mutually exclusive, what is the direction of influence? Is the influencing process downward, upward or lateral? These questions are also relevant in crisis.

Coombs (2007, p.164) defined crisis as ‘a sudden and unexpected event that threatens to disrupt an organization’s operations and poses both financial and reputational threat’. There is a widely accepted agreement that leadership has a significant influence on employee effectiveness and can bring about significant changes in both societies and organizations in terms of determining strategic directions, policy development, and organizational activities, particularly in times of crisis. (Kurtulmus, 2019; Wilson, 2020; Yukl, 2012). The contemporary leadership literature (Samad, Jerjawi & Dadich, 2023; Wu, Shao, Newman, & Schwartz, 2021) has incorporated the concept of 'crisis leadership' to portray leadership in situations of crisis, such as the recent COVID-19 pandemic. Considering the global efforts to overcome the COVID-19 it is imperative to cultivate a thorough comprehension of the dynamic leadership terrain, denoted as the 'Leadership Galaxy', and to scrutinize the interrelationships among the constituents within this galaxy.

Research Question

In view of the above this paper poised to address the following Research Questions (RQ):

RQ1: How leadership influence is exerted?

RQ2: How stakeholders in the leadership galaxy exist?

RQ3: What is the central force that keeps the leadership stakeholders in a harmony within the leadership galaxy?

Research Approach

This conceptual paper is adopted a qualitative approach based on a literature review that draws on scholarly and grey literature in this area. The qualitative approach allows researchers to ask questions those cannot be easily explored through quantitative approach and therefore facilitates answering specific research questions which may then become a useful tool for exploratory research using mixed method approach.

Findings and Analysis

Leadership: A person Vs shared leadership

According to theorists, an individual who occupies a significant role within a predetermined organizational framework can be classified as a leader (Ahlquist & Levi, 2011; Hogan & Kaiser, 2005). Hogan and Kaiser (2005, p.171) argued ‘leadership is usually defined in terms of people who

are in charge of organisations and their units; by definition such people are leaders'. Traditional leadership literature considers leaders as an individual or person and looked at leadership in terms of individual trait or behaviour such as charismatic leadership (Weber, 1947), Transformational leadership, (Avolio & Bass, 1991), Transactional leadership (Avolio & Bass, 1991). Ethical leadership (Brown, Travino, & Harrison, 2005) and Authentic leadership (Luthans & Avolio, 2003). 'Leadership narratives (particularly in the business and political world) often point to the 'visionary' nature of the leaders and their charismatic and persuasive communication skills' (Case, p.61). Classical leadership literature posits that the act of leadership involves utilizing influence to achieve predetermined goals (Bauer, & Green, 1996; Dansereau, Graen, & Haga, 1975; Northouse, 2012; Yukl, 2006). Yukl (2006) argues that leadership encompasses the deliberate use of influence by an individual to direct others, emphasizing the persuasive aspect inherent in leadership positions. In the same vein leadership is also described as an influencing process where an individual influences the behaviour of others toward the achievement of some goals or goal (Northouse, 2012). Grint's (2001, p.4) constitutive approach of leadership argued leadership 'is very much a pro-active affair for leaders. It is they who actively shape our interpretation of the environment, the challenges, the goals, the competition, the strategy, and the tactics; they also try and persuade us that their interpretations are both correct – and therefore the truth –and, ironically, not an interpretation but the truth'.

In the organisational behaviour literature, it is argued that influencing process may not only be downwards only but upwards and lateral as peer influence also (Nagle, nd). While leader influences others around them within an organisation or context, leaders may have higher power whom they must follow or may have to compete others within similar organisations. Barker, Johnson, and Lavalette (2001, p.5) identified leadership as 'simultaneously a purposive activity and a dialogical relationship' emphasizing that leadership involves relationship between multiple stakeholders. Leadership is also about how a leader manage upwards. This is necessary to give confidence to the followers as well as contributing upwards to facilitate achievement of organisational goals. Likewise, people often display leadership among peers or competitors within same organisational or context. Therefore, leadership is mutually exclusive where leaders may exert influence on their followers,

superiors and peers and vice-versa. Figure 1 answers the RQ1 on the direction of leadership influence.

Insert Figure 1 about here

However, in the contemporary leadership literature, the notion of distributed or shared leadership has gained considerable prominence (Gronn, 2002; Spillane, Halverson, & Diamond, 2001). The concept of distributed leadership presents a compelling alternative to conventional, hierarchical leadership models by advocating for a more egalitarian approach to leadership. The paradigm asserts that leadership is not limited to a sole individual or a select group, but rather is a collaborative phenomenon that transcends formal leadership positions and is "distributed" among diverse members throughout an entity (Spillane, 2006). Distributed leadership is a leadership approach that involves the sharing of authority and decision-making responsibilities among team members. According to Bennett, Wise, Woods, and Harvey (2003), distributed leadership is not an individualistic approach where one person takes charge and directs others, rather, it is a collaborative process that operates within the framework of relationships, rather than individual actions. Despite its positive aspects academics also identified complexities of distributed leadership in negotiation, consensus building and decision making (Currie, Boyett, & Suhomlinova, 2009; De Dreu, 2008; Lumby, 2019). Shared leadership also refers to a collaborative process in which several team members engage in guiding and directing the team, with the objective of influencing and steering their peers towards improving team performance (Bergman, Rentsch, Small, Davenport, & Bergman, 2012). The individual possessing the highest level of knowledge and skill in a specific domain may assume the role of leader for a given task or stage, thereby guaranteeing that the most proficient person is overseeing every facet of the undertaking. Therefore, it may be argued that while there is an individual usually described as a 'Leader' within an organisational or work context, there are other stakeholders within and outside of the organisation who have considerable influence on how leaders behave in a given situation. It is worth exploring the notion of leadership and contemplating whether its essence is centered on individuals or rather manifested within a particular setting or entity.

Leadership Galaxy

Within the field of astronomy, the term ‘Galaxy’ refers to a substantial congregation of astronomical entities, encompassing stars, nebulae (comprising gas and dust), black holes, and dark matter, that are intrinsically linked through gravitational interactions. These celestial bodies revolve around a common centre of mass and retain their individual trajectories within the larger constellation (Mo, van den Bosch, & White, 2010). Each of these components has a significant impact on the collective behaviour and structure of galaxies (Hodge, 1992).

Analogous to the influencing dynamics of planets and stars within a galaxy the present model of leadership entails a shift in emphasis from the traditional notion of an individual leader to the dynamics of relationships and interactions that exist within a team or organization. The extensive scope of the term reflects the effectiveness of metaphor in both language and cognition, a concept that has been thoroughly examined by Lakoff and Johnson (1980) in their influential publication ‘Metaphors We Live By’. Again, ‘Galaxy’ is utilized allegorically to represent a collection of distinguished individuals who, like the celestial entities within a galaxy, occupy a distinct position and significance within a broader, interrelated structure. Therefore, the term ‘Galaxy’ can also be utilized metaphorically to refer to a noteworthy assemblage of prominent individuals or entities. According to Kovecses (2010), the utilization of metaphoric language provides an innovative and lively approach to express intricate or abstract ideas. The scholarly examination of a galaxy has been extensively scrutinized in academic literature, as evidenced by the publication ‘Galaxies in the Universe: An Introduction’ authored by Sparke and Gallagher (2007).

As narrated earlier in this paper, leadership involves multiple stakeholders for attainment of a common goal (Barker et al., 2001; Northouse 2018). As per Northouse's (2018) perspective, the process of leadership is intricate and encompasses various facets, including power dynamics, the requirements of the followers, and the environmental factors in which leadership is demonstrated. Individuals who are assigned the roles of 'leaders' or 'bosses' tend to view themselves as possessing greater authority and exhibit an increased sense of obligation towards accomplishing tasks (Tourish, 2013). Conversely, individuals who identify themselves as followers often perceive a lower level of

responsibility for the outcomes of organizational activities. The aforementioned differentiation, however, poses the possibility of strengthening hierarchical dichotomies and may potentially compromise the self-governance of adherents by disproportionately amplifying the power endowed upon leaders. The notion that an excessive focus on leader-centric perspectives may have negative consequences is a widely held view in the field of leadership studies, as evidenced by the observations of numerous scholars, including Kellerman (2008). Uhl-Bien, Marion, and McKelvey, (2007) argue that leadership is a dynamic process. As per the author's definition, leaders are individuals who exhibit behaviours that influence the dynamic nature of a situation and its resulting consequences.

There is no denying the fact that a leader plays a pivotal role for the success and failure of an organisation and influences activities of others around them, leaders do not lead in a vacuum. However, as discussed in earlier sections of this paper leaders themselves are also influenced and often guided by many external forces or stakeholders who may also influence or shape leader behaviour within organisation. Besides the organisational forces such as suppliers, customers, interest groups, competitors within the industry, media and the government may also shape how a leader may operate in each circumstance. For example, with regards to influences of external bodies such as the media, Kevin Rudd, the Former Prime Minister of Australia in a senate inquiry mentioned that Australian politicians are 'frightened of Murdoch media (Hurst, 2021). Klikauer and Link (2021) also talked of media influence in the UK Prime Minister and the government.

The proposed model (i.e., leadership galaxy) posits that leadership is a multifaceted phenomenon that extends beyond the traditional dichotomy of leader and follower. Instead, it emphasizes the intricate interdependence among diverse individuals within an organizational context, each making distinctive contributions towards a shared objective. The figure (Figure 2) below represents different stakeholders that may influence how a leader may lead within an organisation besides positioning the leader within the greater spectrum of work environment where a leader may operate. The figure also explains RQ2 by portraying the dynamics of leadership galaxy and relationship among multiple stakeholders within the leadership galaxy. Each element of the leadership galaxy exert influence on others while maintaining an equilibrium in the leadership galaxy.

Insert Figure 2 about here

Leadership and Power

Finally, the discussion above also established ‘Power’ as the central force in the leadership galaxy and at every level of leadership there is an element of power. Human beings possess an inherent sensitivity to the existence or lack of power, which subsequently influences their conduct. McClelland (1965) proposed that individuals are motivated by their desire for achievement, power, and affiliation, thereby elaborating on the aforementioned concept. The significance of power and legitimacy has been emphasized in seminal leadership literature throughout history, as noted by Burns (1978) and Machiavelli (1950/1932). Leadership necessitates possessing essential components such as power and influence to facilitate team cohesion (Whetten & Cameron, 2010).

The concept of power is an inherent element of leadership, which is supported by previous academic literature (Tourish, 2013; Kurtulmus, 2019; Samad et al., 2023; Samad, Reaburn, Davis, & Ahmed, 2015; See, Morrison, Rothman, & Soll, 2011). According to See et al. (2011, p.27), there is an increasing amount of research indicating that individuals in positions of power experience significant impacts. In order to effectively inspire a team, a leader must convert power into influence through the acquisition of employee approval (Whetten & Cameron, 2010).

The concept of power encompasses an individual's capacity to influence others, which is derived from their ability to regulate factors such as incentives, penalties, and assets. The potential origins of power in leadership are varied and may include elements such as one's position, access to resources, financial status, level of knowledge, and interpersonal connections (Albrecht, 2006; Quinn, Faerman, Thompson, & McGrath, 2015). Samad et. al.'s (2015) research has revealed a crucial nuance to the prevailing understanding, highlighting that power cannot be simply conferred by one's position alone. On the contrary, the authentic origin of authority is rooted in the backing obtained from the individuals who are being guided. The provision of such support is of utmost importance for a leader to exert effective influence on others and successfully attain the desired goals. Whetten and Cameron (2010) have identified several sources of individual power, which comprise of expertise, personal

charisma, effort, and legitimacy. Expertise is a potent instrument for leaders as it provides them with the essential knowledge to steer their teams through the assigned tasks. An exemplar of this concept is observed in the role of a technical team leader within a software enterprise. The individual's authority emanates from their extensive comprehension of the software development process and the associated technologies. This proficiency positions them as a dependable and credible source of direction for their team constituents.

The concept of power in leadership is complex and can have both positive and negative outcomes, depending on the ethical orientation of the leader. Individuals who possess a feeble moral identity and attain positions of power are prone to exhibiting detrimental leadership behaviors (DeCelles, DeRue, Margolis, & Ceranic, 2012; Kurtulmus 2019). Kurtulmus (2019, p.14) has coined the term "dark leaders" to refer to individuals who possess specific communication skills that they may exploit to establish an illusory sense of authority or manipulate the perceptions of their subordinates.

The concept of relational leadership has been increasingly prominent in modern leadership studies, as it regards leadership as a collaborative and relational process between leaders and their followers (Uhl-Bien, 2006). This perspective provides a more nuanced comprehension of leadership dynamics by recognizing the mutual impact between leaders and followers. Individuals in leadership roles possess the ability to elicit loyalty, compliance, and attentiveness from their subordinates, thereby granting them the power to exert influence and facilitate coordination of collective efforts. On the other hand, it is common for adherents to seek direction from their superiors. Due to this rationale, it is incumbent upon leaders to exercise their authority prudently, guaranteeing that their impact fosters a constructive and favorable environment, rather than engendering conflict or discouragement.

Furthermore, the significance of leadership is frequently ascertained by the conviction of followers that the same individual is acknowledged as their leader by others. The aforementioned observation provides clarification regarding the crucial role that followers assume in conferring legitimacy upon leaders and facilitating the coordination of actions within a group. This assertion is supported by scholarly works such as Ahlquist and Levi (2011), Coleman (1980), and Levi (1997). Leaders frequently obtain their authority and credibility from their adherents. Therefore, in response to RQ3 of

this paper, it may be argued that power keeps the leadership stakeholders in a harmony within the leadership galaxy. The intricacy of leadership surpasses the traditional perspective that centers on the leader and necessitates a deeper recognition of the significant contribution that followers make to the leadership procedure.

Contribution and Limitations

This conceptual paper makes a substantial contribution to the body of knowledge concerning leadership. By explicating the various dimensions of leadership influence and elucidating the intricate dynamics within the metaphorical ‘Leadership Galaxy’, this paper encourages researchers to delve deeper into these intriguing areas of leadership. The unique comparison of leadership dynamics to the mutual gravitational forces of galaxies offers a novel perspective and paves the way for additional exploratory and quantitative research. This model may prompt the investigation of the potential mutual exclusivity and interdependence among the diverse stakeholders within the leadership galaxy, allowing for a broader comprehension of the complexities of leadership in crisis situations.

Despite the substantial contributions made by the paper, it is essential to acknowledge its limitations. This paper’s primary limitation is that its assertions are primarily supported by an exploratory study of the existing literature. This method provides an in-depth understanding of the theoretical framework and the current research landscape, but it lacks empirical validation. As a result, although the arguments presented in the paper are logically sound, they require additional validation via quantitative research methodologies. Future research incorporating empirical data collection, statistical analysis, and hypothesis testing could support the presented arguments and aid in refining the leadership galaxy model (Creswell & Creswell, 2017). Figure 2 highlighted examples of a few stakeholders who may influence or be influenced by leader behaviour in any situation including crisis. In reality, there are numerous stakeholders in the leadership galaxy who may be incorporate those in future research.

Implications

This conceptual paper's persuasive arguments have a wide range of implications that will benefit multiple stakeholders in the field of leadership. By analysing the complexity and dynamics of the metaphorical 'Leadership Galaxy', the paper offers insights into the evolution and operation of leadership in various organizational contexts or circumstances. This paper expands the existing theoretical framework and provides an alternative lens for leadership researchers to examine leadership dynamics. The use of analogy emphasizes the parallels between two distinct concepts, namely the gravitational force that directs celestial bodies and the leadership force that directs groups or organizations (Gentner, 1983). Akin to the fundamental force of gravity, leadership provides a stable structure within an organization. The entity in question follows a course that fosters coherence, thereby fostering a sense of unity and a shared mission among its members. Consequently, this analogy strengthens our understanding of the crucial role that leadership plays in entities, similar to how gravity operates in our universe. The metaphorical portrayal of the 'Leadership Galaxy' paves the way for new research avenues to further deconstruct and comprehend leadership influences, the interplay of various stakeholders, and how leadership strategies can evolve. This may stimulate additional empirical research and result in the development of more refined and comprehensive leadership theories (Bryman, 2011). Professionals in leadership positions can benefit from gaining an in-depth understanding of leadership dynamics, which can inform their decision-making, team management, and strategy implementation strategies. Understanding the interconnectedness and mutual exclusivity within the leadership galaxy can aid in the efficient allocation of resources, the resolution of conflicts, and the creation of a growth- and innovation-promoting work environment (Bass & Riggio, 2006). Finally, the paper's findings may be useful for anyone who aspire to be a potential leader. The metaphorical comparison of leadership dynamics to a galaxy can help demystify and make more relatable and understandable the complex aspects of leadership. This could inspire more knowledgeable and effective leadership practices at all levels, from community organizations to multinational corporations (Goleman, Boyatzis, & McKee, 2001). In conclusion, the paper's findings serve as a comprehensive resource for leadership education, training, and development and as a guide for understanding the complex dynamics of leadership.

Conclusion

In the past few decades, leadership theories have undergone a significant shift. Previously, the title of ‘Leader’ was frequently bestowed upon a singular individual within an organization. This paradigm shift entails abandoning an individual-centered perspective in favor of a more distributed or collaborative approach to leadership. This approach to distributed leadership highlights the significance of collaborative relationships and interactions in accomplishing organizational goals. It recognizes that leadership is not the sole responsibility of a single individual, but rather a group effort that capitalizes on the diverse skills, knowledge, and experiences of all team members. It is essential to recognize, however, that leaders do not operate in isolation. Instead, their leadership style and effectiveness are situated within the organizational context, which is influenced by a variety of factors spanning from interpersonal relationships to institutional culture. In addition, the dynamics of leadership influence are intricate and multidirectional. They are not restricted to the conventional top-down paradigm in which a leader exerts influence over his or her followers. Instead, influence is also exerted upward from followers to superiors, reflecting the perspectives and requirements of those who are being led. Simultaneously, peers at the same level of leadership can exert influence on one another either to promote mutual growth or to obtain a competitive advantage. These intricate dynamics are analogous to the motion and influence of celestial bodies within a galaxy. All stakeholders, from top executives to frontline employees, proceed along their own paths within the leadership galaxy, much like celestial bodies orbiting the galactic core. These parties continuously influence and are influenced by one another, comparable to the gravitational force between celestial bodies. This analogy highlights the complexity of leadership influences and the mutual exclusivity that is common in leadership contexts. In conclusion, to comprehend leadership, one must recognize its dynamic, complex, and multifaceted nature, which are exquisitely encapsulated in the metaphor of the leadership galaxy.

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FIGURES

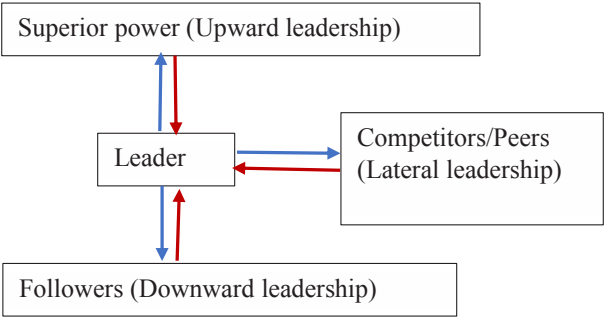


Figure 1: The nature of leadership influence (Author generated)

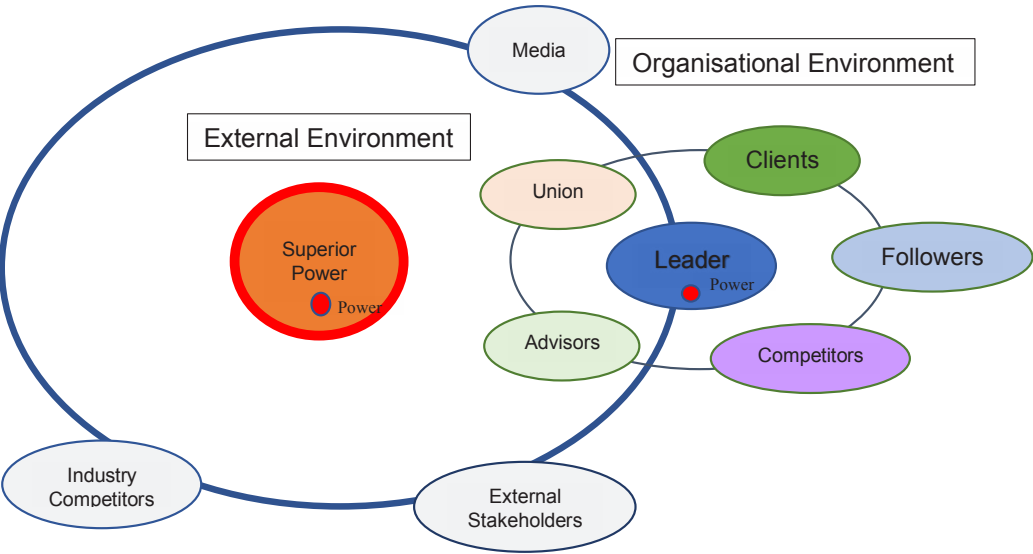


Figure 2: Leadership Galaxy (Author generated)

Stream Number 3: Sustainability and Social Issues

Born-Green-Global: A case analysis to develop a research agenda

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ABSTRACT:

Born-Green-Global: A case analysis to develop a research agenda

The notion of the born-global firm has been well documented within the International Business literature and the born-green firm has also been discussed in literature on ecopreneurs, born-greens, and somewhat by the recently coined born-sustainable. However, the combination of a born-green-global is yet to be researched or discussed in the literature despite this phenomenon being needed to meet global emission reduction agreements and becoming increasingly popular as we move towards “being green” being more normalised in the business sector, particularly among start-ups. Therefore, a research agenda for this type of firm is perhaps overdue. This research explores a well-known born-green-global – Allbirds, to develop a research agenda to enable and facilitate further development and theoretical conceptualisation of this type of firm.

Keywords: born-green, born-global, born-green-global, case study, research agenda

Overview:

The grand challenge to build low carbon economies in light of mitigating for climate change means that companies need to and have the opportunity to create impact globally through their products and services. The challenge of being both green and global is an understudied area yet the importance of such companies is underscored by both global and national carbon emission targets.

The notion of an *international new venture* (Oviatt & McDougall, 1994) or *born-global* firm (Knight & Cavusgil, 2004; Rennie, 1993) has been used for some time to describe companies that are characterised by their early and rapid internationalisation. Aotearoa New Zealand (NZ) and Australia, being small and open markets, have traditionally excelled with companies that either go global rapidly or are born global (Chetty & Campbell-Hunt, 2004; Rennie, 1993). Born-global firms are often considered to have limited resources, similar to any new business, but leverage their “innovativeness, knowledge, and capabilities to achieve considerable foreign market success early in their evolution” (Knight & Cavusgil, 2004, p. 124).

Further, the notion of a born green firm is being understood in current research (e.g., see the very recent research of Sheppard, J., & Mahdad, 2021; Demirel, et al., 2019; Mrkajic, 2016). However, connecting the dots to think about the concept of born-green-global is yet to be fully realised. This research aims to start the conversation regarding the phenomena of a firm that is born both green and global by understanding the way in which they operate, the key barriers they may face and the key knowledge based resources they rely on for both international competitiveness and green value creation.

Current understanding:

There are two key literatures that are relevant to this research and we discuss each at a high level in this abstract. Our aim is to bring these literatures together to capture and develop the notion of a born-green-global firm. As such, we start by considering the born-global firm and subsequently explore the born-green firm.

Coined by Rennie (1993), the term “born-global” was used over twenty years ago to refer to firms that internationalise from inception. Knight and Cavusgil (2004) defined these born-global firms as

“business organizations that, from or near their founding, seek superior international business performance from the application of knowledge-based resources to the sale of outputs in multiple countries” (p. 124). At the time, existing theories emphasized the importance of incremental learning where firms would expand to a similar foreign environment, learn, and then expand into another (Johanson & Vahlne, 1977). Challenging this idea of gradual internationalisation by well-established, large multinational firms, born-globals were young, resource-constrained firms that evolved and expanded rapidly due, in most cases, to the global orientation of the founder and manager at the helm (Zander et al., 2015). Although initially the existence of such firms was seen in locations with smaller domestic markets like Australia, Aotearoa NZ, and Denmark, they began to increasingly emerge in the United States (US) and other locations. For example, nearly one-fifth of new European firms are considered to be born-global (Cavusgil & Knight, 2015).

It has been argued that most born-global firms expand regionally at the start and use exporting as their primary entry mode (Cavusgil & Knight, 2015). In addition, a distinguishing feature of these firm is the global mindset of the founder and managers who “explicitly and implicitly view the world as their market-place” (p. 4). However, our understanding of this phenomenon is still developing, particularly with respect to the appropriateness of the term born-global (Coviello, 2015). Recently, Øyna and Alon (2018) suggested that the unique measure of a born-global is problematic but commonly determined by speed, scope, and extent of internationalisation. In particular, they note that within existing literature a born-global is most commonly characterised by internationalisation within its first three years, with 25% of sales being from international markets, having international market diversity or geographic spread. Ultimately, the born global research has yet to truly uncover the operating specificities of these firms and faces challenges regarding definitional clarity and fragmentation (Zander et al., 2015).

Born-green is a term increasingly being used in the green entrepreneurship literature to understand those firms that start with a green product or service (Sheppard, J., & Mahdad, 2021; Demirel, et al, 2019; Mrkajic, 2016). Being born-green can be associated with having a more green eco-centric orientation which can be a strength (Backer et al, 2009) and a signal to green investors (Mrkajic et al, 2016). In addition, the term ‘born sustainable’ is also being used to describe those firms that, like born green, are designed to create more than just economic value (Knoppen & Knight, 2022). Typically these studies broaden notions of value to include a triple bottom line approach to value creation. However we have chosen specifically to focus on ‘born green’ for this study – meaning a specific focus on both economic and environmental value creation and the tensions and negotiations between these two value creation processes in a firm that has also gone global from start-up.

There is little work that has combined the *born-global* and the *born-green* literatures to understand those companies that are *born-green-globals*. Chwialkowska et al. (2022) discuss “green digital-born globals” and focus on the combination of three key components: sustainability, digitalisation and internationalisation. They conceptualise the characteristics of the successful business model of green digital-born global and use a 5-V ontology framework to discuss how value is created and captured in a green digital-born global context. In another study, born green globals were a context in which to understand the eco-innovation process in composite plastics (Kurniadi & Mohamed, 2021). The authors suggest bridging the theoretical divide between international business, entrepreneurship and eco-innovation. We see that the born-green-global firm can also create value through products and services that are not just digital and as such feel that we could broaden this term to encompass more business organisations that go global with a green value creation model. This research explores this possibility through a case study of a born-green-global that sells footwear.

Research question:

Our research aims to start the conceptualisation of a born-green-global firm. The following questions have guided our approach:

- What is a born-green-global?

- What knowledge based resources do they rely on for both international competitiveness and green value creation?
- What might be a research agenda for this type of business organisation?

Research approach:

Case studies are typically used in the International Business area for an emerging research topic or area (Knight & Cavusgil, 2004). As such, we have adopted a case study approach given that the conceptualisation of a born-green-global is still emerging. The case study that we examine in this paper is that of the firm Allbirds that sells footwear on an international business model. Allbirds is considered to be a born-green-global firm as it began in multiple global locations in 2014. The founders are from two different countries – the US and NZ. They started purely online, selling merino sneakers (shoes). This was a novel approach for both a shoe manufacturer (selling direct to customers) and using a green product (merino wool from NZ) in a green way (green-green classification – Walley & Taylor, 2002). We use the case of Allbirds to develop some initial findings of what we call a born-green-global to suggest a research agenda to further understand some of the practices and value creation mechanisms of such a firm.

Findings:

The aim of this study was to explore the concept of a born-green-global firm. Knowing the literatures across the relatively mature literature of born-global and the emerging literature on born-green we thought that the combination of being both born green and global was a phenomenon worth investigating. Drawing on a case study of a well-known born-global Allbirds we also recognised Allbirds as being born-green and hence a born-green-global firm.

As we have observed this type of firm in existence, we now have a number of questions for future research directions. For example – what are the tensions between being born-global and being born-green, at what level do we understand and study these firms as many have founders that drive the firm, so is the entrepreneurial orientation at the individual or the firm level or both? Finally, another research direction and tension identified is between the green operations of the firm and the green product (in the case of Allbirds) or green service – is the firm green-green or just green and does that make a difference with the born-green-global firm? Our research discusses these tensions identified through our case study analysis as part of a research agenda on born-green-global firms to further the understanding in this emerging practice.

Contribution and Limitations:

The contribution of this research is to introduce the new concept of a born-green-global through understanding the knowledge-based resources they rely on to become successful. It is our wider aim that this research initiates the development of a research agenda for this emerging type of firm. The key limitation of this research is the single case study approach. Despite this, we anticipate that the findings will be of interest to international, entrepreneurship and green management scholars to study the phenomena further.

Implications:

As most born-green-globals will be new ventures we anticipate that the start-up community will be interested in learning from those companies that have successfully developed a born-green-global. This will enable them to understand the barriers and resources that have been drawn on successfully to support new ventures opting to be born-green-global. In addition, those companies operating as a born-green-global will find the results relevant to help them make sense of their firm in these fast changing environments.

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Stream 4 Gender, Diversity and Indigeneity

Empowering Women in the Workplace:

The Influence of Human Resource Policies on Women's Leadership

Aspirations

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Empowering Women in the Workplace: The Influence of Human Resource Policies on Women's Leadership Aspirations

ABSTRACT

Gender inequality persists as a formidable barrier to women's leadership aspirations, despite increased attention and public debate, restricting their advancement to top-level positions and impeding organizational progress. This study analyses 45 human resources (HR) policies from four financial and insurance companies in New Zealand. The analysis reveals three critical themes in the data: policy wording, inclusive language, and content. The study highlights the crucial role of HR policies in empowering and fostering women's leadership aspirations and calls for a paradigm shift from gender equal to gender equity policy. This research contributes to the ongoing discussion on gender equality and offers insights for organizations and policymaker in creating inclusive and equitable workplaces, particularly in promoting women's leadership advancement.

Keywords: HR policies, female leaders, leadership aspirations, policy analysis

INTRODUCTION

Despite emerging success stories of female leaders worldwide, women are still highly underrepresented in leadership roles across many organizations (Fitzsimmons & Callan, 2016). The growing awareness of gender diversity and the high number of women entering the workforce worldwide have not resulted in significant changes in the number of women in positions of power (Joshi et al., 2015). This is slow progress, and if it continues at this rate, it will take 100 years to close the gender gap (World Economic Forum, 2020). This is disheartening, given the effort put into advancing women into leadership positions.

Extensive scholarly research has cast light on factors that may contribute to the limited presence of women in leadership roles. The majority of this research indicates that women exhibit lower levels of leadership aspirations compared to men (Bavan et al., 2019; Hartman & Barber, 2020), and this disparity has not changed significantly over time (Netchaeva et al., 2022). Although some research does find that men and women have equal leadership aspirations (Beaupre, 2022; Hewlett & Buck Luce, 2005), it is influenced by factors such as the gender of supervisors (Fritz & van Knippenberg, 2020; Ni & Huo, 2018), exposure to gender role models (Foos & Gilardi, 2020), organizational identification (Fritz & van Knippenberg, 2017a), the impact of work-life policies (Fritz & van Knippenberg, 2017b), and support from organizational leaders (Hewlett & Buck Luce, 2005). To our knowledge, comprehensive HR

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policies’ effects on women’s leadership aspirations have been understudied, emphasising the need of this research.

The objective of this research is to conduct a critical analysis of the underlying attributes of HR policies and their potential influence on women’s leadership aspirations. This study is guided by the research question, *How do organizational HR policies influence female leadership aspirations?*, and is underpinned by Acker’s (1990) Theory of Gendered Organizations. The theory of gendered organizations explains how gender norms shape work structures, power distribution, and opportunity allocation in organizations, providing insights into the manifestation of gender dynamics in HR policies and practices. Examining female leadership aspirations sheds light on opportunities for empowerment and advancement, fostering more inclusive and equitable workplaces for women’s career progression.

METHODOLOGY

This study explores HR policies in New Zealand private organizations, given their comparatively lower impetus to address gender parity (Deguara, 2020; Genter, 2020). The finance and insurance industry was selected for this study due to its significant gender pay gap in New Zealand (Ministry for Women, 2022), despite maintaining an equal gender ratio. Cases were selected from large organizations as these are more likely to have extensive HR policies (Guest & Conway, 2011). Thematic analysis was utilized to examine 45 HR policies from four finance and insurance companies (refer to Table 1), sourced from the New Zealand business search engine Katalyst Business. Large New Zealand organizations have over 100 employees with total revenue exceeding NZ\$10 million (MBIE, 2019). In a multiple-case study four cases are considered appropriate (Meyer, 2001).

Insert Table 1 about here

This study examined key policies affecting women in the workplace, including flexible work, maternity leave, and family-friendly measures (Feeney & Stritch, 2019; Hideg et al., 2018). Additionally, this study examined relevant documents such as memos and charters to gain additional insights into organizational culture, structures, and practices (Britton & Logan, 2008; Ní Laoire et al., 2020). The thematic document analysis drew upon the guidance of Braun and Clarke (2006) and Saldana (2009), and was supported by the qualitative analysis software NVivo (O’Kane et al., 2021). Grounded in a

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poststructuralist feminist perspective, the analysis started with direct engagement and immersion in the data, aiming to unveil and critically examine gendered discourses within organizational HR policies (Carey et al., 2019). The analysis used inductive coding guided by the research question as the phenomenon under investigation does not have pre-existing theoretical frameworks (Linneberg & Korsgaard, 2019). After becoming familiar with the data and gaining initial insights, initial codes were created using ‘first impression’ phrases extracted from the documents to summarize and condense the relevant excerpts (Saldana, 2009). Coding aims to identify repetitive patterns and consistencies in the documents, leading to the possibility of coding the same codes in different groups (Braun & Clarke, 2006; Saldana, 2009). The next phase involved sorting and collating relevant codes within identified themes, thus refining the analysis at a broader level (Braun & Clarke, 2006) – refer to Table 2 for the final themes.

Insert Table 2 about here

FINDINGS

The thematic analysis identified three key themes: policy wordings, inclusive language, and content – refer to Table 2. The subsequent sections provide a detailed analysis of the underlying policy attributes of each theme and exemplifies these from the examined HR policies.

Policy wording

Throughout the analysis of the policies, it was identified that some appeared to support employees more than others. One way in which this was reflected in the policies was through their *tone*. Some policies used more of a supportive tone emphasising their focus on fostering personal and professional growth while others were more authoritarian. For example, while conveying the same message in their flexible work policies, Case 1 uses an authoritative tone stating, “*the onus is on the employee...*”, while Case 3 opts for a more supportive tone stating, “*it is a preference*”, and with Case 4 exhibiting the most supportive through phrases like “*that’s no problem; our hours are flexible*”.

A supportive policy is also reflected in its level of *formality*. Cases 1 and 3 use more formal language, while Cases 2 and 4 adopt an informal, conversational tone, actively involving the reader through “*we*” and “*you*”. In addition, Cases 2 and 4’s policies express genuine care through positive connotations,

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using terms like “*passionate*” and “*super keen*”. The phrase “*we’ll always try*” in Case 4’s flexible work policy demonstrates a balance between commitment and realistic expectations, assuring employees that their needs will be attended to without making lofty promises. Positive language is more engaging and creates an inclusive, supportive workplace culture where employees, especially women, can thrive.

Support can also be seen in the level *trust* given to the employees through the policy wording. Although trust is mentioned in key policies like flexible working and employee leave across most cases, Case 4 distinguishes itself by offering specific illustrations of a high trust environment. For instance, they do not require proof of pregnancy for maternity leave applications and allow minor one-off flexible work arrangements without managerial approval. Although initially enforced by the recent pandemic, the permanent adoption of flexible work across all cases further showcases the trust bestowed upon employees and a testament to the company’s commitment to employee wellbeing.

A supportive policy can only be effective if it is written with high clarity, employing clear, unambiguous, consistent, and easily understood language. In specific policy areas, notable inconsistencies were identified. The inconsistency emerges as employees are given contradictory signals, being encouraged to be physically present in the office while the organization seemingly promotes flexible work arrangements that allow them to work from home. To illustrate this point, Case 2’s flexible working policy encourages staff to “*maintain physical connections*” while advocating a shift from traditional “*management by sight*” to “*management by results*”. Similarly, Case 3 emphasizes outcome-based performance rather than hours spent at a desk but paradoxically expects more people to be present in the office rather than working remotely. Case 1 appears to take the most cautious approach to implementing flexible working arrangements where “*Informal flexible work arrangements are always temporary in nature...*”. Conversely, Case 4 maintains coherence by supporting remote work without contradictory office presence messages.

Similarly, the ambiguity is where there is *silence* in policies. For example, while most cases imply the total working hours required per week, Case 1 and Case 2 explicitly state their standard working hours, ensuring clarity and transparency. While it is reasonable and justified to have clear expectations during regular business hours, the expectations regarding work outside those hours remain unclear, and this lack of clarity is consistent across all cases. In this case, the policy is silent on whether employees

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are expected to respond to emails or calls outside business hours or during leave. This lack of clarity poses challenges for women who aspire to leadership positions, as they may feel the need to work harder to prove themselves and may unintentionally push their boundaries in order to be visible.

Objective terms are crucial for ensuring clarity in policies. The inclusion of subjective terms such as “*act in good faith*” or “*do the right thing*” may potentially undermine this intention, as they rely on individual interpretation. The term “*good faith*” is present in the policies of all cases, such as flexible working (Case 1), standard individual agreement (Case 2), fit and proper person policy (Case 3), and employee leave (Case 4). The phrase “*do the right thing*” is mentioned in the code of conduct of Cases 2 and 3. Case 3’s remuneration policy is another example where Board has the “*sole discretionary power to offer discretionary incentive schemes to employees*”. Additionally, in the same policy, the company “*...at their discretion may offer provisions...*”. In both examples, the term “*discretion*” suggests that organizations are not obligated to provide specific guidelines or criteria. Subjective terminology may perpetuate discrimination and gender bias and hinder women’s leadership opportunities.

Inclusive language

An inclusive culture reinforces empowerment by embracing diversity, promoting equal opportunity, breaking barriers, and promoting a supportive environment for all. The company’s approach towards diversity and inclusion is evident in its HR policy language. This analysis highlights the two key aspects of inclusive language. First there was a prevalence of *Māori* language in policies across the reviewed cases, except for Case 1, encompassing terms such as “*whanau*” (family) and “*manaakitanga*” (care for others). Second was the prevalence of gender diverse language evident in Case 4. This company 4 takes a distinct approach by defining the “*primary carer*” in their parental leave policy as the parent who has given birth to the child, “*regardless of gender*”. This inclusive policy exemplifies their commitment to embracing non-binary genders and reflects the evolving societal norms and values surrounding diversity. Conversely, the use of the words “*female*” and “*pregnant women*” in Case 1’s parental leave policy signifies the company’s adoption of a gender binary framework within its HR policy. Except for Case 3’s gender pay gap acknowledgement in their remuneration policy and Case 4’s provisions for breastfeeding mothers in their health and safety policy, the analyzed policies primarily employ a gender-neutral approach.

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The adoption of indigenous and gender-diverse language not only reflects the organization's agility in response to external societal change but also highlights its commitment to fostering inclusivity and advancing women's leadership. Embracing such unconventional language helps break the norm and help towards normalizing women in leadership positions.

Content

This analysis uncovers the key aspects of HR policies across all cases and identifies crucial gaps that necessitates careful consideration and attention. Firstly, there is a focus on *employee wellbeing* across all cases, particularly in light of the significant challenges and stressors brought about by the pandemic. This observation is evidenced by wellbeing policy updates taking place during 2020, at the peak of the pandemic. All cases prioritize the wellbeing of their employees by updating their existing health and safety policies, with Case 2 and Case 3 specifically dedicating policies or charters to emphasize their importance within their organizations. In all cases, employees are reminded to prioritize their well-being, for example “*balance work with other commitments*” (Case 1), “*ensure staff have regular breaks and holidays*” (Case 2), “*having appropriate time away from work*” (Case 3), or “*balance their personal and working lives*” (Case 4). Additionally, employees in all cases are provided with support channels through HR or the Employee Assistance Programme (EAP) to safeguard their mental well-being. Cases 3 and 4 exhibit a proactive approach by recognizing the potential risk of power abuse and implementing measures to protect against it, acknowledging the probability of its occurrence. Prioritizing the well-being of employees plays a vital role in empowering women, particularly those in leadership positions, as they navigate the complexities of work-life integration.

Some policies explicitly promote a *two-way interaction* in which employees are encouraged to speak out against unethical or illegal conduct that they are aware of, which can contribute to the development of an inclusive culture. This was evident across all cases. Case 4 stands out as it not only encourages employees to speak up but also provides ideas and feedback for policy improvements. It also implements an open-door policy, allowing direct access to the General Manager of People Experience. This approach shows top-level commitment and can help build a secure and inclusive workplace where employees can openly voice their ideas and concerns without fear of retaliation. Additionally, Case 4's talent development policy promotes a more inclusive culture by encouraging those in power to take ownership

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of their mistakes. When upheld, it creates a culture of accountability and fairness, leading to a more equitable environment for women to thrive and succeed.

This policy analysis reveals the *absence* of crucial policies, particularly for women, indicating gaps in the organization's practises. A pertinent example is the policy on mentoring, a crucial aspect of advancing women's leadership. Among the analyzed cases, only Case 1 and Case 2 explicitly mentioned "*mentoring and coaching*" in their policies. Although these policies are not explicitly designed for women and may lack guidelines, their inclusion shows organizations' recognition of their significant advantages for women's career advancement, ultimately paving the way to leadership positions.

Despite specific policies showing a notable transition towards equity through the recognition of individual uniqueness and case-by-case considerations, there is a notable absence of provisions addressing the unique circumstances of women. None of the cases mentioned any provisions related to female-specific policies such as breastfeeding, menstrual health, or menopause, except for Case 4. However, Case 4's health and safety policy stands out by recognizing and addressing the needs of breastfeeding mothers through the provision of facilities for their support, despite the absence of a dedicated breastfeeding policy. Policies that address the unique needs of women, such as breastfeeding, menstrual health, and menopause, are essential in supporting their career growth, with menopause policies gaining particular significance as women assume senior leadership roles. Inclusive policies supporting women's needs promote gender equality and create an equitable and supportive work environment for all employees.

DISCUSSION

This policy analysis sheds light on the influence of HR policies on organizational structure and culture, underscoring the pivotal role of clear HR policies in fostering a supportive and inclusive workplace environment, especially for the advancement of women in leadership positions. As an integral component of internal communication, HR policies contribute to cultivating positive relationships within the organizations (Welch, 2012). Through a careful examination of the tone and level of formality used in HR policies, the supportive nature of a policy becomes evident. Organizations adopt different tones in their policies, ranging from authoritative to subtle and least directive, as a means to effectively communicate their expectations while also promoting autonomy and flexibility. The analysis revealed a

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consistent pattern in the wording of policies, with an authoritative tone indicating stricter regulations and less empowerment. An authoritative tone and high level of formality is typically linked to power dynamics, hierarchical structures, and bureaucratic inclinations, typical in gendered organizations (Acker, 1990). Bureaucracy, focusing on rules and regulations, establishes organisational order and control, often aligned with conventional masculine ideals (Acker, 1990; Ionescu, 2012). This bureaucratic structure yields performance benefits, especially for large entities, and can promote increased participation of women in the organization, supporting gender equity (Andrews et al., 2017; Roth & Sonnert, 2011). However, excessive reliance on rules and regulations hinders flexibility, efficiency, and talent retention, particularly for employees with family responsibilities (Eaton, 2003; Michael Nnaemeka, 2022; Mori, 2017). The challenge of advancing their careers has been significantly posed for women due to the inflexibility of balancing work and family responsibilities (Bourdeau et al., 2019; Morgenroth et al., 2021). In contrast, organizations with lower levels of bureaucracy tend to foster a culture of trust and empowerment which is crucial for women to advance in their careers (Wolfe, 2022).

This analysis brings to light the notable disparities in the level of formality among the policies across all cases. Using informal language in HR policies demonstrates a more empathic tone and increases employee engagement (Meinecke & Kauffeld, 2019; Verčič & Vokić, 2017). Higher employee engagement has a positive impact on women's leadership aspirations as it fosters a supportive and inclusive work environment. When employees are engaged, they feel motivated and empowered to contribute their best efforts. This eventually creates opportunities for women to showcase their skills and talents, leading to increased confidence and ambition in pursuing leadership positions (Dashper, 2018; Hartman & Barber, 2020; Yeoward & Nauta, 2020).

Similarly, women's confidence and ambition are further enhanced in an environment characterized by high trust, fostering a conducive atmosphere that empowers women to pursue and achieve career advancement (Dirks & de Jong, 2022). Empowerment is a transformative process that bestows individuals with autonomy, decision-making authority, and the necessary resources to actively shape their work and career development (Fernandez & Moldogaziev, 2013). For women, empowering grants them a greater sense of agency and ownership over their professional growth, enabling them to confidently pursue leadership roles and seize opportunities for advancement (Allen et al., 2016; Dashper,

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2018; Wolfe, 2022). Empowerment also fosters a culture of inclusivity, where women's voices are valued, and their contributions are recognized (Campuzano, 2019). Ultimately, empowerment plays a pivotal role in breaking down barriers and promoting gender equality in the workplace (Evans & Maley, 2020; Wolfe, 2022).

Empowering women requires policies that are well-designed policies, consistent, and written in a manner that is easily understood. Although the majority of cases are deemed ready to embrace the flexible working culture, some organizations are treading this with caution as they continue to encourage employees to connect physically, implying that being physically available is still relevant in the workplace (Acker, 1990; Mayson & Bardoel, 2021). A paradox effect is evident, and the expectation of constantly being available or conforming to the 'ideal worker', as described by Acker (1990) in her influential theory of gendered organizations, presents challenges for women, particularly those with children or elderly parents, as they strive to balance their professional and personal lives (Clark et al., 2021; Johnson, 2021; Kasymova et al., 2021).

Additionally, the ambiguous expectation of working outside business hours removes work-life boundaries and impacts dedication, intensified by accessible communication technology (Boswell & Olson-Buchanan, 2007; Nagy, 2020; Perlow, 2012). Without clear guidance, employees may face additional pressure or expectations to be constantly available and responsive. Both genders face the consequences, but women disproportionately shoulder extra unpaid work outside the workplace, exacerbating the impact (Jung & O'Brien, 2019). According to research, women are more likely to experience burnout compared to men (Aldossari & Chaudhry, 2020), leading to decreased productivity (Kasymova et al., 2021), commitment (Panda et al., 2021), absenteeism (Schaufeli et al., 2009), and high turnover (Lu & Gursoy, 2013). These factors can impede women's progress in achieving their leadership aspirations and hinder them from reaching their full potential.

The lack of clarity surrounding subjective terms like "*in good faith*" or "*discretion*" in the policy has negative consequences, particularly for women who often face unconscious bias, stereotypes, and discrimination, hindering their advancement in leadership positions (Evans & Maley, 2020; Teelken et al., 2021). The presence of such subjective terms indicates two possible implications. Firstly, incorporating such terms may reflect a level of trust, underscoring the company's confidence in its

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employees' ability to define and apply these terms appropriately. Secondly, including subjective terms introduces potential implications, particularly for women, as they can be subject to diverse interpretations and decision-making, increasing the potential for inequity, including gender. Checks and balances are necessary to maintain fairness, as absolute discretion undermines the transparency and accountability needed to uphold workplace equality (Castilla, 2015).

The analysis of HR policies also brings forth a profound understanding of the inclusive culture within the organization. Companies that adopt indigenous and gender diverse approaches demonstrate greater flexibility and adaptability that allows them to respond to shifting cultural and societal dynamics, emerging trends, and evolving expectations (Duchek et al., 2020; Fine et al., 2020). Efforts towards fostering inclusion within diverse organizations can present intricate and multifaceted challenges, as they entail both advantages and disadvantages. On one hand, organizations face the risks of intergroup conflicts and discrimination, but on the other hand, they also have the opportunity to leverage the advantages that stem from embracing diverse perspectives and ideas (Ferdman, 2017; Ferdman & Deane, 2014). As organizations strive to address these challenges and promote inclusivity, diversity plays a pivotal role in cultivating an environment that nurtures women's leadership aspirations. By implementing diversity-focused practices that aim to alleviate biases and discrimination, organizations create a pathway for women to thrive and excel in leadership roles (Fine et al., 2020; Peart, 2021). By eliminating systemic barriers and providing equal opportunities, these practices enable women to thrive and progress into leadership roles. As more women progress to leadership roles, it helps to normalize their presence, challenging gender biases and stereotypes, and creating greater opportunities and representation for women in leadership (Hoyt et al., 2012; Olsson & Martiny, 2018).

This analysis brings to the forefront the key areas of focus in HR policies across all cases, while also uncovering critical gaps that warrant thorough examination. One notable observation is the shift in HR policies towards a more people-oriented focus, departing from the conventional organizational-oriented approach. All cases under study demonstrate this shift, as evidenced by their notable transition towards prioritizing employee wellbeing encompassing physical and mental health support, work-life balance, and a supportive environment. Prioritizing employee well-being by promoting work-life balance, and

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fostering a supportive environment are key factors that contribute to the development of women's leadership aspirations (Ellinas et al., 2018; Gregor et al., 2021; Netchaeva et al., 2022). The recent impact of the COVID pandemic has disproportionately affected women and exacerbated existing gender inequalities from increased caregiving responsibilities, remote work challenges, and job losses (International Labour Organization, 2021; Pereira, 2021; Yildirim & Eslen-Ziya, 2020). Undoubtedly, working mothers have been significantly impacted by the COVID-19 pandemic as they face the daunting task of upholding the ideal worker norms at home. Balancing work and family life has become more challenging, compounded by the additional responsibility of teaching their children during lockdown periods (Clark et al., 2021; Kasymova et al., 2021; Zanhour & Sumpter, 2022). These circumstances underscore the urgent need for organizations to prioritize addressing these challenges to support women's empowerment and leadership aspirations in the workplace (Gregor et al., 2021; Netchaeva et al., 2022).

In a similar vein, the cases examined in this study place significant emphasis on fostering an open communication environment that enables women to openly express their ideas, concerns, and aspirations without the fear of judgment or negative consequences. The dedication to fostering open communication cultivates a sense of trust and inclusivity, providing a safe space where women are empowered to share their viewpoints and actively engage in decision-making (Myers & Sadaghiani, 2010; Nguyen et al., 2019). This supportive environment contributes to higher job satisfaction and increased retention rates among women (Biswas et al., 2020; Sriram et al., 2022). Retaining women in the workforce is crucial to address the “leaky pipeline” phenomenon, which refers to the significant drop-off of women at various career stages (Baker et al., 2019; Griffith et al., 2019). Supporting and retaining women helps retain female talent and promotes gender diversity in the workforce.

This analysis reveals not only the implicit meanings embedded in written policies but also the significant gaps in policy provisions. One notable gap identified is the lack of support for mentoring and coaching, which plays a crucial role in nurturing and developing women's leadership aspirations. (Barkhuizen et al., 2022; Carbajal, 2018). Mentoring fosters a dynamic relationship wherein an experienced individual offers guidance, support, and assistance to enhance the career and personal development of a less experienced person (Fowler et al., 2007). It has been shown to positively impact

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women's confidence and facilitate the formation of supportive networks (Dashper, 2018), and increase women's career leadership advancement (Chrobot-Mason et al., 2019; Tharenou, 2005). A comprehensive mentoring policy should define the objectives, roles, and responsibilities of mentors and mentees, establish eligibility criteria, provide training and ongoing support, and continuous evaluation, thereby fostering the professional advancement of women (Buzzanell et al., 2015; Dashper, 2018).

Finally, the absence of provisions addressing women's unique needs raises an important question about whether treating women equally to men or recognizing and addressing their specific circumstances is the best approach to attaining gender equality (Nkomo & Rodriguez, 2018). Despite certain policies acknowledging the uniqueness of individuals and the need for case-by-case considerations, it raises the question of why women's unique needs and corresponding measures are often overlooked, despite their distinct biological and physical traits (Grandey et al., 2020). Additionally, the absence of specific provisions for breastfeeding mothers in the policies of most cases indicates a divergence from established guidelines in New Zealand that support breastfeeding in the workplace (Employment New Zealand, 2023). Organizations must also be mindful of the developing topics of menstruation and menopause, which can hinder women's professional growth as they deal with pain, facility access, stigma, and work-life balance (Atkinson et al., 2021; Carter et al., 2021; Grandey et al., 2020; Sang et al., 2021). Menopause frequently coincides with the optimum time for senior leadership responsibilities, making it especially important to have the policy in place (Whiley et al., 2023).

CONCLUSION

This comprehensive analysis underscores the pivotal role of HR policies in empowering women and nurturing their leadership aspirations. It emphasizes the need for these policies to be thoughtfully crafted in order to be effective. Furthermore, it advocates for a shift from mere gender equality to gender equity policies, ensuring that women's unique needs and challenges are recognized and addressed. By doing so, organizations can create an inclusive and empowering environment that propels women towards leadership success.

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Stream 4 Gender, Diversity and Indigeneity

Table 1

List of HR policies

| Policy | Case 1 | Case 2 | Case 3 | Case 4 |
|---------------------------------|--------|--------|--------|--------|
| Code of conduct | √ | √ | √ | √ |
| Employee leave | √ | √ | √ | √ |
| Parental leave | √ | √ | √ | √ |
| Flexible working | √ | √ | √ | √ |
| Wellbeing | √ | √ | √ | √ |
| Performance review | | √ | √ | √ |
| Remuneration | √ | √ | √ | √ |
| Recruitment | √ | | √ | |
| Diversity | | | √ | |
| Learning & Development | √ | | √ | √ |
| Discrimination | | | √ | |
| Health & Safety | √ | √ | √ | √ |
| Bullying & Harassment | √ | | √ | |
| Domestic violence | √ | √ | √ | √ |
| Internet, Email & Communication | √ | √ | | |

Stream 4 Gender, Diversity and Indigeneity

Table 2
Themes and Sub-Themes

| Theme | Sub-theme |
|--------------------|---------------------|
| Policy connotation | Tone |
| | Formality |
| | Trust |
| | Consistent |
| | Objective |
| | Silence |
| Inclusive language | Indigenous |
| | Gender diverse |
| Content | Wellbeing |
| | Two-way interaction |
| | Absence |

Stream 3 – Friends with benefits: Interconnections between environmental sustainability and gender equality

Friends with benefits: Interconnections between environmental sustainability and gender equality

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Friends with benefits: Interconnections between environmental sustainability and gender equality

ABSTRACT: Environmental sustainability and gender equality are two critical challenges of our time. Unfortunately, these issues are often siloed both within academia and practice. Employing a qualitative case study of an organisation with a formal commitment to both issues, we explore the interconnections between them. Our findings demonstrate that environmental sustainability and gender equality are interconnected and can support each other. But these interconnections do not necessarily start with organisational policies and programs. Instead, interconnections may first manifest in the shared understanding amongst employees and in the organisation’s reputation amongst external stakeholders; only then do they influence organisational policies and programs. Our findings highlight the critical role of internal shared understanding and external reputation in “breathing life” into formal policies and programs.

Keywords: Environment; Sustainability; Gender Equality; Policies; Shared Understanding; Reputation

Environmental sustainability and gender equality are amongst the most pressing “grand challenges” confronting organisations and societies (United Nations, 2022). Unfortunately, global response to both issues is neither fast nor furious. Despite decades of stated commitment to environmental action, the world is rushing headlong towards ecosystem collapse; our planet has already crossed four of the nine environmental thresholds required for humans’ continued survival (Steffen, Mallon, Kompas, Dean, & Rice, 2019). And despite global initiatives aimed at gender equality, progress has been patchy and excruciatingly slow; the COVID-19 pandemic has further exacerbated gender inequality around the world (Economist, 2021). Stakeholders (including consumers, investors, activists, and community) are growing impatient and demanding that businesses address the negative impacts they have on environment and society. As climate strikes and gender equality marches gain momentum, the pressure on businesses to address both issues is intensifying (Schifeling & Soderstrom, 2021).

The United Nations’ (UN) Sustainable Development Goals (UN, 2022) emphasise that these two challenges are inter-twined, and a sustainable future is not possible without gender equality. However, these challenges continue to be siloed within organisations (with the environmental/sustainability manager looking after environmental issues and the diversity and inclusion/HR manager taking care of gender equality issues). A parallel separation has occurred in academia with each issue constrained within its disciplinary boundaries. But there is emerging evidence of the symmetries and commonalities between the two issues (Cook & Glass, 2018; Sandhu,

Perera, & Kulik, 2021; Setó-Pamies, 2015). Both issues demand that organisations move past the short-term business case and make a long-term commitment (Sandhu et al., 2021). Structural changes that organisations use to embed environmental issues across multiple functional areas can potentially make it easier for champions to progress other social issues such as gender equality (Sandhu & Kulik, 2019). Our research investigates whether (and how) commitment to environmental sustainability might facilitate progress toward gender equality (and vice versa).

THEORETICAL FRAMEWORK

Research in the management literature has historically prioritised either external or internal factors in understanding how organisations address environmental and social issues. Institutional theorists (DiMaggio & Powell, 1983; Myers & Rowan, 1977; Scott, 2008) emphasise influences originating in the external environment (pressures from regulatory agencies, industry peers and/or professional norms). Management theorists (Bowen & Ostroff, 2004; Kulik & Roberson, 2008; Metz & Kulik, 2014) emphasise the organisation’s internal practices and leadership. Neither perspective describes the process by which external *and* internal factors lead to structural change within organisations, with subsequent implications for environmental and social issues. We draw on insights from the *decoupling* and *spatial configuration* literatures to understand how organisations “negotiate macro institutional scripts and translate them into everyday actions” (Bromley, Hwang & Powell, 2012: 488)

Decoupling is defined as “adopting a policy symbolically, without implementing it substantively” (Haack & Schoeneborn, 2015: 307) leading to organisational policies becoming disconnected from their final outcomes (Bromley & Powell, 2012). For example, an organisation might establish a flexibility policy designed to attract and retain women (Kalysh, Kulik & Perera, 2016) but the policy will have little impact if managers discourage their employees from working flexibly (Kalev, Dobbins & Kelly, 2006). Decoupling is particularly likely when organisational change efforts are primarily motivated by regulatory forces or the pressure to mimic what other organisations are doing (DiMaggio & Powell, 1983; Pitts, Hicklin, Hawes & Melton, 2010).

More recently researchers have started to examine how internal and external forces collectively influence organisational change dynamics. Drawing on Battard, Donnelly and

Mangematin (2017), Kulik, Sandhu, Perera, and Jarvis (2022) developed the “Three Spaces Framework for Sustainable Change”. This framework describes organisations as operating across three distinct metaphorical spaces (physical, mental, and social) and brings together the interplay of internal and external forces that confront organisational change efforts. **Physical space** describes the organisation’s formal structures (e.g., policies, programs, and roles) that relate to a strategic issue. **Mental space** is the organisational members’ (e.g., managers and employees) shared understanding/identity about these issues. **Social space** is the external stakeholders’ (e.g., customers, competitors, and community members) shared perception/reputation of organisational action on these issues.

As shown in the figure, the three spaces are interconnected. The framework explains that organisations can achieve sustained progress on an issue (e.g., environmental sustainability or gender equality) only when their activities are simultaneously supported across all three spaces. Organisations thus need to focus on strengthening formal structures, policies, and programs (physical space), creating shared understanding inside the organisation (mental space) and communicating a clear message that transcends the organisation boundary (social space).

Insert Figure 1 about here

Organisations can initiate change efforts from any of the three spaces, but if they focus on only one of the three spaces (e.g., formalising roles and policies in the physical space) independently of the other two spaces, it can lead to policy-practice decoupling (having formal policies but ineffective implementation). Similarly, if organisations focus their efforts only in the social space (e.g., communicating their commitment to external stakeholders) but do not demonstrate commensurate action in mental and physical spaces, it can lead to accusations of misleading stakeholders. We employ insights from the literature on decoupling and the Three Spaces Framework to investigate the dynamics by which commitment to environmental sustainability might facilitate progress toward gender equality (and vice versa).

METHODS

Given the inductive nature of our research we used a theoretically informed qualitative case study. Green Corp¹ is a large multinational organisation with more than 150 years of operation. Green Corp has been recognised as one of the world's most sustainable corporations in the world. It is a signatory to the UN Global Compact, the UN Sustainable Development Goals and the UN He for She initiative. We engaged with 31 research participants: interviews with the key senior executives (n=7) and managers (n=6); focus groups with employees (n=12, across 4 focus groups); and interviews with industry experts (n=6). To ensure triangulation (Creswell, 2003) we also collected data from secondary sources including: 1) non-participant observations of organisational events (related to environmental sustainability and gender equality); 2) organisational artefacts (such as logos, posters, stickers, merchandise); 3) organisational policies and programs (such as environmental policy and diversity and inclusion policy); 4) and content from organisational websites and social media (such as sustainability reports, diversity reports, and organisational and customer social media posts on these issues).

Following Eisenhardt and Graebner (2007), we first analysed each interview separately to identify the emergent first order *codes* (e.g., “sustainability is a part of my KPIs”). After we had analysed all the interviews individually, we compared and contrasted the emerging first order codes across the interviews. We grouped similar codes into second order *themes* (e.g., sustainability performance is tied to short- and long-term bonuses). In parallel we also analysed the secondary data sources (e.g., field notes from observations, organisational reports, social media posts) to develop new themes (e.g., staff communicating about sustainability to customers) and to refine the boundaries of existing themes (e.g., employee pride at working in one of the most sustainable organisations). In coding the data we also examined activity across the three spaces (physical, mental, and social). We used NVivo software as a qualitative data management tool. The systematic pattern matching across our data sources enabled us to generate insights which we elaborate in the findings below.

¹ The case name is a pseudonym to protect organisational and informant confidentiality.

FINDINGS

We employ the Three Spaces Framework to describe our findings about environmental sustainability, gender equality, and any potential interconnections between these issues at Green Corp.

Environmental Sustainability and Gender Equality at Green Corp

Physical space (formal structures, policies, and programs). Within the physical space, Green Corp has well-defined policies both on environmental sustainability (e.g., green bonds, product design, and packaging) and gender equality (e.g., targeted hiring for gender diversity, and measuring and addressing gender pay gaps).

The global sustainability goals drive our [product] designs, packaging, and procurements.

There is a clear connection between global commitment and action we take at our level. –

Employee

Globally we are one of the first companies to issue green bonds attached to our impact. If we don't meet our obligations, there is a material impact on the debt bond. So, we have hooked ourselves financially to ESG [Environmental, Social and Governance]. – Executive

By 2025 we want 50% of our new hires to be female, 40% of our frontline leaders to be female and 30% of our senior executives to be female. It's measured and reported on in our half year and yearly results globally. – Employee

Green Corp has a separate pool of money to address gender pay gap disparities. – Executive

Green Corp has developed its own Sustainability Index (which includes both environment and gender) and linked performance on both issues to employees' short- and long-term bonuses. Green Corp has also developed (highly interactive and user friendly) mandatory formal training programs on both issues.

People's bonuses, whether it's short-term or long-term, are linked with meeting the sustainability objectives. – Executive

Gender equality is measured, funded and part of the rewards program at Green Corp. –

Executive

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The online training on environmental sustainability is very engaging. It doesn't feel like you just click a few things and then move on. It establishes connections around the importance of sustainability and how you can be a part of that. – Employee

The training on unconscious bias was an eye opener. – Employee

Mental space (shared understanding of these issues inside the organisation). Although Green Corp has formal policies on both issues, we found that staff had a stronger shared understanding of environmental sustainability initiatives. They described environmental sustainability as “core to our DNA” and shared their pride on social media to be working at “one of most sustainable companies in the world”.

Environmental sustainability is the core reason why Green Corp exists. – Employee

Sustainability is the water cooler conversation at Green Corp. – Manager

I always tell my friends and family that Green Corp is the most sustainable company in the world. – Employee

Employees at Green Corp felt empowered to challenge product designs to incorporate environmental sustainability.

In one of our new projects, some people said ‘why don’t we develop this dimmer that can dim [the lights] from purple to pink and then to blue?’ My response was – NO! That’s a gimmick, that doesn’t change the world. Why don’t we focus on making our products fully recyclable? – Employee

Another example of employee empowerment resulting from this shared understanding was a unique phenomenon that we label *sustainability by stealth*. Staff explained that the constant, consistent, cascade of communication coupled with the ongoing mandatory environmental training resulted in a project team deciding to incorporate recycled plastic into products. But recycled plastic is more expensive than virgin plastic; incorporating it would increase the cost of the product and misalign with the KPIs of the sales and procurement departments. Undaunted, the team redesigned the entire product to reduce production costs and used these savings to offset the costs of recycled plastic. The employees acted without seeking managerial permission; they were convinced sustainability was important to Green Corp and it was *their* role to deliver it.

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So, for the business it looked like we did save a little bit of money, but if you look in detail of the actual projects, we saved a lot of money and then we put a lot of money on recycled plastic to justify the cost. – Employee

Green Corp links staff performance on both environmental sustainability and gender equality to staff bonuses (both short- and long-term) but employees were more aware of the links with environmental sustainability than the links with gender equality.

Sustainability is in my KPIs; my boss's KPIs; my boss's boss's KPIs. – Employee

I am not aware of any gender related targets or the link to KPIs. – Manager

Employees also felt that the broad policies on gender equality should be communicated better.

The policies [on gender equality] can be made clear and more available. They can be shared more widely with the employees. – Employee

Social (external reputation on these issues). Green Corp consistently communicates its commitment to environmental sustainability and gender equality to external stakeholders. But once again there was a greater focus on environmental sustainability. This is perhaps not surprising given that helping customers achieve environmental sustainability through its products and technologies is Green Corp's *raison d'être*.

The reason why Green Corp exists is to help customers achieve environmental sustainability. – Employee

There is consistent communication around sustainability. We share success stories of what we are doing with our customers and how we have helped them become more sustainable. – Employee

At Green Corp I am helping other customers, other industries to be more sustainable by my contribution. It's very different from my previous job [in the auto industry]. – Employee

Although Green Corp has a clear focus on gender equality within its boundaries, their external stakeholders have not directly expressed an interest in gender equality.

Our customers have not directly asked about [our performance on] gender equality. – Executive

Interconnections Between Environmental Sustainability and Gender Equality at Green Corp

Given that Green Corp has a formal commitment to both environmental sustainability and gender equality in the physical space (albeit with environment receiving more attention than gender equality) we expected that any interconnections between environmental sustainability and gender equality would arise first in the physical space. But this was not the case. Instead, we found that within the physical space these two issues largely operated independently of each other.

Lack of cohesive organisational narrative in the physical space. We found that although Green Corp was formally committing to both issues there was no real interaction between them in the physical space. The issues were vaguely united in a stratospheric UN level commitment and broad expectations that a progressive organisation would address both these issues.

The SDGs [Sustainable Development Goals] you know, for us that is quite often something we reflect upon as an organisation, our purpose, and our commitment to achieving those goals. So, at that level, there is a connection. The United Nations put out this set of goals, we then transpose them and flow them down. – Manager

Green Corp stands for purpose and being inclusive, and sustainability and gender equality are key attributes of that. – Executive

The two issues operated as parallel train tracks and responsibility for them was partitioned across distinct roles (the Sustainability Vice-President had responsibility for the environment and the HR Vice-President had responsibility for gender equality).

Junctions in the mental space. Within the mental space, staff shared their perceptions about the interconnections. We found that these interconnections were not driven by formal organisational intent or policy but were generated by staff experiences. We describe these interconnections as junctions where these two parallel tracks crossed over one another. The staff described how environmental sustainability and gender equality were creating a virtuous cycle. Environmental sustainability was attracting female employees and female employees were then actively contributing to new sustainability initiatives.

Any female inside the sector that interviews for a job with us always tells us, always without fail, 10 times out of 10 that it's Green Corp's commitment to sustainability. It's their desire to

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want to work for an organisation that is driving the sustainability effort. That is their compelling reason for them considering moving from where they are today to moving to us. –

Executive

We never struggle to encourage females in the organisation to put their hand up to volunteer for these [sustainability] projects. – Executive

The diversity of thought that gender diversity brought to project teams was proving to be particularly valuable for sustainability innovations.

If you have a non-diverse team, you don't have that diversity of thought that you need to be able to sort of promote this conversation around sustainability because everyone is used to thinking the same way, is less innovative and maybe not as good at thinking outside the box. –

Employee

We also found that boldness of Green Corp's sustainability initiatives was starting to influence gender equality conversations within the mental space.

The boldness on our commitments around sustainability filters through to the boldness in commitments on other issues, one of which is gender equity [as well as other aspects of inclusion]. – Executive

Employees, who we previously described as feeling empowered to engage in *sustainability by stealth*, told us that the same moral strength enabled them to question and have frank conversations around gender pay gaps.

You [Green Corp] have a lot of moral ethic regarding sustainability, 'But why is this woman still underpaid at the same job as me?'; that would be way much easier to bring the conversation here [at Green Corp] than if you were in another company where they will basically not have any progressive view on anything. – Employee

Simultaneously, Green Corp's gender equality efforts were filtering through to sustainability initiatives. In relation to the *sustainability by stealth* example, Green Corp plans to introduce a separate pool of money that engineering and design teams can use to offset the costs of sustainability innovations. This fund will enable environmental innovations to meet the internal return on investment without employees having to invest their own time and effort in engaging in *sustainability by stealth*.

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The inspiration for this fund came from the separate pool of money that Green Corp established to address gender pay gap disparities.

Halo within the social space. Green Corp was aware that it has a strong reputation for environmental sustainability among its external stakeholders, and this was creating a halo effect (wherein positive reputation in one area transfers to another area), leading external stakeholders to extend the positive sustainability reputation to gender equality. But the halo comes with a risk; the staff were very aware that missteps in any one area could tarnish Green Corp's reputation in the other area – as these issues are tied together in the external stakeholder's mind.

Unless we are committed to both, I think it can come across as insincere and a lot of our values base becomes open to questioning. So, I think they [external stakeholders] can go, 'Well they're not very serious about this whole gender piece. Is their sustainability just green washing as well? Are they real about that [sustainability] too?' – Manager

To address this risk in the social space, the boldness that Green Corp applied to environmental sustainability was starting to be demonstrated in its gender equality initiatives. A manager described an instance where a female salesperson had faced derogatory behaviours from a customer. The salesperson and manager agreed to confront the customer and say that this behaviour was completely unacceptable. The manager explained that, while he advised his senior management (because this was a very big client), he was really proud that Green Corp empowered him to take this position.

It wasn't, "can I take the position"? It was, "I'm telling you this is the position I'm taking", which was, you know, absolutely supported. We didn't want to be an organisation that turned a blind eye to that sort of behaviour and it doesn't create that safe, inclusive environment for our employees if they're going to customers and getting that. So, I think it was a really proud moment for me, not what I did but the fact that there was absolute support behind me and behind the person that was affected.

DISCUSSION

Our research question examines whether (and how) commitment to environmental sustainability might facilitate progress toward gender equality (and vice versa). Based on our analysis of the Green Corp case (an organisation that has strong commitment to both issues), we conclude that

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there are interconnections between environmental sustainability and gender equality. The issues can become *friends with benefits*.

Despite environmental sustainability having a greater focus at Green Corp we observed bidirectional effects (environmental sustainability efforts influenced gender equality and vice versa). Contrary to the expectations based on prior literature (Mun & Jung, 2018), we found that these interconnections did not necessarily originate in the physical space; policies and programs associated with one issue did not directly influence the policies and programs in the other area. The interconnections often emerged from the mental (shared understanding) and social (external reputation) spaces.

Within Green Corp we found that these interconnections were first *seeded* and *nurtured* in the mental and social spaces, and then *crossed into* the physical space. Environmental sustainability and gender equality were leading to a virtuous cycle at Green Corp—an external reputation for environmental sustainability was helping to attract and retain gender diversity, and the resulting diversity of thought was leading to environmental innovations in product design. A strong shared understanding of environmental sustainability was enabling employees to engage in bold environmental initiatives and this boldness of thought was stimulating gender equality conversations within the mental space. The interconnections were also manifest in gender equality extending to environmental sustainability—activities in the mental space had led formal gender equality policies (e.g., separate fund gender pay gaps) to influence policies in environmental sustainability (e.g., plan to introduce separate fund to enable environmental innovations).

The halo that external customers were bestowing on Green Corp (transferring the reputation for environmental sustainability to gender equality) was making Green Corp sensitive to the potential for identity-reputation dissonance (Dutton & Dukerich, 1991). The managers were aware that the halo effect in the social space could also result in reputational loss. To reduce the identity-reputation dissonance, Green Corp was working hard to ensure that its reputation on gender equality was equal to its reputation for environmental sustainability (through strengthening its actions on gender equality in the mental and physical spaces).

We acknowledge that our findings are based on a single case study. While a theoretically relevant single case is invaluable in generating new insights (Siggelkow, 2007), the findings are also bounded in their transferability only to other organisations that share similar contexts ((Eisenhardt, 1991). We encourage future research to explore these interconnections across multiple cases. Furthermore, our research uncovers positive interconnections between employee identification with environmental sustainability and gender equality but, as with any form of organisational identification (Caprar, Walker, & Ashforth, 2022), there may well be a dark side when employees over-identify with these issues.

Our research has important theoretical implications. Through highlighting the largely underexamined role of the mental and social spaces within organisations, we extend the literature on internal activism within organisations (Dutton, Ashford, Lawrence, & Miner-Rubino, 2002; Schifeling & Soderstrom, 2022). Our research emphasises that, while the formal policies in the physical space are important and provide support to internal activists (Schifeling & Soderstrom, 2022), it is the mental and social spaces that “breathe life” into these policies and programs. Our research also informs the emerging work on establishing emotional resonance with external stakeholders (Kouame, Hafsi, Oliver, & Langley, 2022). The focus of Kouame et al. (2022) is on building emotional bridges on issues that external stakeholders perceive as important. Our research extends their findings by demonstrating that organisations need to be sensitive to cross-issue connections. These interconnections can lead to a halo effect but they also carry the risk of reputational tarnish.

For managers, our findings emphasise the importance being mindful of all three organisational spaces. Coupling organisational policies with shared understanding and external reputation will prevent the often-repeated scenario where organisations have well-crafted policies that end up divorced from practices (Padavic, Ely, & Reid, 2020). Our findings also highlight that the interconnections between environmental sustainability and gender equality can be a powerful tool for attracting and retaining employees and spurring innovation. Finally, we encourage managers to pay attention to the corporate purpose (Lee et al., 2023). This will enable managers to unite both environmental sustainability and gender equality in their organisational strategy and leverage the interconnections.

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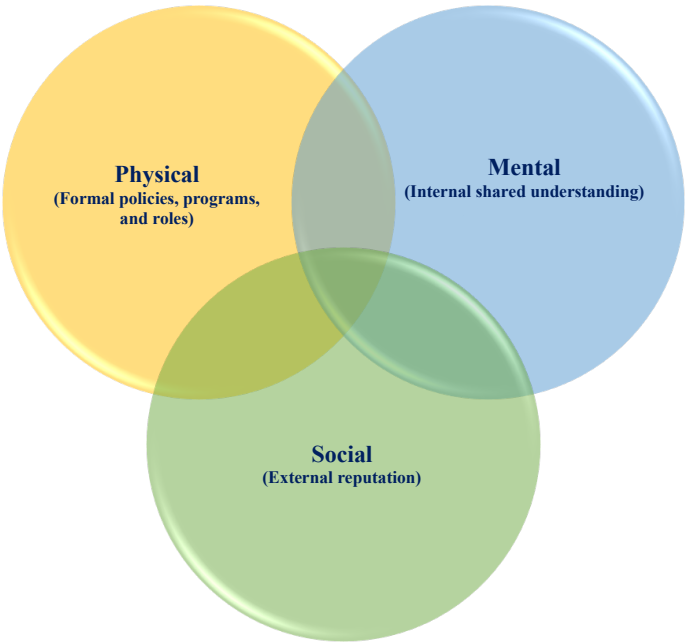
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FIGURE 1: The Three Spaces Framework for Sustainable Change (based on Kulik et al. (2022))



08. Business Processes, Innovation and Supply Chain

Developing optimal nurse schedule for improving healthcare operations in the emergency department of tertiary care Indian hospital

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ABSTRACT:

Healthcare industry plays vital role in improving health and wellbeing of individuals and collaboration and coordination among healthcare stakeholders are important to address changing healthcare needs, technological advancements and societal expectations to ensure the delivery of quality health services. The nurse scheduling is a variant of staff scheduling problem in operations research which enables to find optimal way to assign number of nurses to the number of shifts by taking both hard and soft constraints into consideration. In this study, a mixed integer programming approach is proposed to find an optimal nurse schedule for emergency department which satisfies all the constraints and results in better patient flow and reduction in patients' waiting time and total length of stay.

Keywords: Emergency Department, Nurse scheduling, Resource utilization, Simulation, Optimization, Healthcare Operations

The healthcare industry is a complex and rapidly evolving sector that play a crucial role in providing medical services to individuals and population. The industry encompasses a wide range of organisations and professionals working together to deliver range of services from primary care, preventive care to advanced diagnostics and long-term care. Healthcare services are provided through hospitals, private clinics, nursing and rehabilitation facilities and it also includes ancillary services such as pharmacies, laboratories and medical imaging centres. Healthcare professionals including doctors, nurses, dentists, therapists and other personnel form the backbone of the health industry by providing diagnosis, treatment and ongoing care to patients. Additionally, scientists, researchers and pharmaceuticals contribute significantly by developing new drugs, technologies and treatments.

Due to covid-19 pandemic, there is increased focus on healthcare both domestically and internationally and highlighted the value of healthcare professionals, particularly doctors and nurses. Nurses are crucial to provide quality care to the patients and make up majority of around 59% in the healthcare industry (Haddad et al., 2023). Limitations in organisational resources and facilities and staff mismatches have an impact on the quality of service provided in an acute care hospital setting. Manpower resource limitations in nursing is one of the most prevalent problems globally. Emergency department (ED) is the department in which people consult due to many complaints and demand first medical response and have vital importance in healthcare systems (Gul & Guneri, 2015). However, EDs have been becoming increasingly congested due to the combined impacts of growing demand, access block, and increased clinical capability of the department (Srinivas et al., 2020). This congestion has been known to have adverse impacts on the performance of healthcare services and quality. The lack of adequately trained personnel in ED is a critical lacuna; hence with limited resources, it is necessary to

find ways to use technological advances in order to maximize throughput without sacrificing on care outcomes and quality.

Manpower scheduling is one of the most important aspects of workforce management strategy as there are many aspects should be considered such as staff availability, turnover, rotational shifts and unusual event or activity etc. Staff scheduling is the process of establishing the schedules of an organisation's workforce in order to best carry out daily activities and to meet the current and future demands in a workplace. Workforce scheduling is of importance for many organisations in industry as well as in services such as a hospital, a restaurant, or a retail store (Ang et al., 2017). Nurse scheduling is an activity of assigning nurses to the shifts to conduct a set of tasks in order to satisfy hospital's demand. It involves organising schedules so that shift transition is seamless, and care remains uninterrupted. Proper nurses scheduling not only helps to ensure that patient will receive high quality service but also helps employees to maintain a better work-life balance. This scheduling needs to be efficient to ensure that both individual employee and organisational needs are fulfilled as circumstances change such as sudden leave of absence or delay in reporting to the shift etc. (Legrain et al., 2015). Efficient nurse scheduling in ED is crucial to ensure optimal patient care in a fast-paced and unpredictable environment. As a step forward, the objective of the study is as follow:

Objective of the study

To develop an optimal nurse schedule for hospital managers and policy makers to identify the best opportunity for manpower planning and utilization with flexibility and statistical reliability considering all hard and soft constraints.

1. LITERATURE REVIEW

ED is a complex structure where group of people with different skills, abilities and expertise provides quality care to a widely diverse patient need. Therefore, Quality Improvement in ED is explicitly collaborative approach between medical, nursing and management (Guo et al., 2016). According to National sample survey office (NSSO) data 2017-2018, distribution of nurses by gender and age is as below: (Karan et al., 2021, p.10)

Insert Figure 1 here

It reveals that, there is clear numerical dominance of females in nursing, also approximately two-third of the nursing workforce are below age of 40 years. The estimates from the NSSO also indicates that, female shares overwhelming proportion of 31% among the persons with the qualification of degree in medicine but are out of labour market. In India, 50% of the nurses with adequate qualification are not the part of the current health workforce. Out of this 20% are in the age group of 30-40 years and noted themselves engaged in household core as against joining labour workforce.

The primary reason for the shortage of nurses is the medical migration. The causes include better pay, financial security, job security, a safer work environment and higher standard of living. (M'Hallah & Alkhabbaz, 2013). Like the population is aging, the nursing workforce is also aging. Every year thousands of senior nurses retire, and new nurses are required to replace them. However, because of the pandemic, fresh graduates are unavailable as many colleges have been closed, exams have been cancelled or results have been delayed, which has led to the crisis of new nurses. Also, huge number of nurses quit their jobs during the pandemic due to working in lengthy shifts with many patients resulted in increased stress and decreased job satisfaction. (Tamata & Mohammadenezhad, 2022).

Unattractive schedules are one of the reasons healthcare units strive to retain recruited nurses and cause a high turnover rate of nurses. Even though all nurses are subjected to language training, their communication skills in the local/ state language differ, thus diversity of the origin of nurses further complicates the scarcity of nurses (M'Hallah & Alkhabbaz, 2013).

For nurse scheduling, inadequate nursing resource can lead to increased workloads and low workforce morale, which may directly affect clinical outcomes of patients and overall quality of service provided. (Ang et al., 2017, p.433). In past literature, manpower scheduling in the service industry has been well-documented and various simulation models and mathematical programming approaches have been proposed to deal with nurse scheduling incorporating multiple objectives of both patients' and providers' outcomes and satisfaction (Brucker et al., 2011). Various models and techniques have been proposed to address the Nurse scheduling problem with the objectives of minimization of total hospital cost and the maximization of nurse's preferences while taking into account government rules and hospital requirements. However, Kellogg and Walczak (2007) noted that, nurse shift preferences and shift schedule fairness are also important objectives of NSP which have been less studied using mathematical programming approaches.

Nurse scheduling problem has attracted a great deal of interest in operations research and has been widely studied since 1960's. In the past, several studies on nurse scheduling problem have been found, most were based on cyclical scheduling. Cyclic schedules consist of regular patterns which can be rotated across multiple time period, are easy to build but may be very rigid and may adapt difficulty to changes and may ignores the preferences of the nurses. Howell's method (1966) provided first cyclical scheduling approach which provides step-by-step procedure for accommodating the work patterns and preferences of individual nurse. Subsequently, in early 1970's nurse scheduling began to adopt heuristic and mathematical modelling approaches which are able to take into account all scheduling constraints in solving the problem (Maier-Rothe & Wolfe, 1973). In 1977, smith et al., divided nurse scheduling problem into 3 categories: cyclical scheduling, heuristic scheduling and mathematical modelling approach. Cyclical schedules are regular, repetitive and can be conveniently executed however in practice it does not provide effective ways to rearrange in case some nurses need to change their jobs or

shifts. Heuristic scheduling solution are dependent on the environment and with the numerous constraints, it will be difficult for heuristic scheduling approaches to be deployed effectively over multiple scenarios. As a result, mathematical programming approach, shows a substantial level of dependency to respond to these cases addressed. These models are developed with objective functions and constraints and then utilizes appropriate algorithms to attain an optimal solution for different cases especially the non-cyclical problem (Ozkarahan & Bailey, 1988).

The difficulties in actual implementation of mathematical programming model-based nurse scheduling have been well noted in the literature (Clark et al., 2013, Kellogg & Walczak, 2007). These include difficulty in using these rostering models by nurse managers, ability of these models to capture the complexities with incorporation of staff preferences and fairness and issues arising from rescheduling due to last-minute changes etc. These issues have been factored in this study for operationalising mathematical programming-based model that can be used to support the management of nursing manpower at various levels in real ED.

1.1. Research Gaps

Most of the studies addressing problems of ED are done in developed countries and there is a scarcity of research into improving quality of ED practices in hospitals in developing countries. The existing studies do not give insights on utilization of resources without necessarily adding extra resources or making new investment. Magnitude of the problem, its impact and cost-effectiveness are not fully understood. There is no universal approach or solution model to solve NSP, the size and complexity of the problem dictate the choices, vary from mathematical programming to artificial intelligence solutions. The scarcity/ availability of nurses, the nurse's skills and credentials, various circumstances defining the demand and supply of each hospital unit and country specific hospital labour laws makes nurse scheduling context dependent. There is a need for case study research to accommodate the exploration of practicality of the proposed nurse scheduling model based on the actual case study paved motivation to undertake this study. This study tackles the case study of Indian healthcare unit.

2. PROBLEM DESCRIPTION

The data was collected for this study from emergency department of the tertiary care Indian hospital. The 1st stage of data collection involved collecting secondary data from hospital information system regarding patient arrival times and pattern. This helped to find demand pattern for the nurses. In 2nd stage, primary data was collected through semi-structured interviews of the emergency department nurses and nurse manager to understand nurses' availability and preferences. Ethics approval was taken from hospital authorities before starting data collection.

In case study hospital, nurses' duty rosters are manually created by nurse in charge of each hospital unit and the number of nurses assigned to each day and each shift are determined by on estimate of workload based on the nurse in-charge's experience. Rosters were planned two to four weeks at a

time and two weeks in advance of the rostering period. These schedules are generated weekly or fortnightly. Shifts were planned of two 6-hour shifts of morning and afternoon and one 12-hour night shift. Scheduling ED nurses has always been difficult because ED needs to be staffed 24 hours a day over seven days a week and subject to a variety of hard and soft constraints such as nurse's preferences, legal regulations and hospital policies etc. Therefore, ED nurse scheduling is a complex and intellectually demanding task.

After interviewing ED nurse in-charge and some senior nursing staff in ED, researcher has generated number of insights into the challenges of nurse rostering, these are summarized below:

- ED is always busy so, time made available for roster planning was scarce.
- ED nurse in-charge mentioned that in many circumstances, they took rosters home to work on them in their own time and without interruption which was perceived as an unrecognised to ward management practices.
- There was no evidence of formal training on roster planning either at hospital or ward level despite of their complexity and intricacy. ED in-charge mentioned that it is usually 'learnt the ropes' from the previous incumbent.
- Nurse scheduling was a stressful task for nurse in-charge, ensuring to meet hospital and ward objectives while also satisfying staff. It was undervalued in terms of portfolio of nurse in-charge duties, despite of its managerial importance.
- ED had documented the roster planning process in order to ensure retention of roster planning expertise in absence of nurse in-charge; however, in the meantime poor roster planning and decisions may be generated.

In ED, variation in the staffing levels is required, different staffing levels and skill mix is required at different times of the day and at different times of the week. Understaffing can result in compromising patient care and increasing stress level of staff, whereas overstaffing can lead to cost escalation (Lim et al., 2016).

2.1.Mathematical modelling

Mathematical modelling refers to the process of creating a mathematical representation of a real-world scenarios, systems or processes using a set of variables and constraints. It involves using mathematical equations or algorithms to analyse or optimize best possible allocations of scarce resources. They are very useful tools in real-life complex systems or processes because it helps is testing hypotheses, making predictions and making informed decisions. Mathematical models are valuable tools in various fields such as healthcare, engineering and social sciences because it allows decision makers to explore hypothetical scenarios without making actual changes to the system.

ED is considered as a complex system and it is essential to optimise both human and non-human resources to enhance overall efficiency and patient flow in the ED. Mathematical programming can provide systematic and data-driven approaches to identify optimized solutions by considering factors such as resource availability, staff requirements, demand patterns and legal regulations (Nobil et al., 2022).

3. NURSE SCHEDULING MATHEMATICAL MODEL

Objective: Assign nurses to shifts (morning, evening, and night) such that the demand for the nurses is met at best and all hard constraints are satisfied.

Based on the data collected from interviews, following hard and soft constraints are formulated considering patient demand pattern, nurses' availability and preferences.

Hard Constraints: It represents essential limitations or conditions that must be satisfied in a mathematical model. Violating a hard constraint result in an infeasible solution meaning that finding feasible solutions requires satisfying all hard constraints.

1. Minimum Staff requirement: Morning shift (8am-2pm): 4, Afternoon shift (2pm-8pm): 4, Night shift (8pm-8am): 4
2. Each nurse must work only six days a week and schedule one day off per week.
3. Each nurse must work only one shift a day at most.
4. There should be at least 1 Senior nurse scheduled each shift of a day.
5. Morning shift cannot be assigned to any nurse after a previous day night shift.
6. All nurses have the same amount of total workload. (Morning, afternoon, and night shifts should be distributed equally among all nurses).
7. Maximum number of Night shifts should be 7 for all nurses in 28 days schedule.

Soft Constraints: These are flexible conditions that can be violated to some extent but incur a penalty or cost. Unlike hard constraints, violation of soft constraints does not result in a solution completely infeasible, rather associated with penalty or cost factors that quantify the level of violation.

1. Each nurse has at least one Sunday off in 4 weeks schedule.
2. No nurse can work for more than 8 consecutive working days.
3. Monday shifts are busier so requiring more than 4 staff each shift.
4. Nurses' preferences: for e.g., N7 and N11 don't like to work together.
5. The number of nurses assigned to each shift should meet with the demand of that shift.
6. Avoid working in an evening shift followed by previous day night shift.

The model for this study is formulated using Mixed Integer Programming, coded in python and solved using CPLEX solver. Mixed Integer Programming(MIP) is a mathematical optimization method that combines linear programming with integer variables to handle discrete decision variables effectively. It is used to find optimal solution for complex problems for a given objective function while satisfying a set of constraints. MIP can be successfully used to optimize operational efficiency of a complex system, while considering resource demand and capacity constraints and widely used in various domains of operation research and supply chain management. MIP offers systematic and efficient approach to scheduling problems, resource allocation and production planning (Nobil et al., 2022).

3.1. Mathematical Model

Sets:

D - Set of all the days in the schedule. $(1..d)$

D_s - Set of all the days that are sundays $(1..d_s)$

D_m - Set of all the days that are Mondays $(1..d_m)$

T - Set of all the shifts in a day. $(1..t)$

N - Set of all nurses. $(1..n)$

N_j - Set of junior nurses $(1..n)$

N_s - Set of senior nurses $(1..s)$

N_p - Set of nurses and their preferred nurses $((n_1, n_2), (n_1, n_3)) (1..k)$

Parameters:

$d_{t,d}$: Demand of nurses in shift t and day d .

l : Length of each shift

c : Number of days with at least one holiday allowed.

Variables:

$X_{d,t,n} \in 0,1$: 1 if shift t is assigned to nurse n on day d 0 otherwise.

$S_n \in \mathbb{R}$: Number of sunday shifts assigned to each nurse n .

$Sdev_{n_1,n_2} \in \mathbb{R}$: Deviation in number of sundays shifts in nurse n_1 and n_2 .

$Sabs \in \mathbb{R}$: Maximum deviation of number of sunday shifts for all nurses $in(n_1, n_2)$.

$T_{n,t} \in \mathbb{R}$: Number of each type of shifts assigned to each nurse n for shift t .

$Tdev_{n_1,n_2,t} \in \mathbb{R}$: Deviation in number of shifts in nurse n_1 and n_2 for shift t .

$Tabs_t \in \mathbb{R}$: Maximum deviation of number of type of shifts for all nurses (n_1, n_2, t) .

$Npref_{k,d,t} \in 0,1$ $k \in (n_1, n_2)$: 1 if nurses are working together, 0 otherwise for day d , shift t for pair n_1 and n_2

$Consc_{d,n} \in \mathbb{I} \in (c-3, c-1)$ Number of consecutive days a nurse works $d \in (c..t)$ $t \in T$

eveningSoft Soft variable for evening and night constraint.

Constraints:

Hard Constraint 1: Minimum number of nurses in each shift should be 4.

$$\sum_n X_{d,t,n} \geq 4 \quad \forall d, t$$

Hard Constraint 2: Each nurse should work for 6 days a week.

$$\sum_{d,t} X_{d,t,n} = 6 \quad \forall n$$

Hard Constraint 3: A nurse can only work for one shift a day at most.

$$\sum_t X_{d,t,n} \leq 1 \quad \forall n, d$$

Hard Constraint 4: There should be at least one senior nurse working in each shift.

$$\sum_{n \in N_s} X_{d,t,n} \geq 1 \quad \forall d, t$$

Hard Constraint 5: For a nurse, if the previous night's shift is active, the next morning shift cannot be active.

$$X_{d,t_3,n} + X_{d+1,t_1,n} \leq 1 \quad \forall d, t, n$$

Hard Constraint 6: The number of shifts assigned to each nurse for each type of shift should not vary.

$$\sum_{d \in D, t} X_{d,t,n} = T_{n,t} \quad \forall n$$

Equation describing the deviation of shifts assigned to each nurse.

$$T_{n1,t} - T_{n2,t} = Tdev_{n1,n2,t} \quad \forall n1, n2, t \in N$$

Equation describing maximum absolute deviation of shifts the nurses.

$$T_{abs,t} + T_{n1,n2,t} \geq 0$$

$$T_{abs,t} - T_{n1,n2,t} \geq 0$$

Hard Constraint 7: Maximum number of night shifts should be 7.

$$\sum_{d,t \in t_3} X_{d,t,n} \leq 7 \quad \forall n$$

Soft Constraint 1: The number of Sundays assigned to each nurse should not vary.

$$\sum_{d \in D_s, t} X_{d,t,n} = S_n \quad \forall n$$

Equation describing the deviation of Sundays assigned in nurses.

$$S_{n1} - S_{n2} = Sdev_{n1,n2} \quad \forall n1, n2 \in N$$

Equation describing maximum absolute deviation of the nurses.

$$Sabs + S_{n1,n2} \geq 0$$

$$Sabs - S_{n1,n2} \geq 0$$

Each nurse should have at least one Sunday off.

$$S_n \leq \text{card}(D_s) - 1 \quad \forall n$$

Soft Constraint 2: Number of consecutive days a nurse can work should be less than the value of the consecutive variable.

$$\sum_{d,t}^{d+c} X_{n,d,t} \leq Cons_{d',n} \quad \forall d' \in (c..d), n$$

Soft Constraint 3: Monday shifts are busier so requiring more than 4 staff each shift.

$$\sum_{t,n} X_{d,t,n} \geq 5 \quad \forall d \in D_m$$

Soft Constraint 4: Each nurse's preference should be given priority.

$$\sum_{n \in k} X_{n,d,t} \leq 2Npref_{k,d,t} \quad \forall k, d, t$$

Soft Constraint 5: The number of nurses assigned to each shift should meet with the demand of that shift.

$$\sum_n lX_{d,t,n} \geq d_{t,d} \quad \forall d, t, n$$

Soft Constraint 6: Avoid working in an evening shift followed by the previous day night shift.

$$X_{d,t_3,n} + X_{d+1,t_2,n} \leq eveningSoft + 1 \quad \forall d, t, n$$

Objective Function:

$$\min. Sabs + \sum_t Tabs_t + \sum_{d,n} c Npref_{d,n} + c'eveningSoft$$

4. RESULTS AND DISCUSSION

4.1. Optimal Nurse Schedule

Efficient nurse scheduling in ED is crucial to ensure optimal patient care in a fast-paced and unpredictable environment. Due to its dynamic nature, following challenges are faced during ED nurse scheduling:

- Unpredictable patient arrival patterns and volumes: the arrival patterns, the number and acuity of patients coming to ED can vary significantly, making it challenging to determine appropriate number and skill-mix of nurses. Managing these unpredictable volumes particularly during peak hours or in response to emergencies requires adequate staffing levels and can be challenging in already stretched environment.
- Ed operates round the clock and all the days, requiring scheduling nurses for various shifts including nights, weekends and public holidays. Ensuring sufficient nursing staff during all shifts while maintaining fairness in shift distribution can be a challenge.
- ED handles critical and emergency patients including trauma cases and high acuity medical illnesses, requiring specialized skills and experienced nurses to handle these complex cases and scheduling these can be demanding task.
- Additionally, taking into account individual preferences while ensuring fair distribution of shifts and maintaining optimal staffing level are crucial for staff satisfaction and retention. Effective communication and coordination among nurse managers and nursing staff in the scheduling process is vital in ED settings for balancing staff preferences, organizational needs and compliance with labour regulations.

These challenges are tackled using developed mathematical model enabling more efficient and effective management of nursing resources and provides new optimal schedule to address mentioned challenges of nurse scheduling in ED as below:

| |
|---------------------|
| Insert table 1 here |
|---------------------|

4.2. Optimization Results

Triage in emergency department is a process of determining priority for receiving medical care by assessing clinical condition of the patient (Chen et al., 2019). The Emergency departments of the hospital studied adopts 5 category Triage of patients based on their clinical condition as follows:

Category 1: Critical: Immediate treatments

Category 2: Emergency: within 15 mins

Category 3: Urgent: within 30 mins

Category 4: Semi-urgent: within 45 mins

Category 5: Non-urgent: within 60 mins

The demand pattern of the patient was calculated based on number of patients of each category and their required nurse's time. The following graph represents the demand and supply plot resulted using obtained solution:

Insert Figure 2 here

Mixed integer programming can be an effective and efficient approach for nurse scheduling in an ED while considering various constraints and objectives. It offers several benefits as listed below (Trilling et al., 2006):

- Optimal solutions: MIP offers mathematically optimize allocation of nurses to shifts based on objective function such as maximizing skill coverage or minimizing overtime by giving best possible solution.
- Time efficient: MIP techniques used for nurse scheduling problem such as branch-and-bound or cutting planes methods, explore the solution space efficiently to find optimal or near-optimal solution. Hence can result in efficient and time-saving technique compared to manual or heuristic-based methods of scheduling.
- Constraint handling: MIP allows to incorporate various complex constraints of nurse scheduling into the model such as staff availability, skill requirements, rest periods and shift fairness etc. MIP solvers effectively handles these constraints and also generates schedule that comply the individual needs and preferences leading to improved staff satisfaction and staff retention.
- Transparency and accountability: the schedule generated using MIP are based on mathematical optimization, making it transparent to justify decision-making and demonstrating fairness and compliance with various constraints.
- Flexibility: MIP offers flexibility in modelling as it allows modifying the objectives and constraints as per the changing requirements. This approach is suitable for various healthcare settings as it can handle large-scale scheduling problem with numerous nurses, shifts and various constraints.

The obtained schedule was then used in the simulation model prepared and previous manual schedule and schedule obtained from the model was compare as below:

Insert Table 2 here

There is significant reduction in total length of stay for the patients coming to the emergency department using nurse scheduling model developed for nurse rostering in ED. Also, waiting time for

the category 3, 4 and 5 patients is reduced 11.25%, 17.79% and 25.10% respectively. Nurses' preferences were taken into consideration while formulating the model.

5. CONCLUSION

This study provides an overview of the importance of nurse scheduling in ED. It highlights the significance of addressing the challenges associated with scheduling ED nurses. These includes unpredictable patient arrival patterns and volumes, the need for round the clock coverage, high acuity patients and the complex skill-mix requirement of nursing staff in ED. The impact of these challenges on staffing levels and quality of patient care provided is also discussed. It then developed nurse scheduling model using mixed integer programming and obtained nurse schedule which results in significant reduction in patients waiting time and total length of stay. The practical contribution of this study is three-fold:

- Firstly, it satisfies all the constraints and obtains a near-optimal nurse scheduling.
- Secondly, it can reduce patient's total length of stay and waiting time in ED.
- Thirdly, it can adjust the number of nurses to the shift dynamically.

Also, it is observed that optimization techniques involving the use of solvers such as mixed integer programming are more preferable and easily transferable to hospital services. Other approaches like heuristics or meta-heuristics are less adaptable, accessible and could be time-consuming.

Significance of the study from Asia pacific region perspective

According to Health NZ's 1st quarterly report of 2023, ED wait times across New Zealand hit the highest level in a decade with just 71% of patients receiving medical attention within 6 hours (Target: 95%) between October to December in 2022. Similarly, in Australia in the August 2022, 21% of patients who needed to be admitted to the hospital had to wait more than 8 hours for a bed; some waited more than 24 hours. Therefore, ED wait times and delays to treatment for patients has become increasingly apparent across the world as a problem requiring attention. This pressure needs to be addressed by focusing on hospital flow, manpower planning, prioritizing urgent care and increasing coordination between ED staff to deliver health services. Also, there is a global shortage of nurses and New Zealand and Australia are no exceptions. The New Zealand Nurses Organization (NZNO) reported the shortage of more than 4000 nurses in the country leaving existing workforce extremely exhausted and overworked in irregular work scheduling conditions ("ED wait times hit new record," 2023). The proposed nurse scheduling model can be modified in many ways when applying to other hospital settings and should be able to assist the nurse manager in assigning more balanced workload while maximizing nurses' preferences. The proposed model can be modified and implemented without additional software cost and programming difficulties. Hence, this study will be of immense importance to all hospitals to make efficient and streamlined ED processes by providing cost-effective strategies for improving nursing manpower planning and utilization.

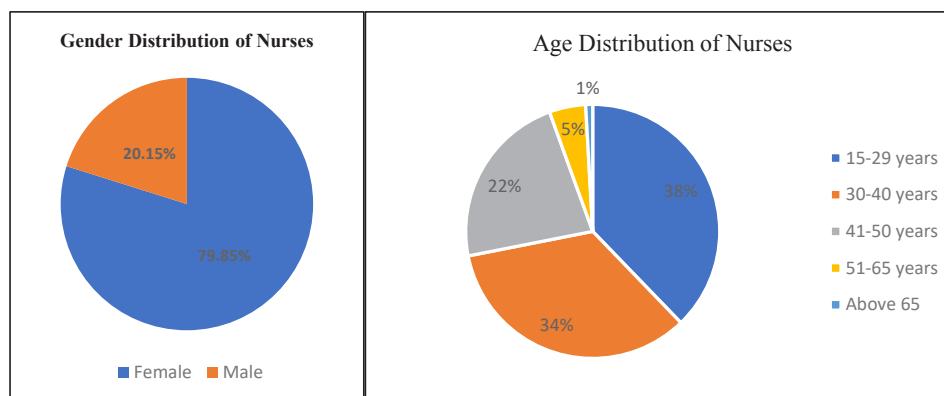
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APPENDIX

Figure 1: Gender and Age Distribution of nurses



(Source: estimates from NSSO 2017-2018)

Figure 2: Demand Vs Supply plot of Nurse schedule

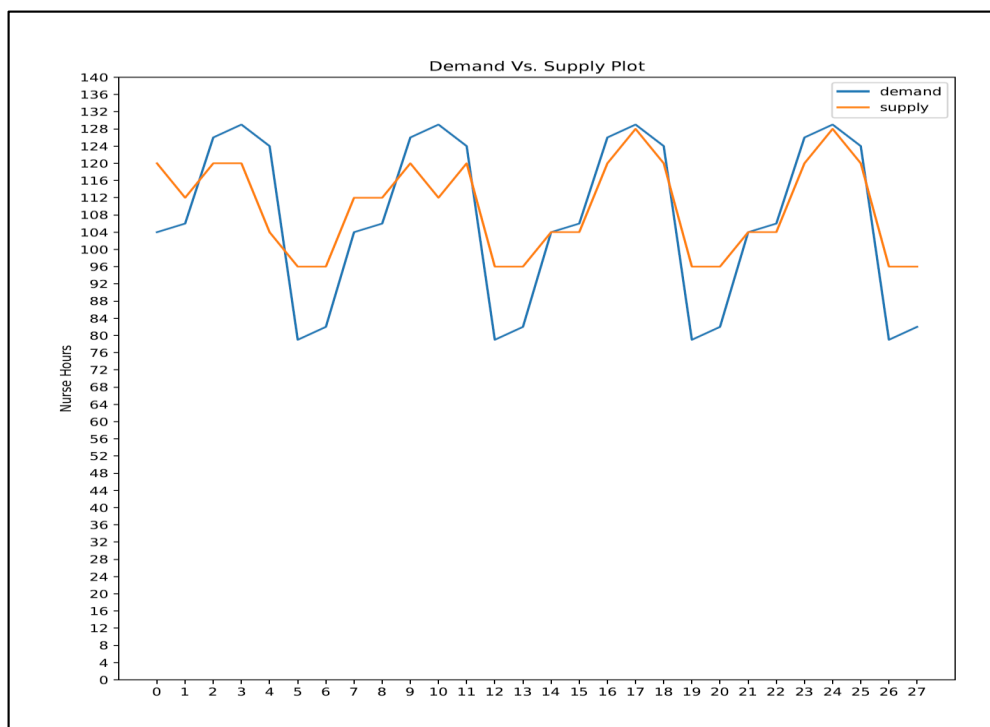


Table 1: Obtained Optimal Nurse schedule

| | Nurse 1 | Nurse 2 | Nurse 3 | Nurse 4 | Nurse 5 | Nurse 6 | Nurse 7 | Nurse 8 | Nurse 9 | Nurse 10 | Nurse 11 | Nurse 12 | Nurse 13 | Nurse 14 | Nurse 15 | Nurse 16 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
| Day 1 | 3 | 0 | 2 | 1 | 1 | 1 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 3 | 1 | 3 |
| Day 2 | 3 | 1 | 1 | 0 | 0 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 2 | 3 | 1 | 3 |
| Day 3 | 3 | 1 | 0 | 1 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 3 | 1 | 3 |
| Day 4 | 0 | 2 | 2 | 2 | 1 | 1 | 1 | 3 | 2 | 3 | 2 | 1 | 2 | 3 | 1 | 3 |
| Day 5 | 1 | 2 | 2 | 2 | 2 | 0 | 2 | 3 | 1 | 3 | 0 | 1 | 0 | 3 | 1 | 3 |
| Day 6 | 1 | 3 | 2 | 1 | 1 | 2 | 3 | 0 | 3 | 3 | 2 | 0 | 1 | 0 | 2 | 0 |
| Day 7 | 2 | 3 | 1 | 2 | 1 | 3 | 0 | 1 | 0 | 0 | 3 | 3 | 2 | 2 | 0 | 1 |
| Day 8 | 1 | 2 | 2 | 3 | 2 | 3 | 0 | 1 | 2 | 0 | 3 | 3 | 1 | 1 | 2 | 1 |
| Day 9 | 2 | 3 | 1 | 2 | 2 | 3 | 2 | 1 | 0 | 2 | 3 | 3 | 1 | 1 | 0 | 1 |
| Day 10 | 2 | 0 | 1 | 2 | 3 | 3 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 1 |
| Day 11 | 2 | 2 | 1 | 0 | 0 | 3 | 1 | 2 | 1 | 3 | 3 | 3 | 1 | 2 | 2 | 2 |
| Day 12 | 2 | 1 | 0 | 2 | 1 | 3 | 1 | 2 | 1 | 3 | 3 | 3 | 1 | 1 | 2 | 2 |
| Day 13 | 0 | 1 | 1 | 2 | 2 | 3 | 2 | 0 | 1 | 3 | 3 | 3 | 2 | 0 | 1 | 0 |
| Day 14 | 1 | 2 | 3 | 3 | 2 | 0 | 2 | 1 | 2 | 3 | 0 | 0 | 0 | 1 | 3 | 1 |
| Day 15 | 1 | 1 | 3 | 3 | 1 | 2 | 0 | 2 | 2 | 0 | 0 | 2 | 3 | 1 | 3 | 2 |
| Day 16 | 1 | 1 | 3 | 3 | 2 | 0 | 3 | 2 | 3 | 1 | 2 | 1 | 0 | 2 | 0 | 2 |
| Day 17 | 2 | 1 | 3 | 3 | 1 | 1 | 3 | 2 | 0 | 2 | 1 | 1 | 3 | 2 | 2 | 2 |
| Day 18 | 2 | 2 | 3 | 3 | 2 | 1 | 3 | 1 | 1 | 2 | 1 | 1 | 3 | 2 | 2 | 1 |
| Day 19 | 2 | 0 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 3 | 2 | 2 | 2 |
| Day 20 | 1 | 2 | 0 | 0 | 0 | 1 | 3 | 3 | 1 | 2 | 2 | 0 | 3 | 1 | 2 | 3 |
| Day 21 | 0 | 1 | 2 | 2 | 1 | 2 | 3 | 0 | 3 | 1 | 2 | 1 | 3 | 0 | 3 | 0 |
| Day 22 | 1 | 2 | 2 | 1 | 3 | 2 | 0 | 1 | 3 | 0 | 0 | 2 | 3 | 2 | 3 | 1 |
| Day 23 | 3 | 2 | 1 | 2 | 3 | 0 | 1 | 2 | 3 | 1 | 2 | 0 | 0 | 1 | 3 | 2 |
| Day 24 | 3 | 3 | 2 | 1 | 3 | 2 | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 2 | 0 | 2 |
| Day 25 | 3 | 3 | 2 | 1 | 3 | 2 | 1 | 1 | 3 | 2 | 1 | 2 | 2 | 1 | 2 | 1 |
| Day 26 | 3 | 3 | 1 | 1 | 3 | 2 | 2 | 2 | 0 | 1 | 1 | 2 | 2 | 3 | 1 | 2 |
| Day 27 | 0 | 3 | 1 | 1 | 3 | 1 | 1 | 0 | 2 | 1 | 2 | 2 | 2 | 0 | 3 | 0 |
| Day 28 | 2 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 3 | 3 | 3 |

(Where, 1: morning shift:8am-2pm, 2: Afternoon shift:2pm-8pm, 3: night shift: 8pm-8am, 0: off)

Table 2: Optimization Results

| Total time spent in ED (in Minutes) | Pre-Optimal schedule | Post-Optimal schedule | Reduction in Time (in Minutes) |
|-------------------------------------|----------------------|-----------------------|--------------------------------|
| Category-1 | 147.61 | 140.68 | 6.93 |
| Category-2 | 112.20 | 109.10 | 3.10 |
| Category-3 | 157.32 | 139.61 | 17.71 (11.25%) |
| Category-4 | 186.15 | 153.03 | 33.12 (17.79%) |
| Category-5 | 316.53 | 237.05 | 79.48 (25.10%) |
| Patient time interval | 420.19 | 310.26 | 109.93 (26.16%) |
| Patient time interval cat-1 & 2 | 217.43 | 212.36 | 5.07 |

Stream 5. Entrepreneurship and SMEs

**Understanding the Dynamics of Psychological Ownership and Community
Embeddedness in Family Businesses: A Case Study Barker's of Geraldine**

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Understanding the Dynamics of Psychological Ownership and Community Embeddedness in Family Businesses: A Case Study Barker's of Geraldine

ABSTRACT:

Family businesses are crucial in rural communities primarily due to their strong community embeddedness. However, existing literature lacks an in-depth understanding of the motivations and drivers behind this community embeddedness. This study explored the interconnections between psychological ownership, community embeddedness, and family businesses in rural communities and examined their practical implications. This study fills this gap by conducting an exploratory case study of Barker's of Geraldine, contributing to the literature by highlighting psychological ownership as a key motivation and driver for community embeddedness in family businesses. This research provides practical insights that guide policy and economic development initiatives in rural areas by investigating the link between psychological ownership and community embeddedness in rural family businesses.

Keywords: family business, rural, community embeddedness, psychological ownership, stakeholder ecosystem

BUILDING THRIVING COMMUNITIES

Family businesses are the most common type of organisational form worldwide (Howorth & Robinson, 2020). Such businesses can be essential benefactors within communities (Lumpkin & Bacq, 2022), particularly within rural communities where family businesses are deeply embedded (Hadjielias, Christofi, Vrontis, & Khan, 2022). Rural communities enjoy benefits from the existence of family businesses because of the visibility of what they do, which has implications for community development and allows them to, in some cases, dominate the rural business landscape (Backman & Palmberg, 2015; Baù, Chirico, Pittino, Backman, & Klaesson, 2019). Lumpkin and Bacq (2022) argue that while family businesses contribute to the rural economy through jobs and revenue, they actively strengthen and build their community because of their higher degree of embeddedness. This is driven by their motivation and capability to contribute to the well-being of their communities. However, there is a gap in the literature to demonstrate the motivations and drivers underlying the community embeddedness of family businesses (Lumpkin & Bacq, 2022), in advance of their desire to establish and maintain a profitable business.

To address this gap, we draw on a theory used within the literature to study family businesses – the

theory of psychological ownership (Pierce, Kostova, & Dirks, 2001) but focusing on rural communities. Psychological ownership involves a connection between the 'self' and a 'target of possession', that is, the family business (Brundin, McClatchey, & Melin, 2023). Previous studies on psychological ownership have enhanced our understanding of why family business owners and members are psychologically tied to their business, that is, having a strong attachment to their business (Bernhard & O'Driscoll, 2011; Björnberg & Nicholson, 2012; Pierce et al., 2001), a point supported by Brundin et al. (2023) who comments, strong psychological ownership would mean being "one" with the business and defining one's meaning in life. Brundin et al. further note psychological ownership is due to investing in creating the business or being raised in it (Brundin et al., 2023) and Brundin et al. (2023) that psychological ownership is viewed as achieving positive outcomes and leading to altruistic behaviour.

In summary, while we know the reasons for creating and maintaining family businesses, we do not understand the motivations and drivers underlying the community embeddedness of family businesses. Therefore, we hypothesise that psychological ownership also plays an important role in a family business's community embeddedness in building thriving communities – an additional altruistic desire. To test this hypothesis, we developed an in-depth case study of a family business, Barker's of Geraldine, established by a family member in the rural town of Geraldine, Aotearoa, New Zealand. The research questions guiding our study are: (1) what role does psychological ownership play in the community embeddedness of a family business? (2) how do psychological ownership and community embeddedness impact the creation of thriving rural communities through family businesses?

Our case study provides a unique perspective on the role psychological ownership and community embeddedness play in building thriving rural communities. In doing so, our study makes an important contribution towards the literature in identifying the motivations and drivers underlying the community embeddedness of family businesses. We note that this research provides insights into how communities could leverage the presence of family businesses and how government policies could advance the family business' competitive advantage for mutually beneficial outcomes.

In the rest of the paper, we elaborate on the concepts of psychological ownership and link it to

community embeddedness to discuss how the relationship contributes towards building thriving rural communities. We validate this relationship through an in-depth case study of a rural family business – Barker's of Geraldine. We conclude with a discussion of the implications and future research potential.

THEORETICAL BACKGROUND

We hypothesise that psychological ownership plays an important role in a family business's community embeddedness for building thriving communities. Therefore, guided by our first research question, *what role does psychological ownership play in the community embeddedness of a family business?* we explored the existing literature through a narrative review.

Family firms and communities

Kannothra, Manning, and Haigh (2018) argue that the impact of family businesses varies across urban and rural settings. Rural has been described in the literature as a distinctive locality in terms of population density, population loss and gain rate, settlement size, local economic structure, and landscape (Halfacree, 2006). Backman and Palmberg (2015) state that family businesses dominate the rural landscape, with Baù et al. (2019) suggesting that rural communities benefit from the impact created by family businesses because what they do is visible and has implications for the community's development. Additionally, the literature highlights that family businesses play a multifaceted role in rural communities, such as providing community support and engagement, job creation supporting economic development (Basco & Suwala, 2020), and family businesses possess a long term orientation to support community wellbeing, build strong social capital and relationships within the communities and provide community leadership through philanthropy and interactions with local institutions (Hadjielias et al., 2022). As a consequence, family businesses provide community resilience during periods of uncertainty. However, the literature identifies one key dimension that adds relevance to the discussion around family businesses, this is the area of psychological ownership, yet more research is needed to deepen this understanding (Brundin et al., 2023; Picone, De Massis, Tang, & Piccolo, 2021; Pieper, 2010).

Psychological Ownership

The concept of ownership is said to comprise two different ownership elements – legal and psychological (Pierce et al., 2001). Legal ownership is suggested as formal ownership commonly defined in law – a legal right to a possession (Pierce & Jussila, 2011). Psychological ownership is described as an expression of a relationship with objects by using pronouns such as my, mine, ours, yours and theirs. The literature examining psychological ownership has evolved over the past few decades (Renz & Posthuma, 2023), yet its focus has remained around the seminal works of Pierce and Jussila (2011); Pierce et al. (2001); Pierce, Kostova, and Dirks (2003). It is hard to arrive at a universal definition of psychological ownership as it extends beyond the scope of rigid context as ownership is a "dual creation, part attitude, part object, part in the mind, part 'real'" (Etzioni, 1991). It can be argued that the relationship between self and possessions is a fundamental component of psychological ownership. Yet, psychological ownership has also been referenced as an extension of self, and changes in the state of possessions could have devastating effects on owners, as Belk (1988, p.160) stated that "we learn, define and remind ourselves of who we are by our possessions (Guarana & Avolio, 2022). Additionally, the degree of control exercised over an object can result in a feeling of ownership (Furby, 1978; Lewis & Brooks, 1974; Pierce & Jussila, 2011; Prelinger, 1959; Sartre, 2001). A further assertion by Csikszentmihalyi and Rochberg-Halton (1981) suggests that investment of the self into the creation, enhancement, or acquisition of an object (an organisation in this case) is an important contributor to the development of psychological ownership (Pierce & Jussila, 2011). Pierce et al. (2003) argue that responsibility does not just come as a result of psychological ownership but that the two are distinct states. Instead, they suggest that feelings of responsibility can result from psychological ownership and that a sense of psychological ownership can result from an individual's sense of responsibility towards something. Scholars have argued that psychological ownership is instinctive and innately human as it satisfies human motives (Dawkins, Tian, Newman, & Martin, 2017; Pierce et al., 2001); therefore, examining psychological ownership helps us understand why family business owners and members have a strong attachment to their business (Brundin et al., 2023). We argue that this emotional attachment to the family business, compounded with the link to one's

identity, impacts how a family business interacts with communities they are part of, particularly if this is a rural community due to the high level of community embeddedness.

Community embeddedness

As Lumpkin and Bacq (2022) state, family businesses are among some communities' most important benefactors due to their social and economic benefits. Moreover, Lumpkin and Bacq (2022) state that family businesses are more motivated to contribute to the well-being of their communities due to their relatively higher degree of embeddedness within the community. In comparison, embeddedness as a concept has been defined and examined by management scholars at individual and organisational levels (see (Jack & Anderson, 2002; Seelos, Mair, Battilana, & Tina Dacin, 2011; Whittington, 1992), yet, community embeddedness remains less explored. Lumpkin and Bacq (p.2) state that "community embeddedness strengthens a firm's ability to create civic wealth for its surrounding locality and that family businesses have heightened levels of community embeddedness which make them especially effective civic wealth creators." Furthermore, Lumpkin & Bacq notes higher levels of community embeddedness provide family businesses with a strong capacity to add to the resources or capabilities of their local communities.

Links between psychological ownership and community embeddedness

By examining the literature on psychological ownership and community embeddedness, we note a strong connection between the two concepts, particularly concerning family businesses. We can argue that the relationship exhibits itself in areas related to collaboration and support within and to the community, the economic interdependence between the family business and their community, and a link between shared values and identity of not just the family business but also of the community with the family business. In addition, the literature notes that family businesses contribute to the community's well-being through supporting philanthropic and cultural initiatives, creating a mutually beneficial and reciprocal relationship that strengthens the feelings of psychological ownership. In accepting the abovementioned concepts, we infer that the relationships between community and family businesses are stronger in rural communities due to their settlement size, local economic structure, and landscape. Such an inference has not been explored before; therefore, our objective was to investigate the impact of the interconnections among psychological ownership, community

embeddedness, and family businesses in a rural community, aiming to understand the dynamics contributing to developing robust and resilient rural communities.

METHOD

We conducted an exploratory case study (Yin, 2017) to answer our research question: *How do psychological ownership and community embeddedness impact the creation of thriving rural communities through family businesses?* This research selected a family business for examination based on purposive sampling based on characteristics for evaluation. Following Miles and Huberman (1994), the chosen case was defined within the family business and rural community context. To address our research question, we accessed data from publicly accessible sources, including the company's websites, news articles, social media platforms, press releases, interviews and a book. This search led us to select Barkers of Geraldine as the case to explore our research question, as the case is "rare and unique" and appropriate for theoretical sampling purposes (Eisenhardt, 1989).

CASE STUDY

Barker's is a well-known New Zealand company specialising in producing a wide range of gourmet food products. The company was founded in 1969 by Anthony Barker and his wife, Gillian Barker, in the small town of Geraldine, in the South Island of New Zealand. Barker's started as a small family business, making jams and preserves using local fruits. Over the years, the company expanded its product line to include a variety of sauces, chutneys, syrups, fruit juices, and fruit-based beverages. They are known for their high-quality products made with natural ingredients and free from artificial preservatives.

Barker's of Geraldine has gained a reputation for its commitment to using locally sourced ingredients whenever possible. They work closely with New Zealand farmers and growers to ensure the freshest and highest-quality produce for their products. The company's fruit-based products often feature fruits like strawberries, raspberries, blackcurrants, and other berries grown in the region. Today, Barker's products are widely available in supermarkets and speciality food stores throughout New Zealand. They have expanded their reach internationally and exported their products to various countries worldwide. Barker's of Geraldine has become a well-respected brand known for its delicious and

artisanal food offerings.

Barker's of Geraldine has become an integral part of their local community and a prominent player in the food industry. They play a pivotal role in the local economy by providing employment opportunities. As one of the largest employers in Geraldine, the company supports the livelihoods of numerous community members. By offering stable jobs with fair wages and benefits, Barker's strengthens the local workforce and contributes to economic growth. In addition, the company's commitment to sourcing locally extends beyond mere economic considerations. Barker's actively collaborates with local farmers and growers to procure fresh, high-quality ingredients. By partnering with these suppliers, Barker's bolsters the local agricultural community, fostering strong relationships and ensuring a sustainable supply chain. This approach supports local farmers and promotes environmental sustainability by reducing transportation emissions. It is important to note that as a business, Barkers could have moved their operations to an urban environment where potential economies of scale could have been achieved, but have refrained from doing so, favouring their home base.

Barker's of Geraldine demonstrates its dedication to community development through generous sponsorships and donations. The company actively supports local schools, sports teams, community projects, fundraisers, and charitable causes. Whether sponsoring an annual community fair or donating to a local hospital, Barker's invests in initiatives that enhance the community's overall well-being. This active involvement builds strong bonds between the company and the people it serves. Barker's also actively participates in and sponsors community events and festivals, injecting vibrancy and excitement into Geraldine. While community-focused, these actions also serve as platforms for showcasing their products, engaging with local residents, and fostering a sense of community spirit – in addition to economic gain. However, by actively participating in the community fabric, Barker's solidifies its place as a trusted and respected brand.

Barker's of Geraldine has a strong commitment to supporting its local community in various ways. We note that Barker's of Geraldine demonstrates a company deeply committed to community support. Barker's has become an integral part of the Geraldine community through various initiatives such as

local sourcing, employment generation, sponsorships, and partnerships. By nurturing its stakeholder ecosystem, the company has built a thriving business and positively impacted the local economy, environment, and society.

DISCUSSION

We began this research with the hypothesis that psychological ownership plays an important role in a family business's community embeddedness for building thriving communities. We were guided by our first research question *what role does psychological ownership play in the community embeddedness of a family business?* to explore what the current literature reveals about psychological ownership and community embeddedness. Following the review of relevant literature, we noted the strong link between psychological ownership and community embeddedness. Subsequently, we approached our second research question *how do psychological ownership and community embeddedness impact the creation of thriving rural communities through family businesses?* We investigated this by developing an in-depth case study of a family business, Barker's of Geraldine, a family business in the rural town of Geraldine, Aotearoa, New Zealand.

Our case study of Barkers of Geraldine revealed that this family business engages and supports its rural community stakeholder ecosystem through the following activities:

- **Employment:** They are a significant local employer, providing job opportunities for people in the rural community, therefore, contributing to the local economy by supporting the livelihoods of community members.
- **Sourcing ingredients locally:** By prioritising local suppliers (farmers and growers) whenever possible, they support the agricultural community in the region. In addition, they foster strong relationships with local producers.
- **Community support:** They sponsor and donate to various community organisations, events, and initiatives. Therefore, enhancing their relationships with other organisations and positively impacting the community.

We infer that Barkers of Geraldine's strong sense of psychological ownership contributes towards their

community embeddedness by fostering shared identity, collaboration, economic interdependence, and a focus on community well-being. Consequently, these factors contribute to a mutually beneficial relationship where the company becomes deeply integrated into the fabric of the local community.

Our research aimed to determine the motivations and drivers underlying the community embeddedness of family businesses. Therefore, we contend that psychological ownership is a key motivator and driver of community embeddedness for family businesses, particularly in rural settings. We also note that psychological ownership and community embeddedness are, in fact, intertwined concepts. The deep emotional attachment to the family business (Pierce & Jussila, 2011), sense of responsibility, and shared values associated with psychological ownership drive family businesses to actively engage with their local communities (Zellweger & Nason, 2008). In turn, community embeddedness strengthens the bonds, trust, and mutual benefits between the family business and the community, contributing to thriving communities.

Implications for practice

Investigating the link between psychological ownership and community embeddedness of family businesses in rural communities has provided us practical insights that contribute to formulating strategies and policies that could create thriving communities. We suggest that understanding the dynamics between psychological ownership, community embeddedness, and family businesses could inform the design and execution of community development initiatives. It can foster community engagement, social cohesion, and economic growth in rural areas. Subsequently, policymakers, community organisations, and local leaders could use this knowledge to develop targeted programs and strategies to create thriving communities. Governments and regional development agencies can utilise this knowledge to design supportive policies, financial incentives, and infrastructure investments that foster an environment favourable to family business growth in rural communities. In addition, these interconnections between psychological ownership and community embeddedness can create a collaborative stakeholder ecosystem that is mutually beneficial.

Limitations and future research

While we believe this study takes a step forward in understanding the link between psychological

ownership and community embeddedness concerning family businesses, we see further research opportunities. As we analysed existing and historical data for one family business, we recognise the need for future research to enrich and corroborate our findings by examining diverse cases of family businesses which will allow for diversity of family firms examined while contributing towards the generalisation of theory.

CONCLUSION

Family businesses in rural communities contribute towards many benefits because of the visibility of what they do, which has implications for community development and allows them to dominate the rural business landscape. Family businesses, therefore, have a high level of community embeddedness. However, there was a gap in the literature around the motivations and drivers underlying the community embeddedness of family businesses. Therefore, our research's objective was to determine the motivations and drivers underlying the community embeddedness of family businesses. Reviewing the family business literature, we hypothesised that psychological ownership was a key motivator and driver of community embeddedness. We empirically examined this linkage through an exploratory case study of Barker's Geraldine. Our research states that psychological ownership and community embeddedness are, in fact, intertwined concepts. Understanding this linkage could assist policymakers in designing supportive policies, financial incentives, and infrastructure investments that foster an environment favourable to family business growth in rural communities. Consequently, supporting the creation of a collaborative stakeholder ecosystem that is mutually beneficial to the family business and community.

Stream 5. Entrepreneurship and SMEs

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Generative AI is here: Time for Transnational Higher Education to step up and embrace the opportunity.

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Generative AI is here: Time for Transnational Higher Education to step up and embrace the opportunity.

ABSTRACT: This paper explores the integration of generative Artificial Intelligence (AI) in transnational education (TNE) programs, introducing its transformative potential and challenges. TNE partnerships between Australian and international higher education institutions enable students to gain global perspectives and build networks, but face difficulties due to cultural differences, language barriers, and educational system variations. Generative AI can tackle these challenges by leveraging existing tools and technologies for personalised learning, effective communication, and inclusivity. Considerations such as cultural sensitivity, technological infrastructure, algorithmic bias, privacy, academic integrity, and pedagogical shifts are crucial for embracing the transformative nature of generative AI in TNE programs, and yet there is some reluctance in using the new technology. This paper provides the first steps required in understanding these considerations.

Keywords: Transnational Education, Generative Artificial Intelligence, Transformative Technology

Educational tools and technologies have played a pivotal role in shaping the learning experiences of transnational education (TNE) students and fostering communication in geographically dispersed TNE programs (Bosire & Amimo, 2017; Konstantinidou & Scherer, 2022). Generative Artificial Intelligence (AI) can leverage existing tools and technologies for personalised learning, effective communication, and inclusivity however navigating the challenges and tensions in the implementation of generative AI requires pervasive discussions between institutions, lecturers, students, and industry. The aim of this paper is to provide an introduction of the first steps required to prepare TNE programs to harness the power of generative AI in TNE programs that will enable innovative and sustainable use for all.

GENERATIVE AI IN TNE

The evolution of AI in education has witnessed a remarkable journey, starting from the early days of rule-based systems to the emergence of more sophisticated and dynamic generative AI technologies (Ouyang & Jiao, 2021; Ouyang, Zheng, & Jiao, 2022). During COVID border closures, TNE was forced to move to an online delivery mechanism to ensure students remained connected and able to progress through their

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degrees (Camilleri & Camilleri, 2022; Lim, Gunasekara, Pallant, Pallant, & Pechenkina, 2023).

Historically, TNE programs have had mixed views on embracing an online presence, particularly those based in an Eastern Education culture (Camilleri & Camilleri, 2022). The increase in online and technological based education provided an ideal environment for the growth and maturity of technology and AI in higher education. AI applications have moved from simple rule-based systems, which involved the formulation of explicit rules and decision trees to guide instructional processes, to intelligent adaptive learning systems based on natural language processing, machine learning, and data analysis that respond to a student's interaction with the LMS (Ouyang & Jiao, 2021; Ouyang et al., 2022). Due to the increase of data and reliance of educational technologies, AI in education has undergone a transformative shift (Ouyang et al., 2022). The advent of generative AI has enabled systems to learn from data, make inferences, and generate novel content. Generative AI models, such as deep learning neural networks, have proven instrumental in facilitating personalised learning experiences, automating administrative tasks, and providing intelligent tutoring (Ouyang & Jiao, 2021). This evolution marks a significant milestone in the application of AI in education, as it empowers educators and learners alike to explore new frontiers of knowledge acquisition and engage in interactive and adaptive learning environments, facilitate real-time feedback, and empower educators with data-driven insights. By leveraging the capabilities of generative AI, education may transcend traditional boundaries and create engaging, interactive, and learner-centric environments that optimise student learning outcomes.

These technological advancements also have the potential to revolutionise the educational landscape by providing personalised and tailored learning experiences for TNE students that cater to the diverse needs and backgrounds, ultimately enhancing their educational journey and outcomes (Lim et al., 2023). There is an undeniable need to adapt TNE programs to embrace the transformative potential of these technologies. By harnessing the power of generative AI, TNE programs can overcome the challenges of varying educational systems, cultural differences, and language barriers. AI-powered language processing and translation capabilities may facilitate effective communication and understanding among

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students and staff from diverse backgrounds. The innovative implementation of technologies, including the use of generative AI, can foster new ways of thinking and learning enabling students to identify, understand and respond to the critical concepts required to be an active global citizen (Alonso-Martínez, Jiménez-Parra, González-Álvarez, Godos-Díez, & Cabeza-García, 2019; Montiel, Delgado-Ceballos, Ortiz-de-Mandojana, & Antolin-Lopez, 2020). The integration of AI in transnational education may equip students with the skills and competencies required in the rapidly evolving global job market. By preparing students to interact, navigate and leverage AI technologies, TNE programs can empower them to thrive in industry settings that increasingly rely on AI-driven tools and practices (Ouyang & Jiao, 2021).

Despite this potential it is crucial to approach this integration thoughtfully and ethically, considering the unique cultural contexts, local needs, and potential challenges. TNE programs must invest in professional development of staff and students, ensure pedagogical adaptation, and address ethical implications to maximise the benefits of generative AI while maintaining a balance between technological innovation, academic integrity, and cultural sensitivity (Ouyang & Jiao, 2021; Pinkwart, 2016). By adapting TNE programs to the evolving landscape of generative AI in higher education, institutions can better equip students and staff with the skills, knowledge, and experiences necessary to succeed in a globally interconnected world.

TNE IN CONTEXT

Partnerships between Australian and international higher education institutions offer an opportunity for students to gain a global perspective, understand diverse cultures, and build international networks (Alonso-Martínez et al., 2019; Bosire & Amimo, 2017; Croucher, Elliott, Locke, & Yencken, 2020; Healey, 2020; Sin, Leung, & Waters, 2019; Tight, 2022). The demand for international education has witnessed a significant surge in recent years, driven by the forces of globalisation and interconnectedness (Kosmützky & Putty, 2016). Transnational agreements (TNE) with Australian Universities where the degree is offered in a host country represent a large portion of TNE market and provide local students

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with the opportunity to experience an international higher education degree ‘in place’ (Croucher et al., 2020).

The College of Business and Economics at the University of Tasmania has two TNE agreements in China. These agreements have been running for over 15 years and are considered mature programs. The partnership with Shanghai Ocean University (SHOU) has been ongoing since 2002. The SHOU partnership is a 4+0 program, where students complete their University of Tasmania Degree (Bachelor of Business or Bachelor of Information Systems) offshore at SHOU, in addition to also completing a Bachelor of Management through SHOU. The SHOU degree is completed in Mandarin Chinese and the University of Tasmania degrees are completed in English. Students complete compulsory English in the first two years of the program. The program is accredited by the Chinese Ministry of Education and has graduated over 6,600 students since 2002. The partnership with the Universal College of Higher Education (UCHE) has been running for over 16 years and is based in Hong Kong. Students articulate into a Bachelor of Business once they have completed prior study (AQF 6) and receive recognition of prior learning to enable them to enroll and complete the Bachelor of Business degree over three semesters. Students complete their Bachelor of Business offshore. The Hong Kong program holds registration with the Hong Kong Council on Accreditation of Academic and Vocational Qualifications (HKCAAVQ) and has graduated over 933 students since 2009. Both the Shanghai and Hong Kong programs enable students to transfer to postgraduate studies in Tasmania upon completion of their undergraduate studies. These programs, like so many in Australian Higher Education, are now grappling with the opportunities and tensions generated by advancements in education technology.

TNE affords students opportunities to experience cultural exchange, personal growth, and the development of global citizenship skills yet there are various challenges students face when navigating different educational cultures (Croucher et al., 2020). Language and communication pose significant barriers, as students may encounter difficulties due to limited proficiency in the language of instruction (commonly English). Educational systems and standards vary across countries, leading to challenges in

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adapting to new curricula, teaching methods, assessment practices, and academic expectations (Bosire & Amimo, 2017). Cultural adjustment and social integration present additional hurdles, as students must navigate unfamiliar cultural norms, societal expectations, and may experience feelings of isolation (Bosire & Amimo, 2017). Accessing academic support services, resources, and extracurricular opportunities can also be challenging due to differences in available resources, library facilities, and research opportunities (Bosire & Amimo, 2017). A significant challenge for TNE programs operating ‘in place’, such as the programs described earlier, is with pedagogical differences, through the perception of the cultural misalignment between the host and delivery institutions (Bosire & Amimo, 2017; Zhao & Liu, 2022). For students and educators trying to navigate between inherent cultural education pedagogies (for example the difference between a lecture style system and an engagement style system) this can create tensions between the intent of learning outcomes for the degree and the lived experience of the student.

Overcoming these challenges requires higher educational institutions to provide comprehensive support systems, foster intercultural understanding, and create inclusive and innovative learning environments that address the unique needs of students within these programs (Kosmützky & Putty, 2016; Pinkwart, 2016). The use of innovative technologies have the capacity to provide support to students that mitigate some of these challenges (Bosire & Amimo, 2017).

EDUCATIONAL TOOLS AND TECHNOLOGY IN TRANSNATIONAL EDUCATION

Educational tools and technologies have played a pivotal role in shaping the learning experiences of TNE students and fostering communication in geographically dispersed TNE programs (Bosire & Amimo, 2017; Konstantinidou & Scherer, 2022). Video conferencing has enabled real-time interactions, virtual classrooms, and synchronous discussions, overcoming geographical barriers and allowing students and educators to engage in face-to-face communication regardless of their physical locations (Batanero, Rueda, Cerero, & Tadeu, 2022). Learning management systems (LMS) have provided a centralised platform for content delivery, assignment submission, and communication, facilitating access to course materials, and fostering collaborative learning (Camilleri & Camilleri, 2022). Online collaboration

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platforms have further enhanced the learning experience by enabling seamless teamwork, group projects, and knowledge sharing among transnational students (Batanero et al., 2022). These tools have not only enhanced access to educational resources but also fostered a sense of community and engagement in TNE. By leveraging these educational tools and technologies, TNE programs have created dynamic and interactive learning environments that bridge the geographical divide, promote collaborative learning, provide learning support, and facilitate effective communication among geographically dispersed learners and educators (Batanero et al., 2022; Bosire & Amimo, 2017). The journey to leverage and integrate learning and teaching technologies has been a long one, mixed with success and challenges often linked to cultural perceptions, resource availability and professional readiness of staff participating in TNE programs.

With the introduction of generative Artificial Intelligence (AI) in higher education there is a need to explore and understand the potential benefits and challenges of integrating this technology in TNE, particularly on the effects of student learning outcomes, retention rates, and overall educational experiences and the pedagogical shifts required for effectively integrating generative AI.

CHALLENGES AND TENSIONS

To ensure the realisation of the innovative and transformative potential of generative AI within TNE, it is crucial to navigate the perceived challenges and tensions carefully. By doing so, we can take the initial steps towards informed and sustainable integration. Cultural differences play a significant role in shaping educational practices, pedagogical approaches, and learning expectations. It is crucial to ensure that AI algorithms and educational content generated by generative AI are culturally sensitive and relevant to the diverse student population.

Professional readiness and engagement with local staff is critical factor in the successful integration (Baker, Smith, & Anissa, 2019; Devlin & Samarawickrema, 2022). Too often the expertise of the local learning and teaching staff is not sought, under utilised or ignored in the implementation of transformative

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educational practices. It is essential to engage early with our local staff to understand the lived experience and expertise as we strive to harness the power of generative AI. Learning and teaching staff need to be trained and equipped with the necessary skills to effectively use generative AI tools and adapt their pedagogical approaches accordingly (Devlin & Samarawickrema, 2022; Pinkwart, 2016). Professional development programs and support systems should be in place to ensure staff members feel empowered and confident in utilising generative AI as a valuable educational tool.

Generative AI algorithms may inadvertently perpetuate biases present in the training data, leading to unfair or discriminatory outcomes (Baker et al., 2019). Addressing algorithmic bias is crucial to ensure equal opportunities and inclusivity in TNE. The use of generative AI involves the collection and analysis of student data, raising concerns about **privacy protection and data security** (Baker et al., 2019). Safeguarding sensitive information and adhering to data protection regulations is essential.

There is the potential for users to generate content that resembles human-authored work, posing challenges to **maintaining academic integrity** (Else, 2023; Lim et al., 2023; Sullivan, Kelly, & McLaughlan, 2023). Ensuring students are equipped to manage the risk of AI developed content, to appropriately navigate AI developed content and are appropriately credited for their work is key in order to ensure academic integrity concerns are managed (Ouyang & Jiao, 2021).

Eastern education systems have highlighted a **preference for information seeking** over critical discussion (Fan & See, 2022; Zhao & Liu, 2022). There is mixed evidence that those studying within Eastern education systems have lower critical thinking skills yet there appears to be a preference for a more passive style of learning (Fan & See, 2022; Lucas, 2019). The ‘pull’ nature of generative AI creates challenges within the Eastern educational system in that it contradicts the perception that the knowledge base is there to be learnt, rather than analysed and questioned (Lucas, 2019).

The concerns of academic integrity has already been raised however tensions exist in the use of a technology tool without the guidance of human thought (Qadir, 2023). **The role of generative AI** as a

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brainstorming and conceptualisation tool lies dangerously close to that of academic misadventure (Qadir, 2023). Successful integration of generative AI will require a paradigm shift in the assessment of and for learning. Performance and critical reasoning and thought will become of more import in gauging student outcomes as generative AI becomes more common place in higher education (Qadir, 2023).

The rapid development of generative AI has resulted in increased use in industry (Else, 2023; Korzynski et al., 2023). The **tension of AI in education**, to either support and control the students learning journey (through big data analytics, individualisation of content and identification of learning stress points) or to empower the student learning journey (through the recognition of AI as a learning tool and student upskill to interact and manage that tool) has impact on the student success in industry. Multiple industries and disciplines, including management, are now focusing on the effective and informed use of AI, particularly generative AI (Else, 2023; Korzynski et al., 2023), and students who do not have the experience of the technology within their degree may find themselves lacking essential skills for entry into industry.

These challenges highlight the importance of developing transparent and accountable AI systems that align with ethical standards and cultural values. Transparency is required in the functioning of generative AI algorithms and clear disclosure of AI-generated content enables students and educators to make informed decisions. Additionally, engaging in ongoing dialogue, both within TNE programs and with external stakeholders, is essential to identify and address ethical considerations specific to cultural contexts. By actively addressing these challenges and ethical considerations, TNE can harness the potential of generative AI while upholding integrity, privacy, and fairness in the educational process.

In addition to the above-mentioned challenges there is an overall tension between the what generative AI can do, how generative AI is functionally used in TNE and the perceived benefits of generative AI (Ouyang & Jiao, 2021; Ouyang et al., 2022). The institutional focus of AI in higher education has previously been on monitoring and predicating student performance, automatic assessment and improving the learning experience through individualising resource recommendations and automatic feedback (Ouyang et al., 2022). The historical function of AI within TNE had a harmonious relationship with the

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functional use and student outcomes. The shift of use from institutional to student through generative AI has unbalanced that harmony, and is reflected the current academic discussion of generative AI's such as ChatGPT (Sullivan et al., 2023). It is essential that the learner viewpoint of these technologies is explored, alongside the educational institutions (Sullivan et al., 2023) to rebalance the function of AI. Generative AI has tremendous potential as tool to support student learning and growth, but it also has a potential to be misused and to be misaligned with the aims of student participation in TNE programs (Lim et al., 2023).

CONCLUSION

The evolutionary journey of generative AI in higher education has presented a transformative landscape that calls for TNE programs to adapt and keep pace with these advancements. The integration of generative AI has emerged as a key avenue to enhance student learning experiences, foster cultural exchange, and equip students with industry-relevant skills. By leveraging generative AI, TNE programs can create inclusive and adaptive learning environments that cater to the diverse needs and backgrounds of students. It is crucial to ensure that the integration of generative AI is approached responsibly and ethically. This necessitates ongoing research, collaboration, and dialogue among educators, policymakers, and stakeholders to establish guidelines, address challenges, and mitigate potential risks. To harness the transformative potential of generative AI, it is necessary to take initial steps that involve pervasive discussions between stakeholders. These pervasive discussions include exploring how institutions approach **engaging with local staff, professional readiness, mitigate algorithmic bias**, and address **concerns related to privacy, academic integrity, and cultural implications**. Navigating the tensions surrounding **AI as a learning tool** and the **diverging perspectives of AI in education and AI in industry** require thorough discussion and consideration from the institutional, lecturer, student, and industry standpoint. It is through collective efforts that the responsible and effective integration of AI in TNE can be achieved, empowering students to thrive once in industry. By embracing the potential of generative AI and fostering a culture of continuous improvement and innovation, TNE programs can truly bridge educational boundaries, empower students, and shape the future of higher education.

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Use of experiential education techniques when teaching entrepreneurship in universities

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Use of experiential education techniques when teaching sustainable entrepreneurship in universities

Abstract:

Sustainable entrepreneurship education concept is related to Education for Sustainable Development and Entrepreneurship education. UN introduced PREM framework for a better approach in incorporating sustainability into curricula. This PREM approach is discussed widely in sustainable entrepreneurship education highlighting the need of experiential education to provide a more practice-based education. Many studies have been conducted on sustainable education in relation to students but there are less studies on teaching-learning approaches. Experiential education is one such teaching approach that is commonly used in entrepreneurship education research. However, only a limited number of studies have been conducted considering teacher/educator, student, learning environment, subject matter, and teaching process altogether in a university setting.

Keywords: Principles for Responsible Management Education (PREM), Sustainable entrepreneurship education, Education for Sustainable Development (ESD), Experiential education, Universities

INTRODUCTION

Sustainable entrepreneurship refers to the discovery, creation and exploitation of entrepreneurial opportunities that contribute to social and environmental impacts in society (Agu, 2021; Fauske et al., 2022). Whereas entrepreneurship education refers to any pedagogical program or educational process to impart entrepreneurial attitudes and skills (Fayolle et al., 2016; Piperopoulos & Dimov, 2015). Building on these two definitions, sustainable entrepreneurship education refers to the development and improvement of entrepreneurial inspiration, awareness, knowledge, and skills required to successfully establish and run a sustainable enterprise (Agu, 2021; Fauske et al., 2022). Hence, sustainable entrepreneurship education combines the fields of sustainable entrepreneurship and entrepreneurship education (Sharma et al., 2021).

The concept of sustainable entrepreneurship education falls into the main scholarly disciplines of entrepreneurship education and Education for Sustainable Development (ESD) (Diepolder et al., 2021; Mindt & Rieckmann, 2017; Wyness et al., 2015). ESD covers all kinds of educational concepts, steps and processes, which are suitable to foster the individual and/or collective contribution towards

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sustainable development (Hoffmann & Siege, 2018). However, education for sustainable development (ESD) indicated a lack in university offerings for educating students with competencies in sustainable entrepreneurship (Pittaway et al., 2020). Research on and the practice of ESD also suggests using learner centered, action oriented pedagogical approaches where learning is experiential, localized and culturally specific, allowing learners to learn what they live and live what they learn (UNESCO, 2017, 2022).

Experiential education emphasizes learning through experience and practice (Chen, 2021). Experiential education takes students into the community and helps students both to bridge classroom study and life in the world and to transform inert knowledge into knowledge-in-use (Eyler, 2009). In entrepreneurship, experiential education approaches provide opportunities to gain knowledge and skills for practice, learn by reflection and self-directed learning, and experience conditions and situations for business start-up and developments. This will increase awareness of entrepreneurial opportunities for students during and after graduation, which is also contributing towards sustainable development. Furthermore, the skills developed during a university education could enable new venture creations (Morland et al., 2021) in a sustainable manner. Therefore, the aim of this paper is to identify how to teach sustainable entrepreneurship in universities with the application of experiential education techniques.

The remainder of this paper is arranged according to the following sections as a literature review on experiential education, sustainable entrepreneurship education, a discussion, and a conclusion.

LITERATURE REVIEW

Experiential education

Experiential education is a student-centered educational framework (de Bilde et al., 2015), which focuses on learning by experience. The term ‘experiential education’ is used to denote supervised, structured, or semi-structured teaching and learning activities that take place in a setting which involves real-life situations and interpersonal interactions (Odalović et al., 2019). Simply put, experiential learning is “the process whereby knowledge is created through the transformation of

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experience” (Kolb, 1984) (p.41). The key features of experiential education are: creating room for expression and cultivation of individuality, free activity, learning through experience, skills development as means of attaining ends which make direct and vital appeal, making the most of the opportunities of present life and acquaintance with a changing world (Dewey, 1938, p.19-20). These features make experiential education a progressive form of education (Itin, 1999).

Diamond model of experiential education

John Dewey’s educational philosophy provides the theoretical basis for experiential education (Smith & Knapp, 2011). Dewey wrote about the relationship between knowledge and experience in the context (Stoller, 2017) and bridged the gap between thought and action, focusing on the ways in which we make use of intelligence in our efforts to address real problems in everyday life (Borden, 2013). Based on the ideas of John Dewey, Kurt Lewin and Jean Piaget, introduced a graphical form of the conceptions of learning (Kolb, 1984, p. 21-23). This is known as Kolb's Learning Style Model (Kolb, 1984). This model illustrates how experiences, including cognition, environmental factors, and emotions, influence the learning process (Keune & Salter, 2022; Miettinen, 2000). Kolb (1984) suggests experiential learning as a holistic and integrative perspective on learning that “combines experience, perception, cognition and behavior” (p. 21) as illustrated by Figure 1.

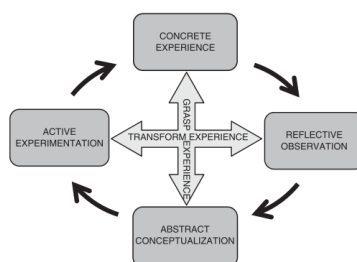


Figure 1 - The Experiential Learning Cycle (Kolb, 2015, p.299)

Although Kolb’s model is used frequently in adult education literature (Miettinen, 2000), Ord and Leather (2011) argue that Kolb’s simplified model of experiential learning does not emphasize the

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importance of ‘meaning’ within experiential learning. In order to provide an overall model for experiential education, Itin (1999) proposed the Diamond Model for experiential education. This model draws on Dewey’s and Kolb’s ideas on experiential education.

Itin (1999)’s Diamond Model for experiential education

This model considers the educator, and the learner are in a transactive process (Chisholm et al., 2009); that is, they interact and exchange knowledge (Lloyd-Strovas, 2010). The Diamond Model explains the clear interactions among five key components: the learning environment, subject matter, student, teacher, and the teaching process as demonstrated in figure 2 below.

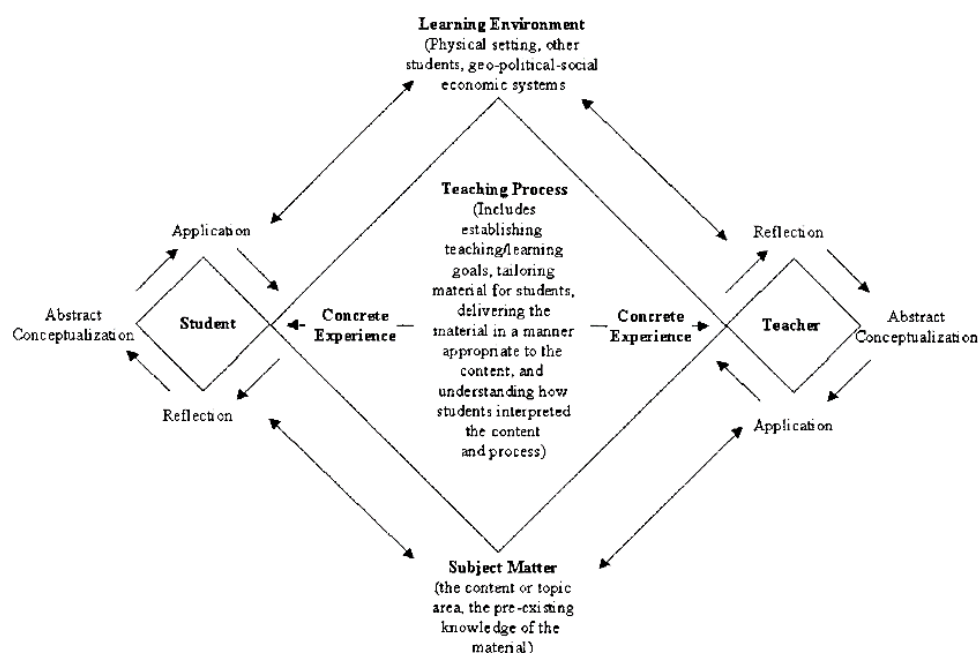


Figure 2 - Diamond model of experiential education (Itin, 1999)

Learning environment: Learning environment is the place where active interactions happen between the learner and the instructor or between the learner and other learners (So & Brush, 2008). It influences students emotionally, socially, and academically (Cayubit, 2022; Davis & Warner, 2018). A high-

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quality learning environment in higher education promotes learning based on understanding, develops expertise and the ability to apply knowledge (Haarala-Muhonen et al., 2011). Students learn better through experiences that link the classroom material to field work (Parr et al., 2007). They value immediate feedback to clarify concepts and such feedback encourages further learning (Huang et al., 2016).

Subject matter: Subject matter includes information about specific topics, disciplinary practices, and concepts (Kavanagh et al., 2019). It should align with the curriculum and be customizable according to the characteristics of the students such as their social environment, culture, and the student's development stages (Dheghu et al., 2019). Subject matter needs to be regularly updated to cultivate more specialized talents required by students in the 21st century (Yang et al., 2016). Hence, references to the world outside the classroom is an intrinsic part of subject matter (Aasebø & Willbergh, 2022). In addition to the subject matter taught in the classroom, the students may have pre-existing knowledge on the subject matter (Itin, 1999). Then, in the classroom, they can get a better, deeper understanding of the subject matter through the interactions with teachers (Li & Zhou, 2022). In this way, university students can co-create knowledge with the guidance of the teachers (Yang et al., 2016).

Teacher: Teachers who use experiential education approaches create classroom conditions to stimulate student learning (de Bilde et al., 2015). They use their own lived experiences in schools and beyond (Glazier & Bean, 2019). Educators make conscious choices that empower students to take control of their own learning. Hence, experiential educators facilitate more student-centered learning experiences (Estes, 2004). According to Wheeler et al. (2008), teachers should act as moderators rather than instructors, promoting free and democratic development of knowledge. This improves their efficiency of teaching (Iringó, 2017).

Student: Students have life experience and knowledge embedded in their own cultural, class, racial, historical and gender contexts (Freire, 1970). They are not empty vessels who passively receive the teacher's knowledge (Freire, 1970; Glazier et al., 2017). Therefore, experiential education directs

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teachers toward providing more opportunities for students to interact with the subject matter, the environment, other students, and the teacher (Itin, 1999). The students accept responsibility for their own learning, with academic staff facilitating the transfer of dependency from teacher to learner (Bawden et al., 1984). Itin (1999) explained that it is not sufficient that students master the content if they do not understand how to apply it in the real world. Dewey (1938) also emphasized that students learn by relating their knowledge to educative experiences.

Teaching process: In experiential education, in addition to learning through books and lectures, intentional experience enhances learning (Breunig, 2005). Breunig further explained that an experience may be as simple as rearranging the chairs into a circle to encourage dialogue between students or it may be more advanced such as engaging in a student-directed classroom experience. This process provides students with the opportunity to fully express, question, explore, and discuss problems freely while applying their knowledge to solve practical problems (Zheng et al., 2018). Katula & Threnhauser (1999) emphasize that experiential education programs will reach their goal of enhancing student learning only when faculty are properly trained. This is because teachers need to be prepared for possible distractions such as students disagreeing on what texts should be read, how they should be read, curricular material, course assessment methods, methodology, assignments, and any other aspects of any given course in any given semester (Breunig, 2005). This will help the teachers to understand how to help students to understand the classroom through experience, and, how to animate the experience through the classroom activities.

Sustainable entrepreneurship education

Sustainable entrepreneurship education has emerged as a vital concept that integrates both sustainability principles and entrepreneurial skills into educational programs. Entrepreneurship education began to address the issue of sustainability during last decades of the 20th century, although origins of entrepreneurship education dates back to at least the 18th century and the history on sustainability education dates back to the 19th century (Kirby et al., 2022). The idea that business should have a significant contribution on welfare arose in 19th century, when Bowen, in 1953, associated social

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responsibility with corporations' activities (Teodoreanu, 2014). Along with the concerns of rising global population, accelerating global development, increasing resource consumption and environmental impacts, it seems increasingly apparent that business as usual is not an option for a sustainable future (Bocken et al., 2014). The Rio Earth Summit in 1992 and subsequent international agreements brought sustainability to the forefront, making public awareness on new approaches that considered environmental and social impacts alongside economic goals as traditional business practices were unsustainable (UN, 1992). After the launch of the United Nations' Brundtland's report in 1987, entrepreneurship has been promoted as one of the tools for achieving sustainable development (Thananusak, 2019).

Sustainable entrepreneurship aims to create sustainable development through entrepreneurial activities (Schaltegger & Wagner, 2011). Although there is consensus that these sustainable entrepreneurship skills and competences are crucial to have, how they are taught is still debated (Fauske et al., 2022). Providing students with the right competencies for sustainable entrepreneurship can enable them to take action for sustainable development in their future work lives (Fauske et al., 2022). To build the entrepreneurial profile, students need to know the different contexts and opportunities to transform ideas into action, for personal, social, and professional activities and to understand how they arise (Pinho et al., 2019). Educate students to become entrepreneurs capable of creating new models of business that address the sustainability concerns requires a change in both the subject matter and pedagogy of learning (Lans et al., 2014). It is identified that concepts like ethics, sustainability and corporate social responsibility (CSR) must be taught in undergraduate courses (Haertle et al., 2017).

Only a few studies have proposed approaches to integrate sustainability into entrepreneurship education (Pinho et al., 2019). Although management education, as a discipline, has established itself by providing knowledge for optimizing resources and maximizing economic returns through knowledge and skills of business management, it is still grappling with the challenge of developing appropriate curriculum and andragogy for imparting management education for responsibility and sustainability (Sharma, 2017). The United Nations supported initiative 'Principles for Responsible Management Education' (PRME), which is launched in 2007, addresses the responsibilities of management education institutions in preparing today's and tomorrow's business professions for the challenge of bringing

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about more responsible and sustainable business (Arruda Filho et al., 2019; Godemann et al., 2014). PRME consists with six key principles as: purpose, value, research, methods, partnerships, and dialogue (UNPRME, 2023) (Table 1).

Table 1: PRME principles

| | |
|-------------|---|
| Purpose | Develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy. |
| Values | Incorporate the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact into academic activities, curricula, and organisational practices. |
| Method | Create educational frameworks, materials, processes, and environments that enable effective learning experiences for responsible leadership. |
| Research | Engage in conceptual and empirical research that advances the understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value. |
| Partnership | Interact with managers of business corporations to extend knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges. |
| Dialogue | Facilitate and support dialogue and debate among educators, students, business, government, consumers, media, civil society organisations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability. |

(UNPRME, 2023)

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DISCUSSION

The concept of sustainability is interdisciplinary in nature (Martins et al., 2022). Therefore, sustainable entrepreneurship education should often draw from diverse disciplines, including environmental science, social sciences, and economics, to provide students with a holistic understanding of sustainability challenges and opportunities. By exploring these interdisciplinary perspectives, students gain insights into the complex interactions between business and sustainability issues. However, there is a lack of university offerings for educating students in sustainable entrepreneurship competencies (Del Vecchio et al., 2021). It is also noted that at the current context, sustainability is merely included in disciplinary texts or elective courses (Parris & McInnis-Bowers, 2017) and there is a shortage in studies how to teach sustainable entrepreneurship (Halberstadt et al., 2019).

The role and mission of PRME has also emphasized the need for an experiential learning process in and between business schools (Alcaraz & Thiruvattal, 2010). There are many opportunities for future researchers to expand on this framework particularly, in the areas of PRME-driven curriculum development and experiential learning (Gupta & Cooper, 2022). This helps in recognizing the importance of experiential learning and real-world application in sustainable entrepreneurship education. Many programmes now emphasize hands-on experiences, such as internships, incubators, and social impact projects, allowing students to apply their knowledge and skills in tackling real sustainability challenges. This includes integration of sustainability principles into business curricula by rethinking traditional business education to include concepts such as environmental stewardship, social responsibility, ethical decision-making, and the triple bottom line approach that considers environmental, social, and economic dimensions. Experiential learning is an effective way of integrating such concepts into the curriculum (Baden & Parkes, 2013; Martins et al., 2022). By immersing themselves in practical experiences, students gain a deeper understanding of the challenges and opportunities of sustainable entrepreneurship.

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However, when developing a framework for experiential education in teaching sustainable entrepreneurship, in addition to considering the perspective of the educators, the framework should cover a larger body of research to provide further insight into students' perception of sustainability, thus improving the strategies of educational institutions (Arruda Filho et al., 2019). Collaborating with businesses and other stakeholders also helps develop applied learning experiences, ensuring that new knowledge and skills are aligned with business needs (Giacalone & Thompson, 2006). Therefore, the diamond model for experiential education provides a good foundation for the purpose as it covers all aspects including student, teacher, subject matter, learning environment and teaching process.

CONCLUSION

There is an emerging discussions on incorporating sustainability into entrepreneurship education and having a curriculum which provides more hands-on experience to students in terms of sustainable entrepreneurship. PREM is a good foundation to start working on sustainable entrepreneurship focus in university education. Considering the fact that PREM highlights the importance of experiential education and considering the perspectives of all related stakeholders such as students, teachers and the corporate sector, the diamond model of experiential education provides a good foundation for developing an experiential framework model for teaching sustainable entrepreneurship in universities.

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2. Organisational Behaviour

Leading with Care: Empathetic Leadership for Hybrid Work

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2. Organisational Behaviour

Leading with Care: Empathetic Leadership for Hybrid Work

ABSTRACT: *With the global adoption of hybrid work and workplace transformation, leaders have been challenged with leading a workforce that has a combination of in-person and remote working employees. This study explores how leadership has been transformed for a hybrid workplace. By adopting a qualitative case study of a multinational organisation, the study findings indicate that new modes of leadership emerged alongside the workplace transformation. These include multimodal leadership, inclusive leadership, humanised leadership, and analytics-enabled leadership. At the intersection of these modes is empathetic leadership, a leadership approach that is reconfigured for a hybrid workplace. The study makes a theoretical contribution to the hybrid work and leadership literature, showing how leadership transformed as organisations transitioned from in-person to hybrid work models.*

Keywords: Leadership; hybrid work; empathy; work analytics; case study

INTRODUCTION

As the world begins to return to some normality following the enforced remote work brought about by Covid-19 pandemic, organisations continue to adopt hybrid work – an alternative work model where employees enjoy spatial and temporal flexibility (Gratton, 2021) and combine working from home and in-person work arrangements. From the Covid-19 experience, hybrid work proved to be successful (Mandviwalla & Flanagan, 2021) and will be a key feature of modern and future work (Knight, 2020). Management literature has already argued that the new hybrid work requires leadership skills that enable leaders to operate across traditional and virtual modes (Gratton, 2021; Hooijberg & Watkins, 2021). In this study we posit that as the workplace has gone through dramatic transformation, leadership has undergone a transformation as well. Despite the overwhelming interest in hybrid work, limited understanding exists on effective modes of leadership in this environment. Our review has drawn on studies that recognised the role of leadership on team effectiveness (Chamakiotis, Panteli, & Davison, 2021; Dery, Sebastian, Auer, & van der Meulen, 2017; Zhang, Zhao, & Yu, 2021), and has shown a gap in this area.

Therefore, there is a need to understand emerging and successful leadership practices to create a supportive environment, strengthen employee engagement, and resolve the ‘productivity paranoia’ (McGregor, 2022) or fear of productivity loss with the shift to hybrid work. Hence, the aim of this study is to gain an understanding of the leadership transformation process and provide a theoretical account of emerging modes of leadership for a hybrid workplace. Accordingly, the research question

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addressed in this study is: *How has leadership been transformed along with the digitalised workplace transformation for a hybrid workplace?*

To answer this question, we explore shifts in leadership practices as work models shifted from in-person work pre-pandemic, to fully remote work during the pandemic, and then hybrid work post-pandemic. Therefore, in what follows, we present a literature review on hybrid work and leadership. This is followed by the research methodology including case organisation and data collection and data analysis methods. Next, the findings are presented, followed by discussion and study contributions.

LITERATURE REVIEW

Hybrid Work

Hybrid work is a form of workplace transformation that requires employees to combine both remote and in-person work. While some employees return to the in-person work environment, others continue to work remotely in a binary model, though variations exist within this model (Spataro, 2022). The hybrid work model can be conceptualized along two dimensions, those of time and place and the flexibility embedded within them (Gratton, 2021). The emergence of hybrid work model which has been accelerated by the digital workplace transformation has increased the need to bring in better ways to manage and lead the workforce where employees are enabled to self-manage their work, maintain productivity, focus time, and work-life balance.

The digital workplace transformation not only brought change to the work design but also necessitates shifts in leadership approaches (Schwarz Müller, Brosi, Duman, & Welp, 2018). Work design change has been categorised in terms of work-life and health and wellbeing of employees (Roche et al., 2023), changes resulting from the increased use of ICT leading to burnout (Marsh, Vallejos, & Spence, 2022), changes in performance and talent management, and changes to organisational hierarchies (Andrej et al., 2022). In a similar vein, leading a hybrid workplace requires leaders to develop and maintain a work environment and culture that is founded on flexibility and trust (Alves et al., 2023), one where performance is balanced with care for wellbeing, where employees are supported, motivated, feel connected, and have the potential for career progression. These challenges call for leadership practices that meet the demands of this work environment.

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Leadership

Leadership has been identified as being critical to the success of the workplace transformation in the post-covid context (Chamakiotis et al., 2021) and in a digital workplace in general (Schneider & Kokshagina, 2020). Chamakiotis et al. (2021) identified that managing engagement, trust, relationships, digital wellbeing, and work-life boundaries are added responsibilities of new e-leaders. Further, leaders of a hybrid workplace need to assume the role of a conductor who coordinates and motivates team members, a catalyst who stimulates creativity and collaboration, a coach who helps people to achieve their goals and professional development, and a champion who advocates for their team and their needed resources in hybrid settings (Hooijberg & Watkins, 2021).

Conventional modes of leadership such as transformational and responsive leadership continue to have relevance to a hybrid workplace. Transformational leadership is defined as *‘the process of influencing major changes in the attitudes and assumptions of organization members’* (Yukl, 1989, p. 269). As leaders support their teams to cope with environmental challenges and remain motivated, transformational leadership contributes to more functional team interactions, improved team viability, performance, and satisfaction (Lehmann-Willenbrock, Meinecke, Rowold, & Kauffeld, 2015).

Branching off transformational leadership is authentic leadership (Avolio & Gardner, 2005; Dinh et al., 2014; Tonkin, 2013; Yukl, 2010). Authentic leaders are transparent, respected, and support the development of positive psychological states within themselves and their followers such as optimism, hope, confidence, and resilience (Avolio & Gardner, 2005; Iszatt-White & Kempster, 2019). A form of authentic leadership is humanised leadership which entails knowing oneself and promoting openness by acting according with one's ‘true self’ (Gardner, Karam, Alvesson, & Einola, 2021).

Responsive leadership is another mode of leadership that is relevant to leading a digital workplace and has been linked to employee engagement (Panteli, Yalabik, & Rapti, 2019). Responsive leadership manifests in activities that focus on the development and continuous improvement of the employee experience in organizations (Dery et al., 2017). This includes financial and mental support, encouragement, and feedback, all of which are believed to foster employee engagement (Panteli et al., 2019). Hence, responsive leadership that accelerates employee engagement and improve their experience in a hybrid workplace is highly relevant.

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In the context of hybrid work, there is a need to further explore and understand effective leadership practices that are likely to be well received by the employees. This is particularly important as the hybrid work environment presents challenges to connection and relationships with team members, managers, and leaders (John, Alsamarra'i, & Panteli, 2022). While employee engagement is already recognised as an important condition for successful work performance, in the context of hybrid work, it is the relationship aspect that matters, which ultimately has a bidirectional association with employee engagement (Chamakiotis et al., 2021).

Therefore, we present the case of a high-tech multinational organisation with clearly defined leadership roles and examine the extent to which leadership practices adopted during the Covid-19 pandemic contributed to an enhanced employee experience. During the disruptions caused by the Covid-19 pandemic, traditional leadership practices of giving directions and delegating work would have made it difficult to respond to shifts in employee needs and faced challenges in a timely manner. Therefore, it is likely that leadership have witnessed a deliberate transformation.

METHODOLOGY

The study is qualitative in nature and is based on a single case study approach. The case of Kappa (pseudonym), a multinational organisation where hybrid work following the pandemic became popular among employees was selected. Semi-structured interviews were conducted with employees and managers across a range of departments and seniorities within the Australia/New Zealand region of the company. A total number of 30 participants were interviewed (see Table 1). Participants included 10 managers and 20 employees with varying time at Kappa at the time of their interview.

Insert Table 1 about here

The empirical study began in December 2021 and was completed in July 2023. Interviews took place primarily via Microsoft Teams and averaged an hour in duration. Amongst other questions related to the employees' engagement experience as they transitioned across various modes of work (in-person, remote, hybrid), study participants were also asked about the leadership practices that were implemented to support them with the challenges of these transitions. Interviews were recorded, transcribed, and coded using NVivo software. In addition to primary interview data, our study also

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used secondary data sources such as publicly available reports published by Kappa that reported on similar work trends, challenges, and leadership practices to support their employees. Data was analysed using a thematic analysis approach (Gioia, Corley, & Hamilton, 2012; Nowell, Norris, White, & Moules, 2017) to identify patterns in challenges of remote and hybrid work and corresponding leadership practices that were perceived to be successful in supporting employee engagement at Kappa during these transitions. Study findings will be presented next.

STUDY FINDINGS

Challenges of Remote and Hybrid Work

A set of challenges were reported by the participants, particularly when they first went into the enforced remote work. Amongst these challenges are digital fatigue, fading of work-life divide, and lack of face-to-face social engagement and its impact on relationships. These challenges were faced as employees transitioned into the enforced remote work due to the pandemic, but also because of having a hybrid work arrangement in broader sense. Digital fatigue was experienced due to a longer working day, working across different time zones, the triple peak effect with peak time in the morning, afternoon and evening, and an increase in the number of emails and back-to-back meetings. These conditions contributed to employees feeling burnout: *'We have people paging us at all hours of the day because we can now work from anywhere in the world.'* – P6. The blurring of the work-life divide is another reported challenge. With the initial enforced remote work, participants had to repurpose their living space into an office space where their new working conditions included lack of a dedicated office space, working with other family members in a shared space, and lack of office furniture: *'In the early months of this, I was working off the kitchen table and then an outdoor table.'* – P5. These challenges were further heightened by schools and childcare closures, contributing to a much-added responsibility on employees who must juggle working and caring responsibilities.

Socialisation, engagement and relationships have been challenged: *'The thing that made it hard was that ad hoc personal conversation, the relationship building, you know, having a coffee with someone and talking about family or what you did on the weekend, it was a lot harder to do that.'* – P16. The lack of face-to-face social connection, social events and the incidental conversations caused

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a feeling of loneliness and social disconnect. This was particularly challenging for newly onboarded employees who have no prior interaction with their new team.

The Prevalence of Digitalized Workplace Transformation

Coming out of the enforced remote work and into a hybrid work model, the hybrid work arrangement continued to maintain a degree of remoteness. Employees reported an increased reliance on information and communication technologies such as Microsoft Teams, Outlook, SharePoint, web cameras, and other office applications to support their work. With most employees maintaining a working from home arrangement with some days in the office, managers and leaders were challenged with the visibility of their teams' working patterns, particularly ones that could lead to burnout such as working late into the evening, working outside conventional hours, and lack of personal focus time.

At the time of the staged return to in-person work and beginning of hybrid work, Kappa started using work analytics tools to enhance the employee experience: *'When you think about the employee experience it transcends a whole range of things. So, whether you're digital, in person, in between, I think [tool] is designed to think about the employee experience pretty holistically.'* – P 25. Such tools (e.g., employee experience management platform) can create visibility on employees' engagement and work habits and routines. by capturing valuable data and generating insights (John et al., 2022). Leaders and managers reported paying closer attention to the data collected and analysing this information to determine employee sentiment towards the changes in their work environment and experienced challenges. This algorithmic management capability enables the capturing of work analytics related to employees' work regardless of workplace or device used.

Leadership Practices in Hybrid Work

Our findings show that there were shifts in leadership practices in response to the corresponding challenges presented. In terms of supporting employees to deal with digital fatigue, several initiatives were reported by employees from their managers including 'walk and talk' meetings to encourage physical activity during work, being empowered to take wellbeing leave, defaulting meetings in the calendars to a shorter duration, monitoring employees' wellbeing through a listening system, reinforcing work boundaries by setting examples and empowering employees to not be in back-to-

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back meetings: *'One of the things, the initiatives that we looked at was really around our meeting culture and really empowering employees ... to say, actually, no, I don't want to join.'* – P14

The blurring of work-life balance impacted employees' motivation and overall emotional wellbeing where the changes to their work routines have caused an overspill of work activities well into their personal life. Leaders and managers empowered their employees to set out of office hours that suits their individual circumstances, giving them flexibility to fit the demands of their personal life around work. Leaders modelled this behaviour so employees can feel comfortable to not reply after hours: *'I put a piece of signature on my e-mail that says, hey, this is out of hours, I don't expect you to respond. I'm looking at a time that's convenient for me and you can do that as well.'* – P 27.

Employees also reported feeling trusted by their managers who do not count how many days were taken from their leave. The provision of financial support was also reported to set up a workspace

Several initiatives were also reported to assist employees with challenges relating to engagement, trust, and relationships. Increased and consistent check-ins with managers and a shift in the tone of those meetings where the conversation would begin by checking on how people are doing became the norm. Leaders presented their true self, always turned their camera's on to encourage visibility and connection, used humour more often, and created a safe space where employees can discuss issues of mental and emotional wellbeing: *'I've seen some of our leaders be really vulnerable during the last 18 to 24 months and I think it's led to much deeper, more personal connections within teams and much deeper and better relationships.'* – P5. Other reported efforts to regenerate social connection include new avenues for rewards and recognition, increased frequency of one-on-one meetings with new employees, sending care gifts to employees, and virtual celebrations of birthdays.

In terms of challenges on employee's work patterns visibility, participants reported how algorithmic management and work analytics influenced leadership practices that pay attention to employee engagement and wellbeing: *'There are manager insights and [tool] can tell early indications that your team might be burning out by working late.'* – P6. Managers found work analytics to be very useful in creating visibility around their teams' work habits and signs of disengagement. Such analytics aggregates data at the team level and provide increased visibility into work patterns that may lead to stress and burnout. With this data, managers can take necessary steps to

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help their teams replan their work habits and improve their wellbeing without any misinterpretations or assumption of a productivity paranoia.

Modes of Leadership in Hybrid Work

While the presented findings point to leadership practices that were well received and perceived to be impactful, these practices substantiate that leadership has undergone a transformation from dogma-driven and directive modes of leadership towards empathetic leadership that puts more emphasis on care and employee wellbeing than ever before. Participants reported on the sentiment of a leadership community coming together more than ever before and demonstrating remote and hybrid leadership skills that suits all settings. In this sense, leadership is becoming multimodal where leaders strive to enable an equitable experience for in-person and remote employees and maintain engagement, collaboration, and motivation. It has also been reported that leaders have become comfortable with vulnerability: *'Be vulnerable, it's OK to not be fully on your game every day and for your team to know that you're struggling like as a manager.'* – P10. This reflects an authentic leadership behaviour that is humanised. Moreover, inclusive leadership has been echoed in practices where leaders took initiatives to accommodate diversity: *'once there's a certain number of people in the room, have somebody in that room who's dedicated to giving the people who aren't in the room voice, so they'll be monitoring the chat log, they'll be monitoring the, you know, there's the hands up feature in teams. That's very easy to miss if you're in the room.'* – P11. Further, team meetings held with Microsoft Teams were recorded so absent employees can access missed meetings later.

Much emphasis on care and wellbeing has been reported, particularly, physical and mental wellbeing which is further indicative of humanised leadership: *'A whole heap of things were coming from leadership ... to reinforce the importance of not burning out and supporting not just ourselves, but our family and our peers as well. That was really noticeable.'* – P 16. Finally, as analytics enabled-leadership is featuring prominently in hybrid work, our study show how work analytics – as a listening system – empowers leaders with the data to make decisions and take actions: *'had the listening systems in place to be able to look at some of the signals which we were then able to then use to ensure that we had the policies, the benefits, the education for our people.'* – P 25

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DISCUSSION

The study has been driven by an interest in understanding the transformation in leadership practices as organisations adopted hybrid work. If the workplace has undergone digital transformation, then leadership is likely to have changed as well, not by means of adaptation of old ways, but through a transformation process that led to a new understanding of leadership, one that is more fitting with digital work regardless of how it is done (in-person or remotely).

Our empirical findings indicate that leadership has undergone a transformation process. As a result, new modes of leadership have emerged. Drawing upon our findings, we propose that successful leadership of a hybrid workplace is a reformed leadership and combines characteristics of four modes of leadership as evident in the study. These include *multimodal leadership*, *inclusive leadership*, *humanised leadership*, and *analytics-enabled leadership*, illustrated in Figure 1.

Insert Figure 1 about here

To begin with, *multimodal leadership* entails that leaders can manage employees whether they work in-person or remotely and come up with strategies that support employee engagement and wellbeing in both modes of work (Hooijberg & Watkins, 2021). It also includes the ability to manage digital work and create a space where both in-person as well as remote working employees feel like they are part of a social fabric, whether it is physical or digital. In multimodal leadership, leaders demonstrate a skillset and initiatives that reflect a conductor, catalyst, coach, and champion capabilities that suit all environments. In this sense, leaders can facilitate the professional development of their employees, build trust, collaboration, drive creativity and innovation, and mentor employees to continue to learn and develop in hybrid work.

Inclusive leadership on the other hand recognises diversity, responds to individual needs and work styles, and actively listens to team members voice (Roberson & Perry, 2021). In existing work models such as virtual work, diversity is understood in terms of temporal, geographical, cultural, linguistics, gender, and other traditional differences. However, in the hybrid workplace context, the notion of diversity have expanded to further include diversity in individual work preferences (in-person vs remote vs hybrid), work styles, states of physical and mental wellbeing, caring

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responsibilities, commuting requirements, generational differences (new graduates vs experienced adults), participation preferences (e.g., chat vs voice vs camera), socially connected vs isolated employees, and other individual based circumstances that are beyond job and role requirements. In this sense, inclusive leadership acknowledges the personal lives of employees beyond professional work interactions and provides individualised support.

Our study findings indicate that an inclusive leadership that puts emphasis on care is key to successful leadership in hybrid work. Inclusivity is not to be left to chance but needs to be deliberate to avoid the accidental exclusion. Inclusive practices include having hybrid events so no one is excluded. Similarly, inclusive leadership entails provision of individual consideration in terms of coaching and mentoring and provision of resources. Hybrid work has presented itself as the preferred option for many employees as well as organisations. Therefore, post-pandemic employees expressed a wish to return to the office and to a collocated workspace, to engage, connect and regain the energy derived from being in the same physical space as their team members. One of the important messages for leaders in hybrid work is to ‘deliberately include rather than accidentally exclude’, that is, leaders need to consider leadership practices that does not put anyone at a disadvantage due to their work preference or personal circumstances (John et al., 2022).

Humanised leadership is an authentic mode of leadership which involves knowing oneself and acting according with one's ‘true self’ (Gardner et al., 2021). Within the context of our proposed leadership practices for hybrid work model, humanised leadership is where there is a shift in focus towards the ‘care’ element. This would include showing empathy and compassion and a relationship-oriented approach. Part of showing one’s true self is achieved through accessibility. Humanised leaders are more accessible, particularly as they constantly have their cameras on. These changes are believed to flatten the traditional corporate hierarchy and make higher level executives and leaders more accessible to junior employees in remote work (Mandviwalla et al., 2021), and hybrid work.

Finally, we argue that *analytics-enabled leadership* is another mode of leadership that is fit for a hybrid workplace. Kifor et al. (2021) contend that digitally powered analytics allows leaders to ‘improve the effectiveness of people-related decision-making’ (p.156452) and create an understanding of employee performance, working habits and work-life balance shifts. Analytics-enabled leadership

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entails that leaders listen to the insights and sentiments revealed to drive decisions and actions. Work analytics tools such as employee experience management platforms not only highlight the data and nudges the required action, but it also enables a responsive form of leadership. This is in comparison to leadership approaches driven by dogmatic principles and how work should be done, perhaps, pre-pandemic. We argue that analytics-enabled leadership is more human-centric, one where caring, provision of individualized support and consideration in response to insights revealed by such tools becomes key drivers for employee engagement – all of which are well suited for a hybrid workplace.

THEORETICAL AND PRACTICAL CONTRIBUTIONS

Our study makes several contributions to literature. First, our study contributes to the literature on hybrid work which has increased popularity in the post-pandemic period. It shows that leadership can be reconfigured to adapt to the challenges experienced by employees in hybrid work. In doing so, the study enhances understanding on effective leadership practices within this alternative but increasingly preferred form of work.

Second, we contribute to the leadership literature by showing how with digitalised workplace transformation, there is leadership transformation too. Particularly, our study informed the proposition of a conceptual model for leadership modalities in hybrid workplace as illustrated in Figure 1. The model illustrates the necessity for a multimodal approach to leadership to successfully lead a hybrid workforce.

A third contribution of our study is in relation to analytics driven leadership. The study has shown that with the increasing use of analytics in workplaces including hybrid work settings, there are renewed possibilities for leaders to develop insights about employees' experiences at work, their needs, and challenges, providing opportunities for leaders to develop interventions in timely and targeted manner.

In terms of the practical implications of our study, our findings provide considerations for leaders and managers of hybrid teams. This consideration is one that is worthy of attention given the global appetite for hybrid work and continuity for some work from home and the requirement to create a hybrid working culture that nurtures inclusiveness, trust, engagement, and wellbeing. Work analytics

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go beyond the provision of metrics on employees' work performance. They provide opportunities for adopting a human-centred leadership approach, one that encompasses attention to learning and development, wellbeing, and work-life balance. These have implications for training and development to ensure that individuals who lead in hybrid work settings have the skills and knowledge they need to deal with the challenges that employees are experiencing and can develop appropriate responses.

CONCLUSION AND FURTHER RESEARCH

With the increasing popularity of hybrid work, organisations and managers need to better understand the challenges that this alternative form of work presents on the work experience of their employees and respond with leadership practices that are fit for the complexity of today's work environment. Drawing on a qualitative case approach, our study shows that with the move to hybrid work, leaders have an added responsibility to transform their leadership approaches where there is a shift on care, empathy and deliberate inclusion. This general approach which we refer to as empathetic leadership is believed to be at the intersection of emerging modes of leadership practices for hybrid work.

Our study opens the agenda for further research in the field of leadership and hybrid work. With the realisation that hybrid work can take different shapes in different organisations with varying arrangements of in-person work and working from home, there is a need to expand research in this area. For example, future research may seek to explore how leadership is transformed in different modes of hybrid work to accommodate varying percentages of in-office and remote workers. Similarly, though our theoretical model introduced that leadership transformation in hybrid work encompasses different modes of leadership, further research should examine whether any particular leadership mode may dominate hybrid work settings in different organisations.

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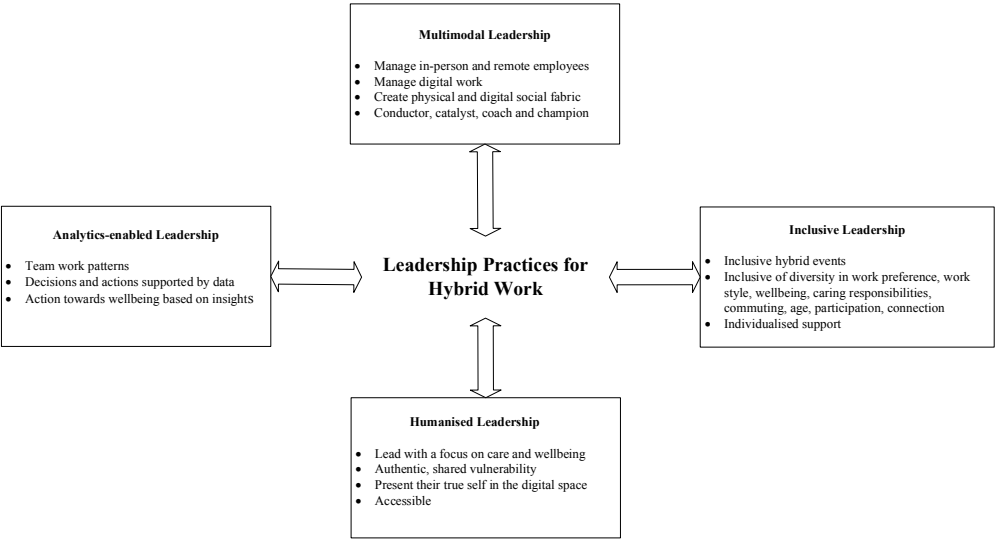
TABLES AND FIGURES

Table 1: Summary of Study Participants

| Participant | Gender | Position Title | Time at Kappa |
|-------------|--------|---------------------------------------|---------------|
| P1 | F | Networking Specialist | 4.5 years |
| P2 | F | Communications Executive | 3 years |
| P3 | F | Architect | 1 month |
| P4 | M | Principal Consultant | 10 years |
| P5 | F | Corporate Communications Director | 4 years |
| P6 | M | Product Marketing Manager | 1 year |
| P7 | F | Digital Sales Leader | 21 years |
| P8 | F | Marketing Operations Team | 10 months |
| P9 | M | Partner Account Manager | 10 years |
| P10 | M | General Manager | 5 years |
| P11 | M | Senior Consultant | 4 months |
| P12 | M | Engineer | 28 years |
| P13 | F | Senior HR Business Partner | 8 months |
| P14 | F | Global Specialist Employee Experience | 5 years |
| P15 | F | Business Group Manger | 19 years |
| P16 | M | Technology Strategist | 14 years |
| P17 | M | Lead Defence Readiness | 2 years |
| P18 | M | Sr Cybersecurity Consultant | 6 years |
| P19 | F | Cloud solution architect | 1 year |
| P20 | M | Platform Engineering Manager | 16 years |
| P21 | M | Senior Customer Engineer | 3.5 years |
| P22 | M | Principal Data and Applied Scientist | 4.5 years |
| P23 | F | Solutions Specialist | 4 years |
| P24 | M | Change Manager | 4 years |
| P25 | F | Business Group Leader | 9 years |
| P26 | M | Cloud Solution Architect | 9 months |
| P27 | F | Education Director | 5.5 years |
| P28 | F | Future Skills Lead | 2.5 years |
| P29 | F | Future Skills Specialist | 14 months |

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Figure 1: Emerging Modes of Leadership for Hybrid Work



**Organizational Citizenship, organizational justice, organizational trust, and the
Impact on Operational effectiveness**

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Organizational Citizenship, organizational justice, organizational trust, and the Impact on Operational effectiveness

Abstract: *To better understand the factors that promote sustainable competitiveness, constructs such as organizational justice, composed of distributive justice and procedural justice, were analyzed. Similarly, the relationship and the effect of organizational justice on organizational trust and altruism were evaluated to better understand the impact of justice on the organization's officials through trust and altruistic behavior. To know the relationships between the above-mentioned factors, a questionnaire was designed, through which 130 valid responses were collected from companies from different economic sectors of Valle del Cauca, in Colombia. The results showed that the three constructs analyzed have a significant effect on the Operational Effectiveness of the companies of Valle del Cauca. The results also report a positive relationship between organizational justice and trust.*

Keywords: Organizational Justice, Organizational Citizenship Behavior, Altruism, Organizational Trust, Operational Effectiveness.

Introduction

This research focuses on the evaluation of the relationships of organizational factors such as Organizational Justice; Organizational Citizenship Behavior (OCB); and Organizational Trust (OT); and their impact on Operational Effectiveness (Van den Bosch et al.) in organizations in Valle del Cauca region in Colombia. In turn, the effect of Organizational Justice (Huo et al.) on Organizational Citizenship Behavior (OCB) and Organizational Trust (OT) is evaluated to analyze the relationship these categories have on the behaviors and perception of *trust* of the members, collaborators, and officials within the organization. Trust is one of the strongest bonds in social (and therefore organizational) relationships, as our survival depends on others, despite our inability to anticipate their choices. Furthermore, trust helps overcome suspicion, distrust, and fear by facilitating positive interactions based on exchange, mutuality, and solidarity.

Literature review

Organizational Justice: Baldwin (2006) argues that it is present when the organization provides equal opportunities for all employees and works to promote fair human relations between supervisors and all

workers. But, as stated by Al-Najar & Maqableh and Timinepere et al. (2018) this organizational justice is based on the judgment of employees who perceive they are being treated equally to other individuals in the same organization (2018). Therefore, organizational justice is, as Al-Masri (2018) suggests, an organizational characteristic that reflects the way an organization operates and how managers interact with their employees at an occupational and human level.

Distributive Justice: This term refers to the judgment of employees in a mixed relationship between fair or unfair, depending on the proportion of inputs and results received from employer organizations, making a cognitive comparison with referents in the same entity or similar organization elsewhere (Timinepere et al., 2018). This variable indicates equity in the allocation of inputs and results in the organization among employees. It also refers to the extent to which the administration justly allocates resources among its members.

Procedural Justice: Focuses on how organizational processes are used to determine organizational outcomes. According to research by Thibaut and Walker (1975), if employees had the opportunity to participate in the process that the organization uses to achieve results, they could perceive them as fair.

Organizational Citizenship Behavior: The concept of citizenship organizational behavior was presented by Organ (1988, cited in Khan et al., 2018) to explain some of the attitudes presented by employees while they were performing their duties in an organization. Organizational citizenship is composed of individual behaviors not directly or explicitly recognized by the formal reward system, and together promote the efficient and effective functioning of the organization (Organ, 1988). The importance of this variable in companies lies in the idea that for a healthy and smooth functioning of an organization, coordination between its members is required to share information efficiently.

Organizational citizenship behaviors fall into the category of behaviors that contribute positively to the company, according to Katz & Kahn (1978), the help and coordination of processes are added to the operations of the organization, which exceeds the normal requirements for a job. In providing organizational

effectiveness and continuity, employees must be willing to take innovative and sincere actions that go beyond their predefined roles (Katz & Kahn, 1978).

Altruism or solidarity: Organ (1988) defines altruism as any discretionary behavior of employees in the form of helping other members of the organization in their specific tasks or relevant organizational problems. The basis of this behavior lies in the feeling that co-workers are helping each other. Altruism, which has been identified as an essential component of behavior by most researchers working in this field, refers to conduits that directly and intentionally aim to help an individual in face-to-face. Situations Although, from the cultural studies of emotions, the egotistical trade of altruism has been questioned as it refers to the action that comes from compassion but is based on the idea of a returning action or benefit and not in the genuine care for others.

Organizational Trust: Interpersonal trust is the basis of organizational trust (Rojas et al., 2020), organizational trust in a more accurate way, we must begin by defining its basis. Different authors in their respective works such as Rousseau et al. (1998) and Lewicki et al. (1998) define interpersonal trust as the decision of an individual to make themselves vulnerable to the actions of others with positive expectations regarding their behaviors and intentions. In the case of an organization, this psychological state is reflected by the individual in front of different people such as their colleagues (lateral trust), their superior (vertical trust), and in front of the organization itself (systematic trust) or in front of other organizations as proposed by Silva and Vinasco (2014) when forming agreements or alliances.

This study is aimed at the general concept of organizational trust, to determine the role, they play in the generation of operational effectiveness in organizations. Based on the conceptual review of the constructs in which this study is designed, the following hypotheses were determined:

H1: *Distributive Justice affects employee altruism/willingness to be solidary.*

Distributive justice can have an impact on employee altruism in the workplace. Distributive justice refers to the perceived fairness of how resources and rewards are distributed among employees within an

organization. When employees feel that they are being treated fairly and equitably, they are more likely to engage in behaviors that benefit the organization as a whole, such as altruistic actions (Lamont, 2017).

Therefore, to encourage employee altruism and create a positive atmosphere at work, organizations must work toward distributive justice. This can be accomplished by establishing open and equitable incentive allocation procedures and making sure that every employee has an equal chance for career advancement and personal growth (Cook & Hegtvedt, 1983; Nozick, 1973)

H2: *Procedural Justice affects the Altruism of employees.*

Evidence from studies indicates that procedural justice may have a favorable impact on employees' altruism. Employees are more inclined to engage in actions that benefit others when they believe they are being treated fairly and justly by their employer, including helping out their coworkers, volunteering, and participating in generous activities. This is caused by the fact that procedural fairness raises employees' levels of loyalty and trust in their organization, which in turn encourages a sense of social responsibility inside the own organization. Therefore, organizations that emphasize procedural justice are inclined to employ people who value altruism (Greenberg & Tyler, 1987; Konovsky, 2000).

H3: *Distributive Justice affects Organizational Trust.*

An organizational trust may be impacted by distributive justice. In an organization, perceived fairness in the allocation of rewards and resources is referred to as distributive justice. Employees are more likely to trust the organization and feel comfortable in their work when they believe that benefits, such as pay and promotions, are allocated equitably. On the other hand, employees could develop resentment and distrust; at the same time, they could develop resentment, distrust, and disengagement from their work if they believe that awards are given out unfairly. Finally, how people perceive distributive justice can have an impact on the culture, output, and morale of an organization (Lamont, 2017).

H4: *Procedural Justice Affects Organizational Trust.*

Organizational trust may be impacted by procedural justice. The perceived fairness of the organizational decision-making and dispute-resolution systems is referred to as procedural justice. Employees are more likely to trust their business and its leadership when they believe that policies and procedures are open, fair, and consistent. Employees may feel annoyed, alienated, and mistrusted if procedures are thought to be arbitrary, inconsistent, or biased. Employee morale, output, and the general organizational culture may all suffer as a result. As a result, businesses that give procedural justice the highest priority are more likely to develop and sustain high levels of employee trust (Tyler & Allan Lind, 2001).

Operational Effectiveness: Involves improving and measuring the performance of the organization's processes, and directing and controlling the company's operations to achieve better levels of competitiveness (Santa et al., 2014). Based on *Operational Effectiveness* as a variable that depends on factors such as *Distributive Justice*, *Procedural Justice*, *Altruism*, and *Trust*, this study proposes the following hypotheses:

H5: *Distributive Justice affects the Operational Effectiveness of Organizations.*

Organizations which put distributive justice first are more likely to draw in and keep top talent while also maintaining high levels of operational effectiveness (Cook & Hegtvedt, 1983; Santa et al., 2022).

H6: *Procedural Justice affects the Operational Effectiveness of Organizations.*

Procedural fairness can enhance organizational performance by raising morale, fostering a culture of trust and cooperation, encouraging better decision-making, and minimizing conflict and complaints (Ambrose & Arnaud, 2005; Greenberg & Tyler, 1987).

H7: *Altruism affects the Operational Effectiveness of Organizations.*

Employees are more likely to be involved in their work and productive when they believe they are working for a company that cares about others. They are more willing to go above and above because they have a sense of purpose and fulfillment in their work. Benevolent employees are more likely to be eager to assist one another, even if it goes against their immediate interests. Better teamwork and collaboration can result

from this, which will increase the efficacy and efficiency of operations. Altruism can, in general, be a great benefit for any organization. An organization can foster a more upbeat, effective, and creative workplace by encouraging altruism among its staff (Nonaka & Takeuchi, 1995).

H8: *Organizational Trust affects the Operational Effectiveness of Organizations.*

The operational effectiveness of businesses can be significantly impacted by organizational trust. Employee cooperation and information sharing, which can increase decision-making, problem-solving, and innovation, are more likely to occur when employees have trust in their bosses and one another. Additionally, trust can aid in lowering tension and conflict, which can improve the climate at work and make it more productive (Singh & Srivastava, 2016).

Methodology

The objective of this research is to verify and explain the relationship between the different variables described above and identify their effects and real impacts on the effectiveness of the operations of organizations since the approach was confirmatory and correlational. To this end, a survey was prepared through which 130 valid data were collected from personnel linked to organizations in different productive and economic sectors of Valle del Cauca.

The questionnaire has a demographic section, followed by a set of variables or constructs that allowed to elaborate of a model that was demonstrated by descriptive and inferential statistical analyses once the data were collected. A five-point Likert scale, where 1 is completely disagree and 5 is completely agree, was used in four sections to evaluate the different variables raised in the model.

The questionnaire was based on an extensive literature review and four sections were designed. The first section covers variables related to *Organizational Trust (OC)*, this section was elaborated based on Oreyzi and Barati (2013). The second section was based on the approaches of Usman and Jamal (2013) to evaluate the variables of *Organizational Justice (Huo et al.)*. The third section was developed according to the work of Asgari et al. (Asgari et al.) to measure the variables of *Behavior of Organizational Citizenship (CCO)*.

Finally, the fourth section was carried out according to the work of Santa, et al. (2014) for the variables associated with *Operational Effectiveness (OA)*.

The CMIN/DF of 1.631 as suggested by Wheaton et al. (1977) is in an acceptable range at a value of approximately five or less as a reasonable criterion. Marsh and Hocevar (Marsh & Hocevar) advised using ratios as low as two or as high as five, and McIver and Carmines (Carmines & McIver) recommended ratios in the range of 2:1 or 3:1 as indicative of an acceptable fit between the hypothetical model and the sample data. Additionally, the reliability of each of the constructs in the model was evaluated by several adjustment statistics, the root of the mean square error of approximation of 16 (RMSEA) was acceptable because the model had a value of 0.057 and the maximum is considered 0.08 (Bentler, 1990). The fitting indices of the baseline comparisons suggest that the hypothetical model fits adequately to the variance-covariance matrix observed relative to the null or d model and independence. Baseline comparison values are above 0.7 and support the reliability of the model, with some results above 0.8 (Bentler, 1990).

Results

A marginally accepted relationship was found between *Distributive Justice* and *Organizational Trust* ($b=0.43$, $p<0.01$). This result indicates that Hypothesis 3 (H3) is accepted and that there is some relationship between Distributive Justice and the degree of Trust that an official feels in the organization in which he works and as expressed by Girgin and Vatansever Bayraktar (2017) in their research, an employee feels high levels of Organizational Trust if his superiors treat him fairly.

On the other hand, a very low relationship was found between *Distributive Justice* and *Altruism* ($b = 0.23$, $p>0.05$) and between *Procedural Justice* and *Altruism* ($b = 0.1$, $p>0.05$), so Hypotheses 1 and 2 respectively (H1 and H2) are rejected. The levels of *Distributive Justice* and *Procedural Justice* have no relation to the *Altruism* that is an intrinsic part of the employees of an organization. This is an important finding given that, it can be concluded that the Altruism of employees is far from Justice. This can be explained because being altruistic is inherent in the individual and is something that is born of culture, and in the case of Colombia,

the happiness and satisfaction of Colombians do not depend on external factors but is congenital to the individual (Martínez & Short, 2020).

In addition, it was found that the relationship between *Procedural Justice* and *Organizational Trust* is high and supported ($b = 0.51$, $p < 0.001$), so Hypothesis 4 is confirmed (H4). This indicates that the degrees of *Procedural Justice* affect the trust felt by employees, ratifying what was mentioned by Chan Kim and Mauborgne in their study, in which they argue that when decision-making processes are perceived as fair, employees' evidence of a high level of voluntary cooperation based on commitment and trust.

Also, a significant and confirmed relationship was found between *Distributive Justice* and *Operational Effectiveness* ($b = 0.87$, $p < 0.01$), and a highly significant relationship between *Procedural Justice* and *Operational Effectiveness* ($b = 0.42$, $p < 0.001$), so both Hypothesis 5 (H5) and Hypothesis 6 (H6) are confirmed. This result demonstrates that fairness is a variable that companies must take into account if they want to increase their operational effectiveness. Leaders and managers must take care to keep employees satisfied, engaged, and loyal to the organization. But to achieve this, leaders must take into account that their actions are equitable and just, avoiding favoritism in the distribution of workload, resources, and incentives (Usmani & Jamal, 2013).

Additionally, the results showed a high and significant relationship between *Altruism* and *Operational Effectiveness* ($b = 0.58$, $p < 0.001$), therefore, Hypothesis 7 is confirmed (H7). The foregoing corroborates that altruism is a relevant representative of the behavior of organizational management and significantly impacts the operational effectiveness of the organization, through the commitment and self-motivation of employees (Ozturk et al., 2010). The above relationship is because colleagues help each other, which will lead to less tension between members of work teams, and consequently, will lead to an improvement in the efficiency and effectiveness of operations (Hall et al., 2009; Ozturk et al., 2010).

Finally, a relationship was found between *Organizational Trust* and *Operational Effectiveness* with an acceptable level of significance, which supports Hypothesis 8 (H8) ($b = 0.67$, $p < 0.01$). The fact that a higher

level of trust in an organization leads to a considerable increase in its operational effectiveness, supports the opinion of several authors who affirm that an organization where there are high levels of trust leads to an increase in different aspects that are part of the best performance of the organization. Some of these aspects are commitment (Kline & Rosenberg, 2010), cooperative behavior (Gambetta, 1988), the formation of network relationships (Miles & Snow, 1992), and strategic alliances (Ferrer et al., 2008), among others.

Conclusions and recommendations

The lessons learned in this study are important for leaders, managers, administrators, or supervisors. Based on the results, it can be openly recommended that employees should be treated fairly and equitably, which implies the recognition of their effort, that they must be impartial in the decisions that are made, equitably distributing the workloads, making them participate, as far as possible, of decision making in different projects. These behaviors will generate an increase in the levels of trust of employees with their bosses and the organization itself, translating into a positive impact on the operational effectiveness of the company.

The above can be explained by the culture of Colombia itself, where different behaviors such as life satisfaction or altruistic actions are innate to the individual and do not depend on external factors such as the government and the society in which he lives, or the justice and organizational culture of the company to which they belong. One factor that was not examined in this study was sportsmanship. Based on the approach of Organ (1988), we would suggest that resilience and the ability to tolerate, resist and prevent the dejection resulting from the inevitable negativities and difficulties derived from work is an innate characteristic of Colombians since they always adopt a positive attitude.

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Managing the paradox of environmental sustainability through traditional philosophies: Insights from traditional Chinese and Māori knowledge

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Stream 3: Sustainability and Social Issues

Managing the paradox of environmental sustainability through traditional philosophies: Insights from traditional Chinese and Māori knowledge

ABSTRACT:

The intensified competition and globalisation make the contemporary business environment more complex, generating conflicting and contradictory organisational tensions. For instance, environmental protection and economic growth have created a paradox for many organisations. However, paradox management theories are primarily based on Western reductionism, such as Aristotle's formal logic and Hegel's dialectical logic, which seeks ultimate resolutions of contradicting elements, showing less effectiveness in managing paradox. In comparison, non-Western cultures have embedded paradox management in traditional philosophies, such as Yin-Yang balancing from Taoism, the "middle-way" from Confucianism and utu from the Indigenous Māori world view. Advocating wholeness and harmony to cope with the contradictory elements vastly differs from the Western dualism approach, offering an alternative to managing the environmental sustainability paradox more effectively.

Keywords: paradox, Chinese philosophy, te ao Māori, yin-yang balancing, utu, environmental sustainability

The world has become more connected, competitive, and complex, and contradictory demands such as collaboration-control, individual-collective, flexibility-efficiency, exploration-exploitation, and profit-social responsibility, are growing at a fast pace for businesses (Lewis, 2000; Smith & Lewis, 2011). These contradictory demands, such as environmental sustainability and social concerns, indicate that the contemporary business environment is packed with tensions caused by the intensification of globalisation, technological innovations, and hyper-competition, requiring decision-makers to be more flexible while simultaneously addressing an array of stakeholder pressures (Carmine & De Marchi, 2023; Smith & Lewis, 2011). Most existing management theories are based on Western reductionism, which assumes tensions are mutually exclusive and can be solved through a dualism or dichotomy approach characterised as a win-win or trade-off. For instance, through a systematic literature review, Van Der Byl and Slawinski (2015) identified 102 of 149 peer-reviewed papers adopting this win-win or trade-off approach to managing tensions that arise when attending to environmental and social responsibilities. One of the issues with a win-win or trade-off approach is that the underlying motivation remains profit maximisation (Hahn et al., 2018). Further, environmental challenges, such as climate change and biodiversity loss, are creating tremendous pressure on ecosystems (Carmine & De Marchi, 2023). The juxtaposition between ecological and economic elements of sustainability produces wicked problems, which are characterised by complex dynamics from their deep interconnections (Carmine &

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De Marchi, 2023). This dualism approach is problematic as such tensions are not regarded as ends in themselves, with financial benefits easily swaying motivations. A paradoxical method is, therefore, suggested as an alternative way to address these tensions simultaneously.

This paper is structured as follows. Firstly, the paper will explain the paradox and the paradox approach and how it is used to address management tensions. Secondly, the paper will discuss paradoxical tensions in environmental sustainability. Thirdly, both Western and non-Western ways of managing the paradox will be addressed, focusing on Chinese and Māori approaches. Lastly, the implications for research, policy and practice will be discussed, followed by concluding remarks.

Paradox theory and the paradoxical approach

The term paradox emerged from the ancient Greeks as a reflection of the term para (contrary to) and doxa (opinion), meaning a condition or relationship that is beyond reason or logic (Chen, 2002). The concept has deep roots in both Eastern (e.g., Yin-Yang in Taoism) and Western philosophies (e.g., Socrates' dialogical method) (Schad et al., 2016). Paradox has been applied in philosophy and psychology such as the existential paradox in modern philosophy and the cognitive nature of paradox that psychologists use to examine the impacts of tensions on creativity and mental health (Lewis, 2000; Schad et al., 2016).

Paradox can be defined as contradictory yet interdependent elements that exist simultaneously and persist over time (Lewis, 2000; Schad et al., 2016; Smith & Lewis, 2011). Paradox includes ideas that seem to clash irreconcilably and contradictory elements yet operate simultaneously and interdependently (Chen, 2002). These definitions highlight two core attributes of paradox: contradiction and interdependence (Lewis, 2000; Schad et al., 2016). It is worth noting that previous authors believed that paradoxes are constructed and are the outcome of human mental polarisation (Lewis, 2000; Li, 2016; Smith & Lewis, 2011). This characteristic of paradox is likely due to the dual-hemispheric structure of the human brain that is possibly related to their bipedal body, causing humans often to polarise real opposites into simplified pairs of mental opposites to reduce the complexity of all links through spatial or temporal separation (Li, 2016).

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People often simplify reality into polarised dualism distinctions to make sense of an increasingly intricate, ambiguous, and constantly-changing world (Lewis, 2000; Schad et al., 2016; Smith & Lewis, 2011; Van Der Byl & Slawinski, 2015). Evidence suggests that researchers could move beyond oversimplified and polarised notions to recognise organisational complexity, diversity, and ambiguity by exploring the paradoxical approach (Hahn et al., 2018; Lewis, 2000; Schad et al., 2016; Smith & Lewis, 2011). A paradoxical approach in management explores how organisations can address competing demands simultaneously, as long-term organisational success requires continuous effort to meet multiple and divergent demands (Hahn et al., 2018).

The paradox of environmental sustainability

The World Commission on Environment and Development (WCED) defined sustainable development as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987, p. 16). Sustainable development is a multifaceted concept that interconnects and interacts with multiple domains and scales, including the global and the local (Mazzocchi, 2020). Although WCED coined the term sustainable development, the concept has existed in many ancient traditional knowledge systems of Indigenous people. For instance, there are old sayings in Confucianism, an ancient Chinese philosophy, “子钓而不纲，弋不射宿” – a hook should be used for fishing instead of a net, and a nest of sleeping birds should not be shot at with an arrow (Guo et al., 2017). Similarly, kaitiakitanga is a traditional Māori value which establishes an active, long-term intergenerational obligation to protect, maintain, and enhance the resources that ancestors have handed down and that will be passed on to future generations, and therefore, all kin, including both humans and nonhumans are cared for in a harmonised manner across domains and time (Nicholson et al., 2019; Rout et al., 2022). These examples of traditional knowledge indicate that environmental sustainability has been embedded in Chinese and Māori philosophies and methods. However, contemporary management research and practices are primarily based on Western philosophies, and the standards and processes tend to follow developments in the West, which are often based on an isolated, either/or approach (Peng et al., 2016; Wang & Juslin, 2009). Such an approach indicates that trade-offs between economic profit and environmental protection always exist, and organisations must choose between different them.

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Although this approach has proven effective in relatively stable business environments, as business becomes more complex than ever, dualism has started to show its inability to deal with mulilayered and multidimensional tensions.

The challenge of sustainable development is to address multiple competing objectives simultaneously, resulting in tensions among these elements, as progress to one sustainability issue could have detrimental effects on other sustainability issues (Hahn et al., 2018). For instance, a growing tension for contemporary businesses is balancing economic growth with environmental development (Edwards, 2021). These tensions create the environmental sustainability paradox, requiring businesses to pursue economic growth without damaging the environment, and in fact, enhancing it.

The environmental sustainability paradox acknowledges tensions among associated desirables, such as economic growth, yet interdependent and sometimes conflicting sustainability objectives like environmental protection (Hahn et al., 2018). Nevertheless, Western management philosophies generally adopt a dualist world view, suggesting that economic performance and environmental protection are mutually exclusive and cannot be achieved simultaneously, and therefore, trade-offs are inevitable. Chen (2000) suggested that for companies to be successful, they must learn how to manage paradoxes and realise that they must possess simultaneously contradictory or mutually exclusive attributes. For instance, on the one hand, if the organisation does not take care of the environment it competes in, there will be no planet left. On the other hand, focusing solely on protecting the environment will reduce profit, and organisations will not survive. Hahn et al. (2018) advocate that businesses should accept and live with paradoxical tensions stemming from sustainability and address these tensions even when immediate benefits (e.g., profit) are absent. He further explained that this perspective does not imply that businesses should forgo the profit altogether. Instead, businesses should “purposefully balance and combine instrumental initiatives – where addressing sustainability issues yield business benefits – with moral initiatives – where firms address environmental and social issues in their own right” (Hahn et al., 2018, p. 236). Therefore, in today’s business environment, linear, rational and scientifically-based ways of resolving problems are no longer effective. These contradictory environmental and economic performance tensions must be addressed using a paradoxical approach,

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and managers need to learn to recognise, become comfortable with, and benefit from tensions and anxieties the paradoxical tensions provoke (Lewis, 2000).

Western approaches to managing paradox

As mentioned, the term paradox originated in ancient Greek (Schad et al., 2016), where Western philosophies were developed. Despite the increased attention, paradox theory and management remain shaped by the Western roots of modern management theories (Keller & Lewis, 2016). However, cultural background informs how individuals and organisations manage the paradox (Schad et al., 2016). For instance, Western approaches stress distinctions, contradictions, and opposing, while Eastern thinking focuses on seeking harmony and identifying a “middle-way” (Chen, 2002; Leung et al., 2018; Schad et al., 2016).

The Western approaches to managing paradox tend to follow the laws of Aristotle’s formal logical and Hegelian logic, which emphasises polarisation and differentiation that seek to distinguish the contradictory elements, the synergy and integration that seek to find higher-order solutions that enable the full experience of both elements simultaneously (Leung et al., 2018; Lewis, 2000; Li, 2016). Further, existing research on paradox indicates that when individuals encounter complex and ambiguous phenomena, they tend to simplifying or polarising them into a dualism category (either/or) and miss the complex interrelationships of these phenomena (Leung et al., 2018; Lewis, 2000; Smith & Lewis, 2011).

Aristotle’s formal logic is one of the most predominant epistemological systems in the West and the world and has been widely applied in developing management theories (Li, 2016). This system contains three logical laws (law of identity, non-contraction, and excluded middle) and adopts a “either/or” approach to making management decisions when contradictory tensions appear, hence denying the existence of paradox (Keller & Sadler-Smith, 2019). This formal logic is essentially a mechanistic, reductionist and analytic system, treating contradictory elements as mutually exclusive discrete categories rather than a balanced unity of opposites within a continuum, essentially denying and avoiding paradox (Li, 2016). Thus, Aristotle’s formal logic, which is based on dualism (either/or) thinking, is incapable of understanding the intricacies of the paradox (Lewis, 2000).

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Through the recursive relationship of thesis-antithesis-synthesis, Hegel's dialectical logic seems to embrace the paradox because it emphasises the unity of opposites (Liu & An, 2021; Schad et al., 2016). The logic allows the temporary existence of paradox in a transition phase within a recursive process of "negotiation" for the ultimate resolution of paradox at the higher level as sublation (Li, 2016). This logic believes that the contradiction between new and old contradictions is inevitable and will eventually be eliminated at a higher level. Therefore, it is ultimately a mechanistic, reductionist, and analytic system to resolve the paradox in a cursive process of negotiation with temporary "both/and", but ultimately falls into the "either/or" category (Li, 2016). Therefore, it is also not effective in managing paradox.

Based on the philosophical foundation of Western management theories, the Western way of managing paradox embraces the ideas that seem to clash irreconcilably, suggesting that seemingly contradictory or mutually exclusive elements out of which a paradox is constructed operate simultaneously (Chen, 2002). Managing paradox means capturing the enlightening potential and exploring rather than suppressing tensions (Lewis, 2000). Two common organisational management to paradoxical tensions were identified through a single case study of the global value chain related to the footwear industry. Proactive paradox management involves accepting and trying to address the tensions arising from conflicting objectives, while defensive paradox management seeks to suppress the tensions (Schrage & Rasche, 2022). Furthermore, Lewis (2000) suggested three common ways of paradox management: acceptance – living with the paradox offers a sense of freedom; confrontation – discussing the tensions to construct a more accommodating understanding or practice; and transcendence – the capability to think paradoxically. Additionally, a dynamic equilibrium framework for managing paradox was developed, which involves accepting paradoxical tensions in the long term while either finding synergies among competing demands or providing oscillating support for these elements in the short term (Schad et al., 2016; Smith & Lewis, 2011). Compared to static equilibrium, which emphasises that all elements are balanced at a steady state, dynamic equilibrium assumes constant motion across opposing forces, and the system maintains balance by adopting a continuous pull in opposing directions (Smith & Lewis, 2011).

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To manage paradoxical tensions, Lewis (2000) proposed that actors must immerse themselves in the tensions and reclaim emotions that have been polarised, thus, shifting the notion of management from planning and control to coping. Through examining the paradox between market and regulatory demands experienced by a telecommunications firm, the study found that these paradoxes coevolve over time as managers shift from defensive approaches that attempt to suppress and avoid paradox to active responses that accept and work within paradox (Jarzabkowski et al., 2013), demonstrating the mindset and behaviour changing towards a more paradoxical approach to cope with contradictory tensions.

Chinese and Māori ways of managing paradox

The concept of paradox has deep roots in Chinese philosophies and is used to explore the nature of existence (Schad et al., 2016). Paradoxical orientations have always coexisted in Chinese culture, and the intensified globalisation makes Chinese culture more paradoxical within its current dynamics (Faure & Fang, 2008). Prior research on managing paradox using Chinese philosophies suggested that compared to the Western analytical way of thinking, which is based on breaking the whole into parts, the Chinese mindset takes an integrative point of view, one that considers all things in terms of their relationships, be it social, economic, or biological (Chen, 2002). Although Chinese philosophies take a more integrative approach to managing paradox, integration in the Chinese mindset is not merely a sum or combination of parts, a paradigm grounded in Western philosophy; instead, it is the totality of relationships that blends all parts like a melting pot (Chen, 2002).

In traditional Chinese philosophies, such as Yin-Yang in Taoism and ‘middle-way’ in Confucianism, opposing elements in a paradox are viewed as interdependent, fluid, and natural (Schad et al., 2016). Further, traditional Chinese philosophies advocate avoiding simplistic distinctions when encountering paradoxical tensions, and Yin-Yang represents a natural wholeness composed of contradictions (Lewis, 2000; Schad et al., 2016). When one force (i.e., Yin) escalates to its extreme state, it retains elements of its opposition and eventually reverses the trend (Lewis, 2000).

With a detailed analysis of five cognitive and logical systems (neither/nor, both/and, either/or, both/or, and either/and), Li (2016) concludes that Yin-Yang balancing (either/and) is the only method

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that embraces paradox, as it treats the two opposite elements in a paradox as “both partial trade-off and partial synergy within a threshold as a range of holistic and dynamic balancing points for healthy tension” (p. 29). Yin-Yang balancing was proposed as an epistemological system that contains three overarching components: relativity, holism, and change, for understanding and managing paradoxes (Li, 2016). Relativity describes the relationship between opposite elements as partial negation and partial affirmation, signifying that these elements are contrary instead of contradictory and complementary instead of interrelated (Keller & Lewis, 2016; Li, 2016). Therefore, the boundaries between the opposing elements are blurred, and the relationship is no longer black and white but with varying gradations of grey (Keller & Lewis, 2016). Further, the holism of Yin-Yang balancing emphasises the wholeness of both the opposing elements and their relationship, meaning missing elements, their contrary or complementary relationships, could result in incompleteness (Keller & Lewis, 2016; Li, 2016). Lastly, Yin-Yang balancing embraces the idea that the whole is dynamic, changing continuously and unpredictably, and the relationships may change and always coexist yet pull the opposing elements in different and varying directions (Keller & Lewis, 2016). Li (2016) categorises Yin-Yang balance as an “either/and” system, with “either” addressing the existence of tension, trade-off, and conflict, with “and” addressing the existence of harmony, synergy, and complementarity.

Another traditional Chinese philosophy for managing paradox is “middle-way” thinking (Chen, 2002; Keller & Lewis, 2016; Leung et al., 2018). The middle-way thinking is based on Confucianism and advocates a simple “split down the middle” approach to managing paradox (Keller & Lewis, 2016). Compared to Western approaches, the Chinese tend to manage paradox dialectically, focusing on moderation, compromise, and middle-way solutions in which both the contradictory elements can be right, and the truth lies between the two perspectives (Leung et al., 2018).

It is worth noting that the unique features of Chinese philosophy could reframe paradox from a negative problem to a positive solution (Li, 2016). Many concepts, policies, and frameworks have been developed throughout Chinese history, demonstrating the Yin-Yang philosophy’s practicality to understand and resolve paradoxical issues. For instance, 一国两制 (*yi guo liang zhi* – one country, two systems), “稳定发展 (*wen ding fa zhan* – stability and development)”, and “社会主义市场经济

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(*shehuizhuyi shichang jingji* – socialist market economy). These concepts may look inconsistent, impractical, unrealistic and puzzling to Westerners, however, they make sense to the Chinese because of their internal consistency and coherence (Faure & Fang, 2008). The ability of the Chinese to manage paradoxical tensions, generate development, coherence, and consistency out of stability, chaos, and contradiction has become one of the most important cultural characteristics that serve and sustain Chinese businesses' transformation and prosperity (Faure & Fang, 2008).

Te ao Māori (the Māori world view) as an Indigenous paradigm can be seen as a valuable way to manage paradox. Mika et al. (2022) observe three principles of Indigenous paradigms. The first principle acknowledges that everything has value because everything is connected with everything else, showing the interdependency and relativity of everything, even if they are contradictory and opposing. The second principle is balance, enacted through the concepts of hau (spirit of the gift) and utu (the practice of reciprocal relations), which occur in cultivation, harvests, and ceremonial, commercial, and humanitarian exchanges. Utu is concerned with maintaining harmony and balance, ensuring that something must be given back whenever something is taken (Bargh, 2012; Durie, 1996). Thus, utu can be defined as maintaining balance and harmony through reciprocal obligations, honesty in all things, punishment for wrongdoing, and exchanging gifts (Mika et al., 2022; Mika & O'Sullivan, 2014). It is often used to manage contradicting and competing tensions. For instance, Māori entrepreneurship has a natural tendency to balance responsibilities within Māori society and wider society; however, fulfilling these responsibilities creates paradoxical tensions, and the Māori concept of utu (reciprocity) is used as a cultural device to regulate cultural and commercial imperatives in Māori entrepreneurship (Awatere et al., 2017). This principle demonstrates the Māori values of constantly seeking internal balance and harmony through reciprocal exchange.

The third principle of an Indigenous paradigm is the immortalisation of physical beings through the transference of energy from one form to another, the endless time and the circular flow of energy and experience (Mika et al., 2022). This last principle demonstrates the continuity of Māori philosophies and values, which is not bounded by time and space, meaning that the past events retain their significance, and ancestors can collapse the space-time continuum to be co-present with their

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descendants (Stewart, 2020). These elements of Māori philosophy exhibit similar characteristics to traditional Chinese philosophies for managing paradox, for instance, the principles of holism, relativity and dynamism in Yin-Yang balancing. Therefore, these traditional Chinese and Māori philosophies suggest a conceptual foundation for managing the paradox of environmental sustainability.

Implications

A study of the paradox of environmental sustainability is proposed, which offers the following implications. First and foremost, the study would offer a new lens to manage the environmental sustainability paradox based on traditional Chinese and Māori philosophies. This research does not seek to replace or dismiss Western management theories to develop a brand new set of theories based on traditional philosophies, nor does it aim to prove that traditional philosophies are superior to Western philosophies. Instead, this study offers a new perspective built upon traditional philosophies and values from Chinese and Māori cultures to manage paradoxical tensions involved in environmental sustainability. As such, it seeks to revive interest in traditional philosophies which have long been disregarded, denied, and characterised as superstitious, unwise, and primitive. This research corresponds to a core principle in Chinese philosophies, the “both/and”, affirming the coexistence of numerous facts and realities when researchers, managers, and governors face common challenges (i.e., environmental sustainability). Further, traditional Chinese and Māori demonstrate great potential in managing paradox. Policymakers should encourage and provide opportunities for organisations to experiment with these cultural approaches, offering organisations alternative ways to cope with contradictory tensions.

While this study sheds some light on managing the environmental sustainability paradox through the lens of traditional Chinese and Māori philosophies, limitations still need to be acknowledged. Research must explore implementation issues in managing paradox, as industries, organisational structure, institutions, and other factors could affect how organisations manage contradictory tensions. Furthermore, research should also consider how individuals respond to paradoxes within organisations, as personal interpretations of traditional philosophies can differ vastly.

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CONCLUSIONS

Contemporary management theories primarily based on Western philosophies are becoming less effective in dealing with complex and contradictory tensions, such as the seemingly competing demands between environmental protection and economic growth. Dualism and ‘trade-off’ thinking originated from Aristotle’s formal logic and Hegel’s dialectical logic, limiting organisations’ ability to meet multiple stakeholder demands. Organisations must look for alternative approaches to manage the paradox of environmental sustainability. Traditional philosophies can shape individuals’ values, beliefs, thinking, and actions. In both traditional Chinese and Māori philosophies and world views, the importance of treating humans and nature as interdependent elements in the ecosystem and a balanced and harmonious relationship are foundational and non-negotiable principles. Moreover, compared to Western management theories, traditional Chinese and Māori philosophies embrace a more relative, holistic and dynamic approach when dealing with paradox, such as the Yin-Yang balancing, middle-way, and te ao Māori. These approaches illustrate a better capability to cope with paradoxical tensions, as they aim to achieve sustainability goals that seem to contradict and compete with each other (e.g., environmental sustainability and economic performance). These traditional philosophies offer an alternative approach to tackling urgent ecological crises such as climate change and biodiversity, adding value to the existing management theories of paradox and environmental sustainability.

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Stream 7. Teaching and Learning

From compliance to collaboration: critically reflecting on the process of embedding an Indigenous Graduate Attribute in an undergraduate business program.

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Stream 7. Teaching and Learning

From compliance to collaboration: critically reflecting on the process of embedding an Indigenous Graduate Attribute in an undergraduate business program.

ABSTRACT

Calls for Australian universities to embed Indigenous content into curriculum are more than a decade old yet this work remains largely incomplete. Institutional commitments made at senior level to achieve these outcomes can lack direction, guidance, and support at the coalface. Using a critical reflection methodology this paper outlines the approach undertaken by a group of Indigenous and non-Indigenous academics to embed a contextualised Indigenous graduate attribute into a traditional undergraduate business degree with multiple majors. The results indicate that collaborative approaches based on relationships and trust and supported with clear guidelines and processes can achieve positive outcomes. A focus on professional capabilities can enhance non-Indigenous staff confidence to teach this content and allay concerns about misappropriation of Indigenous Knowledges.

Keywords: Indigenous, curriculum, critical reflection, business, graduate attribute

Over the past two decades there have been numerous calls upon Australian universities to commit to ensuring all students engage with Indigenous Australian content in curriculum to build capabilities to work with and for Indigenous peoples and communities. However, embedding Indigenous content can be challenging. Although Indigenous academics are best placed to support the development and delivery of culturally informed curriculum, there are currently not enough Indigenous Australians employed in academic roles at Australian institutions to meet this need (Universities Australia, 2011, 2017). Non-Indigenous academic staff often don't know where to start or how to go about embedding Indigenous content, nor how to contextualise it to discipline areas. Without adequate training or support, they fear making mistakes. Using a critical reflective methodology, this research details the experience of both Indigenous and non-Indigenous academic staff engaged in a collaborative and supported process to assure the implementation of contextualised Indigenous graduate attribute into an undergraduate business degree at one Australian university.

LITERATURE REVIEW

Three decades ago, the 1990 Royal Commission of Inquiry into Aboriginal Deaths in Custody (Johnstone, 1991) highlighted the need for training and development of Australian professionals to overcome reliance on neo-colonial frameworks and general ignorance of Indigenous cultures, worldviews, historical and contemporary contexts (Bodkin-Andrews, Page, & Trudgett, 2022; Gainsford & Evans, 2017). Calls for inclusion of an Indigenous Graduate Attribute (IGA) within universities so that all graduates may be able to develop professional capabilities to facilitate better outcomes with Indigenous peoples and communities began as early as 2007 with the work of the Indigenous Higher Education and Advisory Council (IHEAC) (Bodkin-Andrews, et al., 2022). Indigenous scholars have added their voices to this call, highlighting the importance of an IGA to enhancing the competence of the Australian workforce by producing graduates who engage productively and work collaboratively for the advancement of Indigenous peoples and communities (Anning, 2010; Behrendt, Larkin, Griew, & Kelly, 2012). At the sectoral level, these calls were echoed by Universities Australia (2011) in their *National best practice framework for Indigenous cultural competency* and reinforced in their 2017 Indigenous Strategy which set the following target for implementation:

By 2020, universities commit to have plans for, or have already in place, processes that ensure all students will encounter and engage with Aboriginal and Torres Strait Islander cultural content as integral parts of their course of study. This will give all Australian university graduates in the future the chance to develop their capabilities to work with and for Aboriginal and Torres Strait Islander people and communities (Universities Australia, 2017, p. 30).

The Universities Australia's Indigenous Strategy (2022-25, p.55) again calls on Australian universities to include 'Indigenous content in curricula that is meaningful, appropriately developed and appropriately resourced'.

On the whole, Australian universities remain committed to embedding Indigenous content with 14 universities now having a specific IGA and many more including some form of cultural capability graduate attribute (Universities Australia, 2020). Nevertheless, further investment in initiatives and resources is required. Similar to any major change initiative, whole of university approaches including senior executive sponsorship, organisational strategic imperatives, coupled with clear policy and governance processes, adequate resourcing and staff training are seen to be effective in achieving positive outcomes and real impact (Acton, Salter, Lenoy, & Stevenson, 2017; Gainsford & Evans, 2017; Universities Australia, 2011).

Bodkin-Andrews et al, (2022) highlight the complexities involved in including Indigenous knowledges in curriculum including the misrepresentation, contradictions and violations of intellectual property rights and cultural protocols that may occur. Manton, Williams, and Hayen (2023) explain how deficit narratives and stereotypical assumptions can be reinforced by the uninformed use of easily available information such as the Australian Government's Closing the Gap framework. For these reasons, embedding Indigenous content is best done by Indigenous academics but there is a shortage of candidates who possess both discipline-based curriculum expertise and deep cultural knowledge (Gainsford & Evans, 2017; Wolf, Sheppard, Le Rossignol, & Somerset, 2018). Those that are employed, find themselves overburdened with responsibility and expectations to design, deliver, mentor, advise, collaborate (Delbridge et al., 2022) and educate others about Indigenous perspectives (Manton, et al., 2023). Additionally, as Bullen & Flavell (2017, p.589) note, the cultural burden of teaching this content for Indigenous academics can be 'high stakes ... requiring significant resilience and capacity to manage racism both overt (e.g., racist statements from students and colleagues) and covert (e.g., institutional racism)'. Non-Indigenous staff are often reluctant to include Indigenous content citing an already overcrowded curriculum, concerns about student resistance, lack of contextual relevance to the discipline (Bullen & Flavell, 2017; Ranzijn, McConnochie, Day, Nolan, & Wharton, 2008) alongside lack of confidence and lack of requisite knowledge and skills to effectively teach the content and manage any overt racism in the classroom (Burns, 2013, Manton et. al., 2023, Moodie, 2019, Wolfe et al, 2018).

Universities therefore face the dual challenges of a shortage of Indigenous academics and non-Indigenous academics who lack of knowledge of, and are hesitant to engage with, this work. Ways to address this challenge, include development of clear curriculum guidance frameworks, alignment of content to professional standards or capabilities, access to authentic case studies, and individual training and development (Wolfe et al, 2018). Indeed, calls for non-Indigenous staff to be engaged in cultural competence training, and in delivery of relevant and appropriate IGA content across diverse curriculums are decades old (Behrendt et al., 2012, Ranzijn et al., 2008). This paper outlines an example of a guided and supportive process whereby discipline based academics work collaboratively with Indigenous and non-Indigenous curriculum specialists to embed Indigenous content.

CONTEXT: UTS MODEL

The University of Technology, Sydney (UTS) has committed to a whole of institution approach to the development of an IGA framework and has been progressively expanding and resourcing this commitment. The UTS Indigenous Policy, underpinned by the philosophical principle that Indigenous education is for all Australians, commits the university to two key policy objectives:

- 4.12 (4) develop Indigenous competency among its students by creating an environment in which all UTS students have the opportunity to gain knowledge of Indigenous Australians
- 4.12 (5) ensure that all UTS graduates have a professional capacity to work with and for Indigenous Australians. (UTS, n.d.)

Under the auspices of the Office of the PVC Indigenous (Leadership and Engagement), an Associate Dean Indigenous Teaching and Learning was appointed in 2021 to lead the Indigenous Graduate Attribute (IGA) strategy, develop an IGA curriculum framework, and establish a governance process to embed the framework in core curriculum across the University. As a strong signal of the importance assigned to this initiative, the University also committed to fund the appointment of a team of three Indigenous and three non-Indigenous academics to work collaboratively alongside

faculty staff to support the rollout of this work. Staff within this Indigenous Teaching and Learning Team (ITL Team) work in partnership with faculty-based discipline teams and provide curriculum-design guidance, support and feedback on the IGA implementation aligned to the UTS professional capability focus. To ensure all curriculum content has Indigenous consultation, the ITL Team meets weekly to collaboratively review course plans with proposed IGA content and assessments and provide feedback to Faculty. In addition, the team provides professional development to academics across the University via monthly IGA workshops and scheduled sessions on cultural capability and culturally safe classroom practices.

Bodkin-Andrews et al., (2022) argue that it is critical that universities reflect carefully on their teaching and learning practices as they implement IGAs across their disciplines. They view reflectivity as key to transformative learning within institutions. Manton and Williams (2021) posit that engaging in critical self-reflection and evaluating practice is essential to developing cultural responsiveness of the workforce. Such reflection is often used as a tool to encourage students to explore their own positionality and privilege as well as ‘move beyond the limited lens of colonial knowledges’ (Bodkin-Andrews et al., 2022, p. 105) and deepen their understanding of Indigenous perspectives (Bullen & Flavell, 2017). Reflection has also been used in training of preservice teachers to encourage them to reflect on their worldviews and critically evaluate curriculum and pedagogy that ‘excludes Aboriginal Knowledges ... in favour of Western hegemonic approaches (Burgess, Thorpe, Egan, & Harwood 2022, p. 926) and in the training of law students (Burns, 2013). Critical reflection has been used in professional settings as a method for practitioners to learn and improve their practice (Fook, 2011) and effect cultural change (Universities Australia, 2011) and has been used elsewhere by teams of Indigenous and non-Indigenous academics to reveal learnings (see. Gainsford, Gerard & Bailey, 2020). Accordingly, the remainder of this paper reports the critical reflection and associated learnings from a team of Indigenous academic curriculum and content specialists, non-Indigenous curriculum academic experts, and discipline-based academic staff involved in the implementation of an IGA. The course is a typical undergraduate business program with multiple majors. By engaging in

critical reflection, we hoped to achieve learnings that could be applied to future courses and other university wide policy initiatives. The next section outlines our research methodology.

METHODOLOGY

Critical reflection is a qualitative research approach whereby participants are encouraged to examine their own subjective interpretations. It is defined by Fook (2011, p. 56), as ‘a way of learning from and re-working experience’. Mezirow (1990, p.199) explains that ‘critical reflection involves a critique of the presuppositions on which our beliefs have been built’ while ‘learning may be defined as the process of making new or revised interpretation of an experience.’ The process of critical reflection involves participants detailing their experience, then reflecting on this experience dialogically with colleagues with a focus on integrating theory and practice (Fook, 2011, Thompson & Pascal, 2012). Fook (2011) divides this reflective process into two stages, the first to unearth assumptions in the recounting of the experience and the second to uncover important values and beliefs that can then enable participants to remake or reinterpret their experience.

Fook (2011) argues that because new meaning created via this critical reflection is jointly crafted, participants are essentially co-researchers. The five researchers in this study were all engaged in the process of implementing the IGA into the Bachelor of Business program. Each had a different role in the process as shown in Table 1 below.

Table 1: Co-researchers and roles

| Co-researcher | Role in process |
|--|---|
| Assoc Prof Annette Gainsford, Associate Dean, Indigenous Teaching & Learning, ITL Team Indigenous Wiradjuri | Review, oversight, and final endorsement of IGA implementation |
| Danielle Manton, Senior Lecturer, ITL Team Indigenous Barunggam | Review, feedback, and advice on IGA implementation |
| Kath Attree, Senior Lecturer, ITL Team Non-Indigenous | Support Faculty of Business course teams in the design and development of IGA content and assessment. |

| | |
|--|---|
| Professor Chris Bajada, Professor of Economics Non-Indigenous | Course Director for Bachelor of Economics and Discipline lead for Economics major within the Bachelor of Business |
| Dr Rosemary Sainty, Lecturer in Management Non-Indigenous | Discipline lead for Management major with the Bachelor of Business |

Each person recorded their responses to the following three reflective questions related to their involvement in the implementation process:

- 1) What were your initial thoughts, feelings, reactions when first advised that you would need to complete this work?
- 2) What was your experience of the process?
- 3) What learnings have you taken from this that you can apply to your practice?

These reflections were collated by the principal researcher and shared amongst the group. Individual reflections were imported into NVivo, analysed, and coded in line with Fook's (2011) approach above. Initial assumptions participants had about the process were identified. Attention was also paid to the values or beliefs expressed and the learnings gained. The findings and learnings were shared and discussed in a dialogical exchange amongst the team via email to reach consensus.

FINDINGS

Initial reactions

The assumptions participants brought to the process varied depending on their roles. Annette, drawing on her extensive experience working across Indigenous curriculum design and development, wrote 'I acknowledge that most academics come to embedding Indigenous perspectives in curriculum with fear and apprehension'. Although Kath was 'excited by the challenge to work with the Faculty of Business on a complex course' she was influenced by past negative experience and 'worried that it might be difficult to get academics on board to engage with the process'. A further concern of Kath's was that the work wouldn't be prioritised e.g., 'they [discipline-based academics] often see this work as impinging on their research time, don't see it as counting toward promotion'. A concern brought by

Annette was that without ‘early contact’ and ‘strong faculty relationships’ the IGA content would be ‘othered’ (i.e., viewed as a standalone) rather than contextualised within the discipline. Kath similarly believed that ‘relationships, connections and ‘goodwill’ were important to achieve a positive outcome and was fearful that as a new employee at the University and a non-Indigenous person, with ‘no prior relationship with the team’ she would encounter resistance or not ‘be taken seriously’. Interestingly, Danielle, as an Indigenous academic came to the task ‘excited by the possibilities. ... This was an opportunity for us as Indigenous peoples to showcase and celebrate our ways of working, demonstrating our ways work for all peoples’.

For the discipline-based academics, the lack of a prior clear process brought frustration and confusion to the task. Chris noted that Faculty sentiment arising from previous attempts to integrate an IGA viewed the process as ‘moving one step forward and two steps back’ with stakeholders feeling ‘frustrated’ as ‘discussions halted, and the process stalled’. For Rosemary, although initially having her ‘interest piqued’, ‘being curious’ and volunteering to attend a workshop, her perception of the ‘onerous pre-reading’ and ‘ambitious agenda’ associated with earlier training dampened her enthusiasm and confidence e.g., ‘I felt very aware of my lack of Indigenous knowledge and cultural competence. I felt I had a long way to go before I could contribute meaningfully’. Annette was conscious that because actions implemented prior to her being appointed had ‘stalled due to lack of understanding, direction and resourcing’ this placed an ‘imperative’ on her to develop a framework and deliver a more streamlined process.

Negative sentiment coding was conducted in NVivo on all five reflections. Image 1 below provides a word cloud of the most frequent terms. The time involved was a strong factor for all participants. The language of compliance was also evident in reflections. For example, Rosemary talked about being ‘required’ to attend workshops and ‘responsibility’ falling on her shoulders as the coordinator of the management major. She felt that the ‘cognitive load’ of new initiatives being ‘constantly handed down’ was reflected in poor internal employee voice survey scores revealing higher job stress and feelings of lack of control amongst academic staff.

Actual experience

knowledges as well as ensuring their curriculum is strengths based and authentic.’ Kath’s worry about her non-Indigeneity was offset by the ‘reassuring oversight from the wider ITL Team which consists of both Indigenous academics with lived experience who are strong curriculum and discipline experts, and non-Indigenous academics with both discipline and curriculum expertise.’ Invaluable support from her Indigenous colleagues to ‘identify resources, re-frame approaches’ in this ‘Indigenous led space’ with everyone working ‘collaboratively to develop capabilities and confidence’ was ‘comforting’. Danielle also mentions ‘scaffolding and support’ of the team approach as being something she is able to utilise in her practice. Rosemary similarly describes the benefit of this supportive and collaborative approach in her reflection e.g.

From our first meeting we were quickly able to identify subject modules where Indigenous perspectives would naturally fit and indeed enhance the subject’s content. For example, in topics on wellbeing, workplace flourishing, and psychological and cultural safety. ... Kath was able to provide me with excellent references for the teaching content - something I would have really struggled with. I was excited by these as they offer so many great possibilities in the classroom.

Learnings from the process

Fook and Gardner (2007) discuss how participants often feel powerless within organisations. Senior executives make the decisions, and these are seen as being imposed on staff at lower levels who are required to implement them. In an increasingly complex organisational environment staff fear the consequences of the wrong decision. Rosemary describes in her reflection how, although initially keen, she came to view the IGA implementation ‘as yet another requirement handed down the food chain’ on top of a host of other requirements. The actual experience was one however where she was able to gain value for both herself and her students and where the ‘heavy lifting required for IGA compliance’ was undertaken collaboratively. Chris reflected on the importance of the work, citing ‘the great deal of goodwill by academics [in the disciplines] to working with and for Indigenous peoples to improve outcomes.’ He described how the process of ‘realistic milestones, ‘constructive feedback’, and ‘frequent touchpoints’ and ‘small steps’ helped to ‘fit with the workload of academics’ and

provided the ‘right balance of intervention and support’. The value for him was in ‘making a difference’ via Indigenous content and assessments that ‘provide a new lens through which [students] see important societal issues in economics that will ‘shape student thinking’ and result in more empathic and consultative approaches to policy decision making.

Whereas the discipline based academic staff had experienced the implementation process as quite lengthy, Kath had expected to be able to complete the work in a timelier manner: ‘I misunderstood the size of the task ahead. The need to work with eight course teams on eight different majors will require a significant investment of time’. She reflected on the importance of building relationships and connections to work effectively with discipline-based staff. Reflecting on the experience of working with Faculty of Business staff encouraged her to ‘ask for testimonials to emphasise to others that this work can be both positive and affirming’. She was able to identify simple ways to improve her practice e.g., ‘examples of IGA content in subjects or courses to illustrate practice to future teams’ also to ‘regularly reinforce and reassure teams regarding available support and resources’. Annette reflected on the importance of ‘robust relationships built on trust’ as well as a ‘clear processes’ and a ‘systematic approach which ‘resulted in the IGA being embedded in a meaningful discipline specific approach to enhance the student experience’.

CONCLUSION AND CONTRIBUTION

In their discussion on Indigenising curriculum, Gainsford and Evans (2017, p.61) argue that “implementing changes to the core business of universities (i.e., the undergraduate degree) requires many parties aligned under a clear direction and committed to achieving a cultural change agenda. As per any change initiative, success relies on supportive executive level leadership, adequate resourcing, training, and support. To ensure that this work is done sensitively and appropriately, it is important that this work is performed under the leadership of Indigenous educators. At UTS we are fortunate to have strong senior leadership for our IGA implementation. The university investment in a team of six academics, led by an Indigenous Associate Dean to embed this work, places the institution as a leader in the sector in relation to IGA implementation. We acknowledge that not all institutions have similar

priorities or resources available. Notwithstanding this investment, our critical reflections of the process of implementing IGA content into an undergraduate business has illustrated how Indigenous and non-Indigenous academics working collaboratively with a clear framework and process can achieve a positive outcome, overcome fear and hesitancy on behalf of non-Indigenous academics, and build their capacity and confidence to deliver this content. Our focus on building students' professional capabilities to work with and for Indigenous Australians rather than embedding Indigenous Knowledges has enhanced the confidence of non-Indigenous staff to teach this content. It also helps allay concerns about misuse or misappropriation of Indigenous Knowledges. The approach therefore provides a model that could be adopted by institutions on a smaller scale at the faculty or discipline level.

Lastly, in describing our model, we do not mean to discount or negate the need for more transformative approaches to engender genuine change nor the need for more consultative, shared, partnership-based approaches involving Indigenous communities (as advocated by Manton & Williams, 2021). We acknowledge that there are many approaches to embedding Indigenous content in curriculum to effect change such as 'on-Country' or place-based learning programs which have been found to result in profound shifts in understanding, behaviour, attitudes, and approaches (see for example Burgess et. al., 2022). While our process is only one attempt in the journey towards reconciliation in higher education, it does provide an example of how both Indigenous and non-Indigenous academics working together can achieve change. As Rosemary writes "the process has been based on relationship and resources [and this] lays a solid foundation for further work'.

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Stream 1: Indigenous networking: Enhancing social,
cultural and spiritual capital for sustainable futures

**Indigenous networking: Enhancing social, cultural, and spiritual capital for
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Stream 1: Indigenous networking: Enhancing social, cultural and spiritual capital for sustainable futures

Indigenous Networking: Enhancing social, cultural, and spiritual capital for sustainable futures.

ABSTRACT:

This paper reports on a study of Indigenous peoples and the networks they form. It briefly discusses Māori and Indigenous peoples and business, then draws from business network theory, and the 'capitals' literature, to argue that Indigenous networking contributes to enhanced capitals and more sustainable futures for Indigenous communities. The paper contributes to the small but growing field of Māori and Indigenous business literature, and an even smaller body of work focusing on the significance of spirituality to Māori and Indigenous business and communities. The methodology for the fieldwork is framed by Kaupapa Māori ontology, epistemology, methodology and methods.

Keywords: Networking, Indigenous, Social Capital, Cultural Capital Spiritual Capital

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OVERVIEW

Māori, the Indigenous people of Aotearoa New Zealand, and other Indigenous peoples around the world have suffered the most negative consequences of colonial oppression (Henry and Foley, 2018). Many are rebuilding and revitalizing their communities and cultures through economic development (Peredo & Anderson, 2006). However, they often continue to lag behind the dominant cultures in their homelands. In recent decades, a growing number of Māori and Indigenous scholars in the management academy have conducted research for, with and amongst their peoples, to explore strategies that contribute to better outcomes and more sustainable futures (Mika, 2017).

Although the entire Indigenous experience and history is beyond the scope of this paper, Cornell (2006) succinctly captures the history and origins of the Indigenous struggle for self-determination, focusing on Australia, New Zealand, Canada and the United States, which are home to a wide range of Indigenous peoples. He notes that, in these first-world, wealthy nations, the Indigenous peoples are amongst the poorest, despite living, in some cases for thousands of years, in prosperity and harmony with their environment. Cornell notes, “that the wealth of these countries has been built substantially on resources taken from these peoples, whose poverty—in the grand scheme of things—is a recent creation” (p1).

Prior to the devastating impacts of colonisation, the Māori economy thrived, trading both nationally and internationally (Frederick & Henry, 2004; Wilson, 2012). According to Petrie (2006) the rapid expansion of Māori commerce was not random or by chance, but rather a result of purposeful and deliberate strategies that were underpinned by customary practice (p40). Despite the damage of colonisation, Māori and other indigenous peoples have proven to be more resilient, and increasingly assertive in their aspirations for self-determination, and cultural revitalization. This paper echoes the work of other indigenous scholars that highlight the innate ability of Indigenous peoples to successfully bring both social and business spheres together (Foley & Frederick, 2008).

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This study focused on Māori and other Indigenous peoples' networks, as a potential vehicle for revitalization of culture, and economic and social wellbeing, thereby contributing to more sustainable futures. Moller, Kitson, & Downs (2009) contend that network theory is interested in all kinds of relationships between actors who are fundamentally linked through resource dependency. Hence, relationships are considered "vehicles to access, create, and control resources" (Moller *et al.*, 2009, p330). Latour (1996) asserts that every network has its own unique frame of reference including definitions and explanations of growth. Hammond & Glenn (2004) argue that Western network theorists can gain insight from traditional Eastern thought, and we suggest that may also be true of Indigenous knowledge and practice.

CURRENT UNDERSTANDING

Business Networks

Business networks are "complex, systemic webs of interdependent exchange relationships within which companies and individual managers need to operate" (Henneberg, Naudé, & Mouzas, 2010, p. 355). Business networking theory and consequent literature has highlighted the origins of networks, and their strengths and weaknesses. However, there has been little focus on Indigenous peoples and networking. One important contributor compared social networking amongst three Indigenous peoples, Māori, Native Hawaiians and Australian Aboriginals (Foley & Frederick, 2008). They found that Hawaiian and Māori entrepreneurs, and the communities in which they operated, displayed a strong foundation of social and cultural capital, which was less in evidence for Aboriginal entrepreneurs. Thus, the varying levels of social networking capability had differing impacts on the operation of their business functions. Thus, when networks were culturally accepted, a dynamic networking interaction would ensue, with strong economic motivators, and these were highly integrated between both social and business spheres (Foley & Frederick, 2008, p. 204). In order to understand the integration of both social and business spheres, this study explored the impact that 'capitals' may play in developing enterprise capability through

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indigenous networking. Although raising capital is recognised as a particular necessity and constraint for Indigenous enterprise (Furneaux & Brown, 2008), studies describe indigenous peoples as possessing a history of acquiring capital that is intangible, tangible, and can foster enterprise that balances profit-making and socially sustainability efforts (Foley & Frederick, 2008).

Capital

For Nafukho, Hairston & Brooks, “capital became multidimensional in the economic literature of the twenty-first century and has been extended to include such terms as ‘financial capital, organizational capital, intellectual capital, human capital, structural capital, relational capital, customer capital, social capital, innovation capital, and process capital’ (2004, p545). Though capital is most commonly understood as a measure of financial means (Kim, Aldrich, & Keister, 2006), others have extended the concept to the evaluation of natural capital in ecological terms (Costanza et al., 1997), social and cultural capital as means of facilitating social exchange, mobility and change through relational and cultural resources (Bourdieu, 1977), and human capital as representations of human potential, because of one’s physical, mental and emotional being (Becker, 1964; David & Lopez, 2001).

Social Capital

We draw on Fukuyama’s definition of social capital as “an instantiated norm that promotes cooperation between two or more individuals... [leading] to cooperation in groups and therefore related to traditional virtues like honesty, the keeping of commitments, reliable performance of duties, reciprocity, and the like” (Fukuyama, 2000, p3). Social capital has been linked to structural, relational and cognitive dimensions, which create value for organisations (Tsai & Ghoshal, 1998), and may benefit firms seeking finance (Uzzi, 1999). Social capital has also been referred to as, “the aggregate of the actual or potential resources which are linked to possession of a durable network... to membership in a group” (Waquant & Bourdieu 1992, p119). Recent studies have focused on the importance of social

Stream 1: Indigenous networking: Enhancing social, cultural and spiritual capital for sustainable futures capital and networking amongst Indigenous entrepreneurs (Foley, 2008; Foley & O'Connor, 2013).

Cultural Capital

According to Throsby (1999), economists distinguish between physical, human, and natural capital, but a fourth, cultural capital, “is defined as an asset embodying cultural value” (p3). This concept is based on the work of Bordieu’s analysis of class inequalities in educational attainment (Goldthorpe, 2007). In a similar vein, Abel (2007) explores the role and function of cultural resources in the unequal distribution of health, also drawing on Bourdieu. He suggests that class-related cultural resources interact with economic and social capital and concludes that cultural capital (or lack of) is a key element in the transformation of social inequality into health inequality. Further, Yosso (2005) conceptualizes community cultural wealth through a critical race theory lens (CRT), which she argues challenges traditional interpretations of cultural capital. In her study of, and with, communities of colour, she posits that CRT views these communities as places in which the array of cultural knowledge, skills, abilities and contacts possessed by socially marginalized groups often goes unrecognized and unacknowledged. In this literature, cultural capital is seen as an indicator of privilege, whereas for Māori and other Indigenous peoples, it is an affirmation of their identity (Bamblett, Myers & Rowse, 2019).

Spiritual Capital

Spiritual capital is a relatively recent entry in the business literature (Zohar & Marshall, 2004). It is seen by some as an extension to human capital, often referring to the strength of religious belief. For Berger and Hefner, “Spiritual capital might be thought of as a subspecies of social capital, referring to the power, influence, knowledge, and dispositions created by participation in a particular religious tradition” (2004, p3). They go on to suggest that any study of spiritual capital, in an organisational context, should include an examination of the organisation, its meanings, and impacts. Roosevelt Malloch (2010) notes that spiritual capital is an emerging concept, which he defines as “the fund of beliefs,

Stream 1: Indigenous networking: Enhancing social, cultural and spiritual capital for sustainable futures examples and commitments that are transmitted from generation to generation through a religious tradition, and which attach people to the transcendental source of human happiness” (p756).

Spiritual capital resonates for Māori, and no doubt other Indigenous peoples, for whom spiritual capital emanates from a relationship, not necessarily with the/a God, but with the strong spiritual realm that is intrinsic component of the culture, values and ethics of traditional Māori society (Henare, 2001). For Mika (2015) spiritual capital also enhances Māori aspirations for self-determination, human potentiality and freedom.

RESEARCH QUESTIONS

The research questions developed over two phases, the first of which focused on Māori business networks in Aotearoa New Zealand. However, the study evolved during a sabbatical in Canada, Australia and the United States, to include both business and other types of networks:

1. What is the role of Māori business networks in Māori self-determination and development?
2. What is the role of indigenous networks and networking for indigenous enterprise?

RESEARCH APPROACH

This research is underpinned by Kaupapa Māori, a term that Māori scholars have increasingly used to describe Māori-centric philosophy and world views (Pihamā, Cram, & Walker, 2002) and the consequent research ontology, epistemology, and methodology (Henry & Pene, 2001; Bishop, 2005) that have been evolving in recent decades. In terms of research, Kaupapa Māori Research can be seen as a set of cultural values, beliefs and social practices, predicated on the notion of, ‘for, with, and by Māori.’ The methodology and methods adopted for this study are a “reflection of the researcher’s values and beliefs about truth, reality and existence, and the consequent knowledge that can or should be gleaned”

Stream 1: Indigenous networking: Enhancing social, cultural and spiritual capital for sustainable futures (Henry & Foley, 2018, p213). Guided by Kaupapa Māori methodology, specific methods included:

In-depth interviews, which began with cultural protocols of greeting, acknowledgement of ancestors and country, provision of hospitality and catering, and gifts of cultural significance, as a symbol of reciprocity between researcher and participant. Participant observation, gleaned through active involvement in a range of Māori and Indigenous gatherings.

In all, 40 interviews were conducted in four countries over three years. Whilst the majority of participants were Māori or other Indigenous people, there were six no-Indigenous folk, who had worked alongside Indigenous organisations and communities for many years. As the interviews progressed, other types of networks, beyond the original business networks, were identified. The authors participated in, observed, and conducted interviews with representatives of the following:

- Three Māori business networks around Aotearoa New Zealand
- Three First Nation business networks based in Toronto and Ottawa
- One Aboriginal business network based in Melbourne
- ImagineNative, Indigenous film festival, Toronto;
- Pow Wow, New Credit in Six Nations, Ontario;
- The Native Aboriginal Indigenous Caucus, Academy of Management, Boston;
- Māori & Indigenous Performance Symposium, Cultural Conservancy, San Francisco;
- Te Ha, global Indigenous network of change-makers, San Francisco;
- Gender Diversity Indigeneity SIG, ANZAM, Cairns.

FINDINGS

Respondents overwhelmingly spoke of the ways that Māori and Indigenous networks and gatherings enhanced their cultural identity. The non-Indigenous participants spoke of how those networks and gatherings enabled their sense of inclusion in the culture, strengthening their relationships and commitments to those communities. The key

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element of these gatherings was building and reinforcing mutually beneficial relationships and connections, a hallmark of the relationality which often informs values and practice within Māori and Indigenous cultures (Wolfgramm & Henry, 2015)

Further, there was a strong sense of enhanced spirituality and spiritual connection, which for many was lacking in comparable, non-Indigenous gatherings in which, they participated. This was particularly true for those involved in both Māori/Indigenous and non-Indigenous business networks, groups within scholarly academies, film festivals and other performance-based gatherings.

The research highlighted the positive outcomes of Indigenous networks and networking, drawing on a systems theory model, where Inputs are the purposes behind the network or gathering, the Organisation is guided by these factors, and the Outputs result in enhanced capitals (Kast & Rosenzweig, 1972).

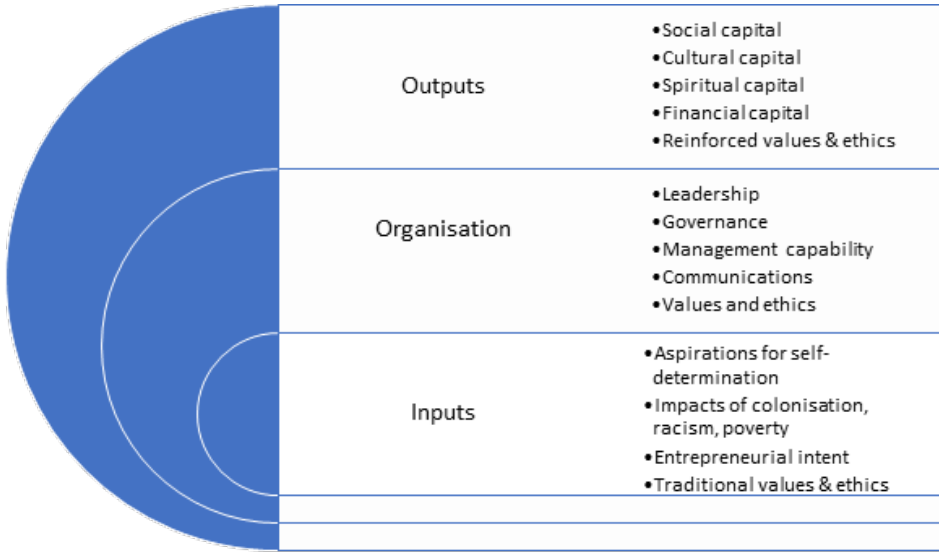


Table 1: An Indigenous Networking Systems Model

CONTRIBUTION & LIMITATIONS

This study contributes to the Māori Indigenous business literature, particularly in the field of business networking, underpinned as it is by the recognition that networks and other formal

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gatherings are sites where the formation of multiple capitals occurs. We argue, these capitals in turn contribute to enhanced wellbeing, therefore the networks make an important contribution to sustainable futures for Indigenous peoples.

This study is limited by the scope of organisations and participants, but further research in the field will overcome these limitations.

IMPLICATIONS

We believe this study will have positive implications for further development of Māori and Indigenous literature and enhance outcomes from their networks and gatherings.

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Wāhine Māori entrepreneurs: Cultural, social, and financial challenges when experiencing business growth

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Wāhine Māori entrepreneurs: The cultural, social, and financial challenges when experiencing business growth

ABSTRACT: *This paper examines the cultural, social, and financial challenges wāhine Māori entrepreneurs face when growing their businesses in Aotearoa New Zealand. Wāhine Māori entrepreneurs are women who identify as Māori entrepreneurs. Research on Indigenous and Māori entrepreneurship continues to grow, however, there is a noticeable gap in literature concerning wāhine Māori entrepreneurship. This paper covers this important research area and will contribute to literature pertaining to Indigenous female entrepreneurship and gendered views of culture and identity. A series of qualitative interviews with wāhine Māori entrepreneurs who have experienced or are undergoing growth in their businesses will be conducted. The initial rationale, concepts and approach will be shared, and interactive discussion and comment is invited.*

Keywords: Indigenous Entrepreneurship; Māori Enterprise; Wāhine Māori Entrepreneurship, Indigenous Female Entrepreneurship; Entrepreneurial Growth, Female Entrepreneurship.

Māori and Indigenous entrepreneurship

Entrepreneurship by Indigenous peoples is receiving increased research attention due to its unique cultural context and its distinctiveness from mainstream society (E. Henry et al., 2017; Klyver & Foley, 2012; Mika, Felzensztein, et al., 2022, p. 8). Indigenous entrepreneurship improvises enterprise as an important economic vehicle to uplift Indigenous communities while balancing economic demands with cultural values (Manganda et al., 2022) and the natural environment (Mika, Felzensztein, et al., 2022). A core consideration in Indigenous entrepreneurship is self-determination (Mika, Dell, et al., 2022; Roche et al., 2015; Wolfgramm et al., 2019), and encompasses aspects of Indigenous social, cultural, and economic development (Collins et al., 2020; Dana & Anderson, 2007; Jurado & Mika, 2022). Research has also highlighted the impact of colonisation (Dell et al., 2018; Henry et al., 2018; Mika, Dell, et al., 2022), the importance of cultural identity (Foley & Frederick, 2008; Ganesh et al., 2021; Henry et al., 2018; Houkamau et al., 2019), working for the collective (Peredo & Anderson, 2006), community connections, (Cahn, 2008; Ratten & Dana, 2017; Ring et al., 2010), a generational business outlook (Cahn, 2008; Ganesh et al., 2021), and networks in shaping the entrepreneurial activities of Indigenous peoples (Pio & Essers, 2014; Ring et al., 2010) including Māori entrepreneurs (Frederick & Henry, 2003).

Wāhine Māori entrepreneurship in context

Wāhine Māori entrepreneurship takes place within the context of Māori enterprise, but what is a Māori business has been a vexing question for some time (Young, 1992). Before July 2022, Stats NZ were using a definition of Māori business that they were aware was not completely in line with the nature and extent of such firms, but was operationally feasible for their purposes (Mika et al., 2016; Stats NZ, 2021). Academics and practitioners, consequently, created definitions that worked for them. One such definition was “a Māori business is one that is owned and run by and for Māori” (Jurado & Mika, 2022, p. 8). Stats NZ (2021) has since revised its definition of Māori business as “a business that is owned by a person or people who have Māori whakapapa [genealogy], and a representative of that business self-identifies that business as Māori” (p. 29). To understand the number of Māori-owned enterprises in Aotearoa New Zealand, Taturanga Umanga Māori (Statistics on Māori businesses) use Stats NZ data to analyse Māori authorities and Māori small, medium enterprises (SMEs) (Mika et al., 2023). There are limitations to this approach of measuring Māori business activity which includes limited analysis of Māori SMEs and sole traders, and restricted population coverage by region and iwi (Stats NZ, 2021). While Stats NZ’s new definition allows business owners and their representatives to self-identify as a Māori business, it is through the Māori business identifier of the New Zealand Business Number (NZBN) that makes self-identification possible (Mika et al., 2023).

Support for wāhine Māori entrepreneurship

Wāhine Māori entrepreneurship has been a focus for New Zealand since the mid-1980s, on the basis of the work of inspiring wāhine Māori in the community, government, and private enterprise following Hui Taumata in 1984 (Hill, 2009; Horsfield & Evans, 1988; Love, 1984; Simpson & Raumati, 1991). Dame Georgina Kirby was a pioneer for Māori women in business and the community (Mika, 2016). Her work was a catalyst to the growth of wāhine Māori entrepreneurship. As president of the Māori Women’s Welfare League, she was instrumental in forming the Māori Women’s Development Incorporated (MWDI) in 1987. Since its formation, this organisation has offered finance and mentoring services to wāhine Māori in business (C. Henry et al., 2017; MWDI, 2020; Rotorua Daily Post, 2021).

In addition to MWDI, several government and Māori initiatives have been established to support Māori enterprise (Amoamo et al., 2018; E. Henry et al., 2017). They include Federation of Māori Authorities (FOMA), Poutama Trust, Kōkiri, and regional Māori business networks such as Whāriki in Auckland, Te Awe in Wellington, and He Toronga Pakihi ki Taranaki (Ministry of Business, Innovation and Employment, 2023).

Wāhine Māori in the economy and enterprise

According to Nana et al. (2021), almost 40% of 23,000 Māori-owned businesses had wāhine Māori as owners, with 61% having at least one female owner (of any ethnicity), compared to 53% of non-Māori-owned businesses. While wāhine Māori business-owners are increasing, research on their experiences as entrepreneurs is limited (Simmons-Donaldson et al., 2018; Zapalska & Brozik, 2018). Simmons-Donaldson et al. (2018) found a report by Horsefield and Evans in 1998, which had a specific focus on wāhine Māori in the economy. The authors noted that it only provided a preliminary view of the economic position of Māori women, was written from a western perspective and its conception of economy. No further discussion was provided to give depth into the challenges faced by those researched for the report.

A report by policy makers from Ministry of Economic Development (2008) commented on wāhine Māori in the Māori economy, highlighting that women, and in particular wāhine Māori, face more barriers to entering business than men. Te Puni Kōkiri (2022) extend this point by stating that wāhine Māori also face greater challenges in becoming active shareholders. Researchers found that a genuine care for others, a well-being to wealth approach to business, as well as participating in voluntary and community work were evidence of a wāhine Māori entrepreneur approach to business (Simmons-Donaldson et al., 2018; Spiller et al., 2011; Te Puni Kōkiri, 2013). While wāhine Māori entrepreneurship has been a concern of policy makers, providers, and Māori for some time, limited research is available pertaining to the challenges these entrepreneurs face in growing their businesses.

Barriers to female entrepreneurship

Studies of Indigenous female entrepreneurship, however, have uncovered a complex interplay of cultural, social, and financial barriers (Padilla-Meléndez et al., 2022; Simmons-Donaldson et al., 2018; Zapalska & Brozik, 2018). This includes navigating the economics of generating income, running a business, and increasing employment against social and cultural aspirations of creating new family futures, learning from elders, and improving the health, education and housing of their families (Pearson & Daff, 2014). Other cultural challenges, from an Indigenous female perspective, include expectations assigned to traditional Indigenous values and running a business in a predominantly western-oriented economic system (Datta & Gailey, 2012; Eddleston & Powell, 2012; Padilla-Meléndez & Ciruela-Lorenzo, 2018; Sarri & Trihopoulou, 2005; Tapsell & Woods, 2010). These challenges can hinder the ongoing operations for the entrepreneur.

Several common social barriers have been identified in literature including:

- Gender bias (Hechavarria et al., 2019; Houkamau et al., 2019; Yacus et al., 2019)
- A ‘fear of failure’ by women (Noguera et al., 2013)
- The discourse of work-family life balance which emphasises the reproductive role of women rather than entrepreneurship (Dean et al., 2017; Eddleston & Powell, 2012; Gherardi, 2015)
- Limited access to networks (Brush et al., 2009; Ring et al., 2010)
- Limited access to mentors (Arenius & Minniti, 2005; Dean et al., 2017; Koellinger et al., 2007)
- Lack of female participation and representation in decision-making positions (Brush et al., 2009)
- The intersecting impact of being both Indigenous and female in a male-dominated entrepreneurial landscape (Dean et al., 2017; Galloway et al., 2015; Woitbooi & Ukpere, 2011).

On an individual level Padilla-Meléndez and Ciruela-Lorenzo (2018), along with other academics, note accelerators and barriers to business growth. This includes:

- Education (Ratten & Dana, 2017; Shinde, 2010)

- Family which includes dependency syndrome (Padilla-Meléndez & Ciruela-Lorenzo, 2018) as well family-ties and businesses (Ratten & Dana, 2017)
- An individual's own personality traits (Carter & Shaw, 2006; Dean et al., 2017).
- Financial issues are another factor and include accessing financial resources (Brush et al., 2009; Ratten & Dana, 2017; Yacus et al., 2019)
- Securing funding and investment (Brush et al., 2009; Dean et al., 2017; Greene et al., 2003; Yacus et al., 2019)
- Building financial sustainability for future business growth (Brush et al., 2009).

It has also been noted that generally female-owned businesses tend to be smaller, have fewer employees, less capital available, and lower revenues (Dean et al., 2017; Pearson & Daff, 2014; Sidi Ali, 2018). Yet, Brush et al. (2009, p. 8) noted that female entrepreneurs “are one of the fastest growing entrepreneurial populations in the world.”

Defining business success and growth

The non-Indigenous enterprise literature tends to associate business success and growth with a range of indicators including the number of employees, growth in sales, profitability, and market share (Carter & Shaw, 2006; Welter et al., 2016). Hechavarria et al. (2019) believe there is no one best benchmark of business success, and therefore, researchers suggest using a variety of measures. This includes understanding intrinsic motivations (satisfaction gained from doing business, desired work-life balance, making a positive impact in one's community), that come from the entrepreneur and extrinsic motivations arising from external factors (profit made from business, winning awards and accolades) (Mika, Dell, et al., 2022). This research will identify and analyse what business growth means to wāhine Māori entrepreneurs.

Proposed research

Considering the preceding context, this study will seek to answer the following questions: (1) what are the social, cultural, and financial challenges affecting wāhine Māori entrepreneurs when growing their

businesses in Aotearoa New Zealand and (2) how are wāhine Māori cultural and social values reflected in entrepreneurship in Aotearoa New Zealand? The research will involve a series of interviews with 8 - 10 wāhine Māori entrepreneurs, who reside in Aotearoa New Zealand, who have experienced or are currently undergoing growth in their business. Each entrepreneur will be interviewed once every six-months over an 18-month period to provide a picture of how their business is tracking, as well as the opportunities and challenges each entrepreneur has experienced over this time. A mentor for each entrepreneur will also be interviewed, to provide a different perspective of how each entrepreneur and their business has evolved over the research period. Information will also be gathered on each business and transcripts from the interviews will be analysed and presented as individual case studies. All interviewed wāhine Māori entrepreneurs live in Aotearoa New Zealand. Their businesses trade nationally and, in some cases, internationally, and cover a range of industries including food manufacturing, tourism, and online educational programmes through to sports apparel, accounting, and civil construction. Engaging entrepreneurs from a range of industries will provide different experiences and perspectives which will add richness to the research and subsequent findings.

Contribution and limitations

By reviewing the literature, understanding each business and conducting in-depth qualitative and inductive research (Mika, 2020), this study will expand on the limited understanding of wāhine Māori entrepreneurship by examining the cultural, social, and financial challenges they face when growing their enterprise. An in-depth analysis into these challenges will contribute to indigenous female entrepreneurship and gendered views of culture and identity.

In addition, this research will provide practical recommendations and solutions for central and local government policy makers, post-settlement government entities (PSGEs), business support organisations, and Māori business organisations involved in fostering Indigenous entrepreneurship (Henry et al., 2018). Having a greater understanding of the specific challenges faced by wāhine Māori entrepreneurs will provide opportunities for targeted initiatives and interventions to navigate these barriers.

Implications

This research will be significant for Māori and wāhine Māori entrepreneurship and business development. Firstly, it will provide policy makers with key insights to shape policies and business programs to support wāhine entrepreneurs through specific challenges, and to prepare and support them for future business growth. This could also involve targeted funding opportunities by improving access and reshaping, mentoring, networking opportunities and professional development programs offered by central government, agencies, and Māori business organisations. By understanding the specific cultural and social challenges wāhine Māori entrepreneurs experience, enterprise and investors can understand a new model of business success driven by indigenous values. This study will also provide an understanding of the experiences of wāhine Māori entrepreneurs and encourage more dedicated research in this area. It will also contribute to the overall global research of Indigenous entrepreneurship.

In conclusion, this research aims to provide a deep understanding of the cultural, social, and financial challenges wāhine Māori entrepreneurs face when growing their business. Interim findings will be presented at the Australia and New Zealand Academy of Management Conference in December 2023. By building upon existing Indigenous entrepreneurship knowledge, and creating new literature specific to wāhine Māori entrepreneurs, this study will inform future research, policy, investment, and support initiatives. Enhancing the economic prosperity for wāhine Māori entrepreneurs will add strength and cultural resilience to the overall entrepreneurial landscape of Aotearoa New Zealand.

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**Challenges of Being a Social Enterprise:
When Being a Business for Good Means Being a Good Business**

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Challenges of Being a Social Enterprise: When Being a Business for Good Means Being a Good Business

ABSTRACT: *Social enterprises rely on the goodwill of observers, but observers may not understand the dual goals (social and financial) that drive social enterprises. We interviewed Australian social enterprise founders to examine their real-world experiences. Informed by moral licensing theory, our findings demonstrate that a history of good deeds may be a burden for social enterprises rather than a benefit. Specifically, social enterprises' good deeds may raise observer expectations to unrealistic levels that are impossible to meet. We identified several distinct challenges that arise from observers' expectations alongside alternative strategies that founders use to manage those challenges. Our findings contribute to the moral licensing literature by demonstrating that observers may conflate organisations and founders, making both vulnerable to backlash.*

Keywords: Social Enterprises, Startups, Moral Licensing, Interviews, Observer Expectations.

Social enterprises are committed to making the world a better place. Social enterprises operate with a defined social goal, they gain significant income from trade, and they invest effort and resources into their social mission to fulfil meaningful purposes (Social Traders, 2021). Some social enterprises support the community or the environment; others provide job and training opportunities for vulnerable groups. More than 12,000 social enterprises operate in Australia, contributing \$21.3 billion to the Australian economy and employing over 206,000 people (Gales & Khalil, 2022). Social enterprises deliver valuable benefits to society while following their social mission, but are social enterprises' emphasis on good deeds putting themselves (and their founders) at risk?

Social Enterprises: Businesses for Good

Social enterprises usually start small, driven by the passions of a few individuals. In some ways, social enterprises resemble startups operating as profit-earning business ventures. They are innovative organisations (D. G. Cockayne, 2019) that promise new ways of working (Marwick, 2013) and attract employees who are passionate about their work (D. Cockayne, 2016). In other ways, social enterprises are like charities, working for a social cause and making a public commitment to a social issue (Young, 2001).

However, social enterprises are distinguished by their dual goals. Social enterprises follow a unique business model of being motivated by both their commercial activities *and* their social mission (Dees, 1998). These 'commercial ventures that address social missions' (Young, 2001, p. 140) must generate income to remain viable. In the Australian context, there is no legal definition of social enterprise, so they can take on a range of organisational and legal structures (Social Traders, 2021). A social enterprise can operate as a for-

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profit business (generating income through commercial means) or a not-for-profit business (income is channelled towards the social good) (Young, 2001). This range of structures can create confusion in the market. Observers may not recognise that social enterprises are businesses with financial goals. Academic research and practice highlight the social-commercial tension unique to social enterprises (Smith & Lewis, 2011).

The Burden of Good Deeds

Usually, a history of good deeds is viewed as a valuable asset for individuals and organisations; a history of good deeds operates as a buffer when mistakes are made. The moral licensing literature suggests that an individual actor's history of good deeds can give the individual more freedom to act badly on occasion (Effron & Monin, 2010). Recent research has suggested that a parallel process applies to organisations so that observers are willing to forgive organisational transgressions when the organisation has a history of good behaviour (Camps & More, 2023; Gamez-Djokic, Kouchaki, & Waytz, 2022; Kliamenakis, Grohmann, & Bodur, 2023; Ryoo, 2022). Startups are particularly likely to be given the benefit of the doubt when they stumble. Observers are prone to forgive these social media 'darlings' (Geller, 2019), even when startups engage in morally questionable behaviour (Gamez-Djokic et al., 2022).

However, unlike other organisations, social enterprises 'live in a glass house'. Social enterprises' missions are highly visible, and many social enterprises actively highlight their history of good deeds in order to attract customers and investors. For example, the Australian social enterprise Who Gives A Crap promotes its toilet paper as ethically produced and publicly raises funds for sanitation projects in developing countries ('Who Gives A Crap', 2020). Thankyou prominently features its advertising slogan 'Good for you. Good for humanity.' on its social media accounts and website; its mission is to 'help create a world where not one person lives in extreme poverty' ('Thankyou Co', 2023). This self-promotion of organisational good deeds can raise observers' expectations to unrealistic levels, and social enterprises may be harshly criticised if they do not perform as observers expect (Young, 2001). For social enterprises, even minor transgressions may generate outrage.

As a result, the good work performed by social enterprises may put them – and their founders – at risk of backlash. But we know little about observers' expectations of social enterprises and even less about how

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those expectations impact social enterprises. In this research, we investigate the pressures social enterprise founders experience from observers' expectations – especially during the early startup stage. We interviewed 41 social enterprise founders from all across Australia to understand how social enterprises manage these high expectations and the risks of being a 'good business'.

METHODS

This research is designed to develop a deeper understanding of social enterprise founders' experience with pressures arising from observer expectations. In particular, we wanted to identify the strategies social enterprises use to manage unmet expectations and avert backlash. We adopted a qualitative methodology due to the lack of a substantial body of evidence on this topic in social enterprise research (Eisenhardt & Graebner, 2007). Qualitative methodologies enable comprehensive examination, offering insights and enabling nuanced interpretations (Carson, Gilmore, Perry, & Gronhaug, 2001; Creswell & Creswell, 2013).

Sample

We collected data from 41 social enterprise founders, identified through social media platforms (Twitter, Facebook, LinkedIn) and online publications (newspapers, magazines, and newsletters). We contacted our first founders through social enterprise industry networks and recruited additional founders using snowball sampling (Browne, 2005). Most social enterprises that participated in the research project (78%) were founded in the last ten years and primarily focused on supporting and connecting communities (43%) or making the environment more sustainable (20%). Other social enterprises offered employment and job training for vulnerable groups (15%), addressed gender equality issues (10%), or strove to improve people's health (8%). These enterprises were spread throughout Australia, with the greatest concentration in Victoria (33%) and South Australia (38%). Most enterprises in our sample described themselves as not-for-profit businesses contributing to the social good (55%), but 35% operated as for-profit businesses. Of the social enterprise founders who participated, 60% identified as female, 38% as male, and 3% as non-binary/third gender. 30% of the represented founders were 50+ years old, and only 5% were between 18 and 25 years old. Most participants (83%) were born in Australia, and 88% identified as Australian (excluding Indigenous Australian).

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Data Collection and Analysis

The interview protocol focused on the social enterprise's mission and its history of good deeds (e.g., 'Tell me about an achievement of your organisation that you are proud of. How does that achievement align with/display your social mission?'). Additionally, the interviewees were asked about the challenges they faced staying aligned with their social mission (e.g., 'Has your organisation ever had trouble sticking with its social mission?'); and observer reactions to misalignment (e.g., 'Was your organisation ever criticised for not living up to its social mission? What were the stakeholders' reactions?'). Semi-structured interviews provided flexibility to explore individuals' stories and narratives (Wengraf, 2001) while encouraging rich responses (Miles & Huberman, 1994). After the interview, the founder completed a brief demographic survey about their age, education, and cultural background, along with descriptive information about the social enterprise. The first author acted as the interviewer. The interviews were conducted face-to-face or via Zoom and lasted around 1 hour. The interviews were digitally recorded and professionally transcribed.

The first author coded the data using qualitative content analysis (Miles & Huberman, 1994). This data analysis allows the researcher to identify and interpret significant patterns or themes. According to Joffe and Yardly (2004, p. 57), a theme is defined as a 'particular pattern of interest found within the data.' In coding, we followed a two-step process. In the first step, we identified social enterprise challenges. *A posteriori* (inductive) coding was employed, allowing the patterns of experience across social enterprise founders to be extracted directly from the data instead of relying on an *a priori* coding template based on pre-existing theory. This process of identifying patterns and organising the qualitative data included open coding, creating categories and abstraction (Braun & Clarke, 2006; Elo & Kyngäs, 2008; Hsieh & Shannon, 2005). After this open coding, in the second step, we compared the identified challenges to one another and interpreted the lists of categories that we could group under three higher-order headings (Burnard, 1996; McCain, 1988). The same two-step procedure was adapted to identify and interpret the strategies social enterprise founders were using to act on the challenges. Thus, we identified and interpreted themes associated with observer expectations of social enterprises and social enterprises' efforts to manage those expectations. We used NVivo as a qualitative data management tool to record and compare the codes (Maher, Hadfield, Hutchings, & de Eyto, 2018).

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RESULTS

Social enterprise founders in our study described challenges arising from observers' expectations. These challenges took three distinct forms: (1) financial-social tensions, (2) unrealistic expectations of social enterprises, and (3) unrealistic expectations of founders. Further, we learned that founders used a range of strategies to manage these challenges.

Challenging Observer Expectations

Financial-Social Tensions. Social enterprises in Australia operate across a broad spectrum of business models, but no matter what business model they adopted, founders struggled to develop a clear identity that encompassed both their financial goals and their social mission. Some founders were initially unaware of the term 'social enterprise', and others were unclear of its meaning.

When I started, I didn't even know social enterprises existed...I just wanted to run a business that donated 50% of the profit...I was never quite comfortable calling myself a business...and certainly wasn't comfortable calling myself a charity. But I didn't know what I was. And [social enterprise organisation] informed me that I was a social enterprise. (Male founder, benefiting charities)

We're structured as a profitable business but driven at its core...[by a] positive purpose... I struggle with the labels sometimes. Other people have decided that we're a social enterprise. We never went out and decided that's what we are. (Male founder, supporting communities)

Founders described the tensions they experienced between their financial goals and their social mission. Observers had high expectations of organisations that operated as 'social enterprises' and were critical of businesses that appeared to put profit ahead of the mission.

Imagine a person who's running up a big mountain...they have to put on a really heavy backpack, which is all of the expectations and all critiques that are put on charity...Then they have to put a massive front-pack on [with] all of the critiques of business...[then] they get to race...against people that only have one of those backpacks. (Male founder, supporting vulnerable people and a sustainable environment)

We made it [social enterprise] a sole trader business just because that was the easiest way to make it operate.... that step was perceived by the community as 'just to make money' because that's what a

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lot of sole traders' mission is...It [backlash] put a stall on progressing [the business] in public spaces for a while. (Female founder, supporting communities)

Observers sometimes pressured social enterprises to lower prices – putting the enterprise's financial goals and long-run viability at risk.

[Co-Founder] and I had many discussions about, should we make it [this or that price]...we want people who don't have much money to be able to get them...[but] these are the most well-made andthe most sustainable products in their category, so that's [price] not negotiable. (Male founder, supporting vulnerable people)

I have to make those profits to be able to have the money to give away...it's [prices] for the benefit of trying to make enough so you can help [others]...I'd just have to stick my ground...I know the quality of this is a lot better than other products; that's why it's at this price, and I'm not going to budge. (Female founder, supporting vulnerable people)

Further, social enterprises' mission of doing good led some observers to expect that the social enterprises would offer their services and products for free. Female-founded social enterprises were particularly vulnerable; observers expected female-founded enterprisers to donate their time without adequate compensation.

[Women] often give things away for free, and we don't value our time, and I'm trying to shift the paradigm...[asking customers] 'What kind of honorarium are you providing?' 'Well, we could probably give you tea and coffee'...I'm not in a position to work for free, and I don't think you should be asking women to work for free...[they] need an adequate income to thrive for their families. (Female founder, advocating for gender equality)

The journey has been very hard for me because I was just completely pro bono. I just banged on doors, and I said, let me in, let me do this...They said, 'Sure, you can do it, but we don't have any funding'. (Female founder, supporting communities)

Observer expectations constrained social enterprises' options when it came to choosing funding agencies or business partners. Observers anticipated that a 'good business' would only partner with other 'good businesses.' Again, these tensions put the social enterprise's future at risk. Founders managed these

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tensions in different ways – sometimes drawing a hard line, sometimes reluctantly taking on less desirable partners to further their enterprise’s social mission.

Every business needs revenue, and sometimes revenue is very low...so it can be tempting to take on [a partner]...I’ve put the barriers up so I don’t have to give them [partner] a hard no... You start putting the price up, or you start making it hard [to partner]. (Male founder, supporting communities and a sustainable environment)

Whether [the money] comes from a politician [or] a drug dealer, that money is actually helping someone’s else hunger. One less person is eating food from a trash bin - one more of the children is getting a proper meal. (Male founder, supporting vulnerable people)

We had to make the decision that [partnership] wasn’t the right [decision] – which was hard – especially when you’re pretty strapped for cash – but that’s that mission drift. [Not partnering] had to be done so delicately, that could not be done, ‘We are not going to work with you, you dirty mining company’. (Female founder, supporting communities)

Unrealistic Expectations of Social Enterprises: Social enterprises rely on the goodwill of observers, but observers often had unrealistic expectations of social enterprises. Based on the social mission, observers expected social enterprises to be 100% ‘perfect and pure’ in fulfilling their social goals. These unrealistic expectations put pressure on social enterprises; they are held to higher standards than more traditional companies.

If you’re not doing everything absolutely perfectly...there is this expectation...then you shouldn’t do it at all. And you’ll cop all sorts of criticism that won’t be directed at a mining company. If a little social enterprise says, ‘I’m going to recycle my coffee grounds’, questions like: ‘Where are you going to put it? Who’s going to use it? How much does that save?’ are raised. It’s just this whole other level of scrutiny which doesn’t make sense. (Male founder, supporting communities and a sustainable environment)

In terms of expectations from customers, one thing I did notice was...I think when you’re a social enterprise...for some reason, [they] expect you to be perfect. (Female founder, supporting a sustainable environment)

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Observers expect social enterprises to stick to their social mission at all times. However, even with good intentions, social enterprises may sometimes be unable to fully deliver on their social mission, especially during crises:

COVID is a really good example...we are so passionate about employing [vulnerable people] but...it ended up being our management team [working] for the entire pandemic time ...[because] the [vulnerable staff] need to isolate. (Female founder, providing work for vulnerable people)

Unrealistic Expectations of Founders: Observers' high expectations are not limited to social enterprises; founders or even employees can also face these expectations. When founders are devoted to their enterprise's social mission, observers fail to distinguish between the enterprise and the person. But these observer expectations are impossible to meet and exert pressure on founders.

When I bought my Tesla, there were a few people on social media, and Tesla seems to attract a certain level of hate...it's like, 'What about this and what about this aspect?' So you can get stuck in these little 'gotchas' - Are you doing a hundred per cent?...I can't do it perfectly. (Male founder, supporting communities and a sustainable environment)

People...expect you to be perfect...we follow [a sustainable environment mission], and then people might expect then that everyone that works for your organisation should be vegan. (Female founder, supporting a sustainable environment)

I don't think [observers] would forgive me if I were driving around in a Ferrari. [Social enterprise founders] wouldn't start on this journey if they were that type of person. (Male founder, benefiting charities)

Managing Observer Expectations

When observers' high expectations are unmet, they become vocal on social media platforms (e.g. Instagram, Facebook, Twitter, or Google reviews). Observer criticism had harmful consequences for social enterprises, their employees and their founders. Founders had different strategies for responding to observer criticism.

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Some founders acted on the backlash and changed their products and supply partners in response to observers' criticism.

We didn't really focus on gender-inclusive language...I'm glad that we had that criticism...because we've been able to do some more research and really understand how important it is to have inclusive language in our marketing and in our communication. (Female founder, advocating for gender equality)

There was a [social media] post a couple of years ago when we used to package our [products] in plastic bags...Someone...was like, 'Oh, how are you using plastic bags?' And after that, we changed to compostable bags, which was a great choice, but it's just – we are struggling to even make that bag of [plant-based material]...we're a small business. (Male founder, advocating for environmental sustainability)

But founders did not universally embrace observers' criticisms. Some founders chose to withdraw from the backlash, going on hiatus from social media.

We got accused of racism on all the social media pages. And then a couple of [customer] friends got on the same bandwagon...we responded by the textbook, we're doing everything nice to this guy.

We gave [customer] a free [product] and a written apology. And he didn't take his post down...next week's fundraising was...down...it cost us quite a bit of money...I've closed down the social media site for months because of a few bad reports...can do you more damage than any good ones. (Male founder, supporting vulnerable people)

DISCUSSION

Research on moral licensing theory (Effron & Monin, 2010) suggests that startups who exhibit a history of good deeds will be forgiven for bad behaviour (Gamez-Djokic et al., 2022; Kliamenakis et al., 2023; Ryoo, 2022). However, social enterprises may not enjoy the same benefit of the doubt. Social enterprises operate unique business ventures and publicly promote their good deeds. Therefore, social enterprises (and their founders) live in glass houses; they risk backlash when they fail to live up to observers' expectations.

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In our research, founders struggled to forge an identity that integrated their social and financial objectives (Smith & Lewis, 2011). But the integration was even more difficult for observers. Observers criticised social enterprises if they appeared to prioritise profit over their mission, pressuring founders to lower prices or offer free services. Aligning with gender stereotypes, female-founded social enterprises experienced the most pressure to be ‘social’ (Eagly & Karau, 2002; Heilman, 2001) and ‘warm’ (Fiske, Cuddy, & Glick, 2007; Guillén, Mayo, & Karelaia, 2018).

Observers have unrealistic expectations of social enterprises (Foster & Bradach, 2005). Our research demonstrates that these unrealistic expectations apply to founders as well. Passionate leaders motivate observers to trust an enterprise’s social mission (Thorgren & Omoredé, 2018). However, in the observers’ eyes, our founders’ passion made them indistinguishable from the social enterprises they operated. Neither the founders nor their social enterprises could live up to observers’ expectations, especially during crises like the COVID-19 pandemic. Unmet expectations can lead observers to punish organisations (Whitson, Wang, See, Baker, & Murnighan, 2015) or criticize them on social media (Gunaratne, Rui, & Seidmann, 2017; Wang, Reger, & Pfarrer, 2021). Founders described a range of strategies for avoiding missteps (e.g., establishing clear and uncrossable boundaries vs collaborating with the occasional unsavoury partner to advance the social mission) and responding to backlash (e.g., making course corrections in response to public criticism or ‘going dark’ on social media until criticism subsided).

Theoretical Implications

Our findings showcase the struggles experienced by social enterprise founders. They contribute to the moral licensing literature (Blanken, van de Ven, & Zeelenberg, 2015; Effron & Monin, 2010; Lasarov & Hoffmann, 2020) in three distinct ways. First, we expand the field’s understanding of who might experience (or be denied) moral licensing. Moral licensing theory initially focused on the value of good deeds for individuals who transgress (Merritt, Effron, & Monin, 2010; Monin & Miller, 2001); research later demonstrated a parallel effect for organisations who transgress (Gamez-Djokic et al., 2022; Kliamenakis et al., 2023; Ryoo, 2022). Our findings indicate that observers might conflate individuals and organisations into a single entity – observers held founders and their social enterprises to the same unrealistically high standards. Second, we demonstrate an exception to the general rule that a history of good deeds will lead to

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forgiveness (Effron & Monin, 2010). Startups may be forgiven for their transgressions (Gamez-Djokic et al., 2022) but social enterprises are held to higher standards than other businesses. Our findings suggest that good deeds do not always buffer organisations from criticism. For social enterprises, their good deeds may be a burden – raising observer expectations to unrealistic levels that make their business ventures less viable. Third, we have taken the first tentative steps toward developing a typology of the transgressions most relevant to social enterprises. There is little information in the literature about what constitutes an organizational transgression in the eye of the observer (Effron & Monin, 2010; Ryoo, 2022). Our findings suggest that social enterprises who place an emphasis (even a very mild emphasis) on profit will be perceived by observers as transgressing. Further, our findings suggest that observers take a very broad view of transgressions. Observers expect social enterprises (and their founders) to ‘be good’ across many dimensions, even dimensions that are not directly embedded in the enterprise’s social mission.

Practical Implications

Even with good intentions, social enterprises are likely to fall short of observers’ high expectations. Our research findings suggest that social enterprise founders can use two strategies to protect themselves – and their organisations – from backlash. First, founders can proactively educate observers (customers, partners, and other stakeholders) about their underlying business model. Most observers are not sufficiently informed about difference between social enterprises and other types of organisations (e.g., charities). Full transparency (e.g., on the social enterprise’s website) about the business’s financial objectives might mitigate observers’ negative reactions to the social enterprise’s pricing. (Bhaduri & Ha-Brookshire, 2011; Merlo, Eisingerich, Auh, & Levstek, 2018; Stevens, Spaid, Breazeale, & Esmark Jones, 2018). Second, founders can participate in business networks (e.g., social enterprise councils, Social Traders, Social Enterprises Australia) and mentoring programs. Business networks motivate managers to reflect on their own business decisions and learn best practices from other people’s experiences (Huang, Lai, & Lo, 2012). For example, business networks might help social enterprise founders to craft internal policies that create guardrails aligned with their social mission. Further, business networks can be a source of emotional support. Like many small business owners (Sardeshmukh, Goldsby, & Smith, 2021), social enterprise founders are at risk for exhaustion and burnout.

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Limitations and Opportunities for Future Research

Social enterprises are a fast-growing group in Australia (Gales & Khalil, 2022) and we were able to interview a large group of founders about their experiences. Our findings suggest that female founders experience unique challenges, and we encourage future research to continue applying a gender lens to social enterprises. However, we had limited access to Indigenous Australian founders. Indigenous Australians have engaged in entrepreneurial activity for thousands of years (Australian National University (ANU), 2020; Foley, 2020) but many Indigenous businesses do not explicitly identify themselves as social enterprises (Gales & Khalil, 2022). We encourage future research to focus on diverse samples that are representative of the Australian population. Further, our sample deliberately over-represented social enterprises in early business stages, because the literature suggests that observers are usually forgiving of startups (Gamez-Djokic et al., 2022). Longer histories of good deeds might provide social enterprises greater protection if they fail to meet observer expectations. We encourage researchers to examine the experiences of social enterprises across the entire age continuum.

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Do Political Skills Matter for Creativity Recognition? Exploring the Mediating and Moderating Mechanisms

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**DOES POLITICAL SKILLS MATTER FOR CREATIVITY RECOGNITION?
EXPLORING THE MEDIATING AND MODERATING MECHANISMS****ABSTRACT**

Creativity recognition is significant in modern-day organizations. Although creativity recognition is conceptualized as dynamic in property, it has largely been treated as a unilateral rather than an interactive phenomenon in research. In this study, we draw upon the sensemaking theory and social-political perspective to formulate a dynamic, interactional model that comprises political skills, novelty elaboration, usefulness championing, and creativity recognition. We collected multi-source field data to validate the newly created measures and test proposed hypotheses. Results show that employees who made sense of the organizational environment from a political perspective can capitalize on their political skills to elaborate on idea novelty and champion idea usefulness, therefore, facilitating evaluators' recognition of novelty and usefulness. Results revealed that evaluators who had paradoxical frames were less likely to be influenced by employees' usefulness in championing and acknowledging the usefulness of their ideas; however, they were more likely to integrate endorsed usefulness as creativity. We intend to contribute to the creativity recognition literature by examining the dynamic sensemaking process between employees and evaluators and uncovering the mechanism between employees' political skills and evaluators' creativity recognition.

Keywords: Political skill; novelty elaboration; usefulness championing; paradoxical frame; individual creativity

**DO POLITICAL SKILLS MATTER FOR CREATIVITY RECOGNITION?
EXPLORING THE MEDIATING AND MODERATING MECHANISMS**

To meet the fast-changing customer requirements and draw market spotlight, organizations face intense pressures to creativity today (Miron-Speckto, Erez, & Naveh, 2011). Creativity refers to the mental or social process (Perry-Smith & Mannucci, 2017) to generate idea, insights, or problem solution of both novelty and potentially usefulness is conceived as the first stage of innovation (Baer, 2012). Theoretically, novelty is perceived as the primary factor while usefulness as the secondary one (Perry-Smith, 2014), nonetheless, usefulness is emphasized at the expense of novelty empirically (Zhou, Wang, Bavato, & Wu, 2019) as novelty implies a departure from routine performance or expected behavioral norms with uncertain meaning or utility (Janssen, Van De Vliert, & West, 2004). Creativity ranges from breakthrough discovery to incremental improvement with the aim to solve problem or make work more standardized, cost effective, and efficient. As creativity offers new solution, produces unexpected value, harnesses intellectual and social capital, it is perceived as essential for organizational performance, survival, and prosperity (Shalley, Zhou, & Oldham, 2004).

Regarding the extent to which supervisors (or evaluators) perceive a target as creative, creativity recognition has a subjective component that beyond objective or normative standards (Zhou & Woodman, 2003), which make it susceptible to influences at individual or contextual levels. Past research suggests that evaluators' education, functional background, age, tenure (Hulsheger, Anderson, & Salgado, 2009), prior knowledge, experience, and workload (Zhou et al. 2019) may affect creativity recognition. Despite that, evaluators' dispositional traits (i.e., Madjar, Greenberg, & Chen, 2011) relate to the appreciation or downplay of creativity (Zhou, Wang, Song, & Wu, 2016). Contextual characteristics such as hierarchy (Keum & See, 2017), culture norm (i.e.,

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fearing risks or chasing perfection) and group dynamics (i.e., leadership; Michaelis, Stegmaier, & Sonntag, 2010) may also affect evaluators' appreciation of creativity.

Although prior research explicates the elements that may affect creativity recognition, there still some ambiguities remain. Firstly, prior literature is largely evaluator-centered and underestimate the proactive role that employee may play. In fact, employees who understand evaluators' performance expectations and instrumental concerns can be more persuasive in communication and demonstrating performance, therefore, the proactive roles that employees play in creativity recognition should be illuminated. Secondly, the intermediate dynamics through which employee's interpretation of organizational environment may affect the recognition result is unknown yet. Employees' proactive endeavors may serve as the mediating mechanism that affect evaluator's perception and attitude, in turn, influence the recognition result. Thirdly, in line with the proposition that novelty and usefulness are orthogonal sub-dimensions of creativity (Zhou et al. 2016), novelty recognition and usefulness recognition should be different components of creativity recognition and have different antecedents rather than a uniform one (Montag, Meertz, & Baer, 2012), in other words, factors influencing the perception of novelty may not influence that of usefulness (Kaufman, Baer, Cropley, Reiter-Palmon, & Sinnott, 2013). Therefore, the relationships among novelty recognition, usefulness recognition, and creativity recognition should be distinguished. Fourthly, given that novelty recognition is theoretically emphasized but usefulness is empirically emphasized, balanced research should attach equivalent importance to both novelty recognition and usefulness recognition. Fifth, the specific cognitive frame that evaluators employ to endorse creativity and integrate novelty and usefulness into creativity leaves unknown yet. Past research identifies the importance of mindset in decision-making process and suggests the role of cognitive factors (i.e., schema incongruity, conformity to rule, or attention to

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details; Miron-Spektor, Gino, & Argote, 2011) in retaining feature, making prediction, and expressing preferences (Zhou et al. 2019), the cognitive mindset that evaluators adopt in addressing novelty and usefulness recognition remains unknown.

To fill in these research voids, we identify the subjective nature of creativity recognition and emphasize the proactive roles that employee plays in creativity recognition process. We introduce the Sense-making theory (Ford, 1996) to explain how employees and their supervisors make sense of organizational environment and shed light on the dynamics that lead to creativity recognition. We adopt the social political approach and suggest that employees who understand organizational environment may resort to proactive endeavors (i.e., elaboration and championing), in turn to positively win evaluators' recognition of their generated ideas. On the other hand, evaluator's cognitive frame may can develop comprehensive understandings about the value of generated ideas, and more probably to recognize novelty and usefulness in a holistic way, therefore, determine the extent to which novelty and usefulness will be acknowledge as creativity. Our research represents a more comprehensive effort to understand the antecedents of creativity recognition and intermediate dynamics.

Likewise, our research entails several contributions. Firstly, we shift the focus of creativity recognition from evaluator-centered perspective to the interactions to the sensemaking interactions between focal parties (i.e., employees and supervisors). As creativity recognition is partially subjective in nature and open to the sociopolitical influences, we articulate that employees' sensemaking of environments may advocate their initiative efforts, such that they may utilize political skills to proactively elaborate and champion generated ideas, in turn to increase the odds that their ideas be recognized by evaluators. Furthermore, our research represents the attempt for the first time to accounts for the relationships among novelty recognition, usefulness recognition,

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and creativity recognition and untangle the cognitive contingency through which novelty and usefulness recognition can be transformed into creativity recognition.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

The Integration of Sensemaking Theory and Social Political Perspective on Creativity

Recognition

Creativity recognition refer to the extent to which individuals or groups perceive whether a target is worth pursuing with respect to novelty and usefulness in relation to identified problems by referring to internalized criteria of the domain (Csikszentmihalyi, 1996: 80). Creativity recognition highlights that a target inherently possesses a normative level of creativity while evaluators may not discern (Zhou et al., 2017).

Creativity recognition is embedded in individual's sensemaking process. In organizations, individuals rely on their perception instead of accurate information to make sense of circumstance and act accordingly for change or learning (Weick, 1995: 55). A sensemaking perspective on creativity (Drazin, Glynn, & Kazanjian, 1999; Ford, 1996) suggests that when individuals are confronted with an unknown situation, they try to make sense of it by creating their own interpretation and meaning, the latter of which provide goals and motivation for subsequent action. Dedicates to understand issue or event that bear characteristics of novelty, ambiguity, uncertainty, or discrepancy (Maitlis & Christianson, 2014), the sensemaking process of creativity recognition involves the key elements of perceiving cues, creating interpretations, and taking action.

Organizations are inherently political (Mintzberg, 1985) and creativity recognition can be open to social-political maneuvers due to the subjective propensity. Employees may exert their influences on creativity recognition results by leveraging their social intelligence to mobilize supports, produce shared understandings, and promote creativity recognition. Since creativity is

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change-oriented and disruptive in nature of creativity, it points to breaking or upsetting established structure, systems, routines (Ford, 1996), or behavioral patterns. Creativity may encounter resistance not because of technical deficiency, but because of constructed threat to vested interests (Janssen et al. 2004). In the meaning while, evaluator's dispositional and cognitive characteristics (i.e., implicit theory of creativity; Zhou et al., 2016) may affect creativity recognition, such that evaluators who conceive creativity as threatening would engage in self-interested behavior to impede it from being realized (Frost & Egri, 1991).

To shed light on the bilateral sensemaking processes and integrate the social political perspective into creativity recognition literature, focal study introduces the viewpoint that political framing of problems can enhance idea elaboration, assessment and implementation (Perry-Smith & Mannucci, 2017) and posit that political skills, the capabilities of employing influence tactics to build beneficial interactive relationships (Grosser, Obstfeld, Choi, Woehler, Lopez-Kidwell, Labianca, & Borgatti, 2018), can drive creativity recognition. As political-skilled employees who can develop outward-focus to navigate work environment, interpret environmental cues (Ferris et al. 2007), they know the big picture at macro level and the incentives or instrumentality concerns of their supervisors at micro level, and have the interpersonal savvy and social astuteness to acquire resources from social networks to effectively influence their targets and achieve goals successfully. Also, they can inform effectively (i.e., packaging and presentation of past performance; Treadway, Breland, Williams, Cho, Yang, & Ferris, 2013) to facilitate evaluator's acknowledgement.

Indirect Effect of Political Skills on Novelty Cognition through Novelty Elaboration

Political skills are identified as either personal attributes or abilities that lubricate agentic behavior effectively for personal and/or organizational objectives (Ahearn, Ferris, Hochwarter, Douglas, & Ammeter, 2004: 311). Conceptually, political skills represent a comprehensive pattern

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of social competencies functions in intrapsychic, behavioral, and interpersonal processes (Munyon, Summers, Thompson, & Ferris, 2015) and consists of four dimensions (Gentry, Gilmore, Shuffler, & Leslie, 2012): 1) social astuteness, which indicates to being attuned to social environment and behave astutely when observing and interpreting others' behavior; 2) apparent sincerity, referring to being honest, authentic, sincere, trustworthy, and genuine in social interactions, reflects the true execution component of political skill; 3) interpersonal influence, namely the ability to use power and influence over others in a flexible and adaptable manner to elicit desired responses; 4) networking ability, concerning effectiveness at forging relationships, building coalitions and alliances with others with the aim to establishing friendships, garnering support, negotiating and managing conflict.

Political skills can drive novelty elaboration, which involves technical elaboration, collective explanation (i.e., specifying new characteristics through comparison), ambiguities clarifications, and expansion (i.e., explicating induced structural changes) of novelty. Firstly, political skills employee has the social astuteness to accurately capturing cues emanating from organizational settings for initiative and to know how to demonstrate appropriate initiatives (Wihler, Blickle, Ellen, Hochwarter, & Ferris, 2017). They have self-awareness and interpersonal skills to exert influence on external environment (Ferris et al. 2005), and therefore, do better in opportunity recognition and capitalization. Given the fact that uncertainty and ambiguity are inherent in original and novel ideas, evaluators who failed to receive sufficient technological information regarding the creative target may choose to abandon those ideas. Through maintaining authenticity and genuineness, politically skilled employees can display sincerity to gain trust, build rapport (Grosser et al., 2018), and mitigate possible resistance; through delivering technical specifications

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in an informative way, they may build up interactive communication to eliminate adverse criticism, share the uniqueness of generated ideas.

Novelty recognition refers that the extent to which that generated ideas are considered as original, unique, or unconventional by normative standards (Zhou et al. 2016). Featured by accuracy (i.e., internal reliability), predictive adequacy (i.e., the degree to which proposed ideas approximate reality), and explanatory potential (Fisher & Aguinis, 2017), novelty elaboration is conducive to identify critical technological attributes or merits of novel ideas with certainty and clarify technical ambiguity. By refining rough ideas and explaining novel characteristics in an interpretive and comparative manner, novelty elaboration can make novel ideas more sharable and acceptable from the recipient's side. Through present and package ideas in a communitive and understandable way, novelty elaboration can foster idea selling and conveyance, sheds lights on the non-described or identified interactions between new ideas and other structural factors (i.e., behavioral pattern, cultural norm, organizational system, operational procedure), and foresees systematic or dynamic change. Taken together, politically skilled employees can initiate novelty elaboration to expand evaluators' scope, deepen their understandings about the technical advantages of novel ideas, account for evaluators' instrumental concern and expectation, in consequence to promote novelty recognition.

Hypothesis 1a. Political skills will be positively related to novelty elaboration.

Hypothesis 1b. Novelty elaboration mediates the relationship between political skills and novelty recognition.

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Indirect Effect of Political Skills on Usefulness Cognition through Usefulness Championing

Usefulness recognition means that evaluators evaluate plausibility and feasibility of produced idea or product in a given context (Anderson, Potočník, & Zhou 2014). Championing behavior is conceived as a type of proactive action that dedicated to obtaining approval of resources (i.e., money, talent, time; Howell & Higgins, 1990) and triggered by need for achievement and risk-taking propensity, which can push extant ideas forward (Perry-Smith & Mannucci, 2017). Political skilled individuals possess political insights, social astuteness, and appeared sincerity to be attuned to organizational environment and take personal initiatives (i.e., champion behaviors) for usefulness recognition.

Politically skilled employees have social astuteness to precisely capture evaluators' expectancy and execute persuasive communication. By accurately diagnosing situations and managing shared meaning of organizations in a productive and appropriate way (Ferris, et al. 2005), they can comprehend evaluators' performance expectations and interests appropriately, then leverage past performance to establish favorable images, signal future performance (Treadway et al., 2013) to capture evaluators' attention. They select proper style or delivery tactics to convey the usefulness of produced ideas, and demonstrate honesty, openness and reliability to gain supervisors' trust, confidence, and support (Ferris et al. 2007: 302). Due to a lack of legitimacy and granted benchmark (Csikszentmihalyi, 1999), evaluators could experience uncertainty during creativity evaluation process, and they selectively rely on situational cues to determine the potential of implementation. With this respect, employees' reputation, influence, past performance serves as evidences of efficacy or ability of implementing ideas, therefore, evaluators are more likely to support and approve ideas proposed by employees who are thought to be legitimate and competent.

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Political-skilled employees can also possess interpersonal influence and network ability to champion the usefulness of their ideas. Interpersonal influence refers to leveraging social resources to exploit opportunities with tailored behavior for favorable evaluations (Wihler et al. 2017), so that employees may communicate effectively with evaluators of different background or experiences and sell their ideas successfully. Even more, they can work in conjunction with others to formulate intentional actions, such as leveraging social capital to mobilize sponsorship, developing championing strategies to promote their ideas (Wihler et al. 2017). Network ability is defined as the extent to which individuals skilled in developing and using social network effect change at work (Ferris et al. 2007). As politically skilled employees have transactional knowledge and networking ability, they can manage evaluators' reactions (Treadway et al. 2007), instill confidence, champion the marketability and feasibility of ideas, therefore, establish the utility and legitimacy of generated ideas.

Hypothesis 2a. Political skills will be positively related to usefulness championing.

Usefulness championing ensures evaluators that generated ideas are worth risking their social reputation and devoting organizational resources and helps remove the perceptual and behavioral bias against generated ideas and buffer negative effects induced by organizational politics (Brouer, Harris, & Kacmar, 2011). Through advocating the utility and feasibility of generated ideas, politically skilled employees can solicit positive perception and feedback from evaluators, thereby to improves the odds that generated useful ideas to be recognized; whereas evaluators can get to know the merits of proposed ideas, and under which conditions they can be applied, and be convinced of the feasibility and legitimacy of generated idea.

Hypothesis 2b. Usefulness championing mediates the relationship between political skills and usefulness recognition.

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A Serial Mediation Model

We further propose a serial mediation model in which employees' political skills have indirect effects on evaluator's creativity recognition via novelty elaboration and usefulness championing and then via novelty recognition and usefulness recognition. Politically skilled employees are capable and willing to resort to proactive endeavors such as elaboration and championing to advocate recognition of novelty and usefulness. According to the componential theory of creativity (Amabile, 1996), novelty recognition and usefulness recognition can be integrated a whole and will be conducive to creativity recognition.

Hypothesis 3. Employees' political skills are positively and indirectly related creativity recognition of evaluators via (a) novelty elaboration and (b) usefulness championing, and then via (c) novelty recognition and (d) usefulness recognition.

The Moderating Role of Paradoxical Framing

Originated from minor adaptive or set-breaking heuristics, creativity is considered as an alternative to routine performance (Madjar et al. 2011) that measure the quantity or effectiveness of work (Borman & Motowidlo, 1997). Since creativity recognition requests for substantial resource investment, it may reduce the amount of available resources allocated to routine performance and causes paradoxes. The paradoxes here speak to contradictory yet interrelated elements that exist simultaneously and persist over time, seem logical when considered in isolation but irrational, inconsistent, and absurd when juxtaposed (Smith & Levis, 2011: 386). A characteristic of paradoxes is the simultaneous presence of two seemingly mutually exclusive assumptions or conditions, each of which, taken individually, is incontestably true or logical, but seem to be inconsistent and incompatible when combined (Quinn & Cameron, 1988).

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Individuals draw upon their cognitive frame (or mindsets) to interpret complex reality and experiences. Cognitive frame provides a structure of assumption and rule to answer what is going on, increases awareness of environmental discrepancies, affects creation of meaning and sensemaking of paradoxes (Madjar et al., 2011). As one type of mental template that encourages individuals to recognize and embrace contradictions, paradoxical frame (or mindset) posits that opposites coexist harmoniously and interdependently to form a continuously changing and transforming totality (Lüscher & Lewis, 2008). Contrary to the predominant isolated analytical thinking approach, paradoxical frame provides a perspective to embrace and integrate paradoxes in a holistic way (Zhang, Waldman, Han, & Li, 2015) and determines the extent to which individuals leverage paradoxes to attain beneficial outcomes (Miron-Spektor, Ingram, Keller, Smith, & Lewis, 2018). To entertain contradictory propositions, paradoxical framing enables increased number of elements one considers (Leung, Liou, Spektor, Koh, Chan, Eisenberg, & Schneider, 2018), encourages cognitive juxtaposition of inconsistent elements, and increases the breadth of attention and the accessibility of knowledge, therefore, inspire the development of cognitive flexibility and generate new interconnections (Miron-Spektor et al. 2011).

In present research, we suggest that evaluators' paradoxical mindset may synthesize and promote flexible shift between short-term goal (i.e. routine performance) and long-term goal (i.e., learning, growth) (Miron-Spektor & Beenen, 2015), hence, affect their recognition of subordinates' creativity. Paradoxical mindset may also shape the way evaluators deal with the discrepancies that existed among novelty, usefulness, and creativity. As a reflective of cognitive complexity, paradoxical frame can nurture cognitive capacity to provoke exploration of incongruent concepts. Paradoxical frame enables evaluators to be engaged in complex thinking (i.e., to differentiate and integrate opposing elements (Tetlock, Peterson, & Berry, 1993), and

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provides the impetus to generate synthesis of novelty and usefulness as creativity (Leung et al. 2018). Given that novelty recognition refers to acknowledging the departure from routine performance or violation to existent cognitive structure, while usefulness recognition speaks to endorsing the utility in problem-solving or organizational goal achievement, evaluators who adopt a paradoxical mindset can make sense of the discrepancies among divergent factors and adopt both/and thinking (Smith & Tushman, 2005) to achieve an integration. Paradoxical mindset also embodies cognitive flexibility, which may broaden evaluators' attentional scope and attend to divergent perspectives.

Evaluators with higher level of paradoxical frame will better employ both/and mindset approach to initiate explorative processing, build up intercorrelations among novelty recognition, usefulness recognition, and creativity recognition, provoke confrontation and reconciliation of complexity. On the contrary, evaluators who possess low level of paradoxical frame will view the existed differences as conflicts rather than opportunities that boost learning and integrative solutions (Miron-Spektor et al. 2018), and generate dysfunctional response (i.e., abandon novel or useful ideas). Evaluators of low level of paradoxical frame have narrow attentional spectrum and show cognitive rigidity when confronting paradoxes and cannot uncover interrelationships among novelty, usefulness, and creativity. They have the propensity to adopt the either / or strategy to produce simplified solutions, polarize interrelationships to eliminate ubiquitously existed distinctions or discrepancies, which may cause failure in making integration among divergent facets.

Hypothesis 4a. Paradoxical framing will moderate the positive relationship between novelty recognition and creativity recognition, such that the relationship between novelty

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recognition and creativity recognition will become stronger (vs. weaker) when the level of paradoxical framing is higher (vs. lower).

Hypothesis 4b. Paradoxical framing will moderate the indirect positive relationship between novelty elaboration and creativity recognition via novelty recognition, such that the indirect relationship will become stronger (vs. weaker) when the level of paradoxical framing is higher (vs. lower).

Hypothesis 5a. Paradoxical framing will moderate the positive relationship between usefulness recognition and creativity recognition, such that the relationship will become stronger (vs. weaker) when the level of paradoxical framing is higher (vs. lower).

Hypothesis 5b. Paradoxical framing will moderate the indirect positive relationship between usefulness championing and creativity recognition via usefulness recognition, such that the indirect relationship will become stronger (vs. weaker) when the level of paradoxical framing is higher (vs. lower).

OVERVIEW OF THE THREE STUDIES

We conducted three studies in a progressive manner to test proposed research questions. We set out to examine the content validity, reliability, and factor structure of created items of variables in pilot studies. In Study 1, we investigated the indirect effects of political skills on creativity recognition via novelty elaboration and usefulness championing then via novelty recognition and usefulness recognition and examined the moderating effects of paradoxical frame on the associations between novelty recognition and creativity recognition and between usefulness recognition and creativity recognition, respectively. We sampled from a wide range of industries which highlighting creativity and engaged in innovation empirically to enhance the generality of

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our research findings. In Study 2, to mitigate the possible deficiencies of cross-sectional data acquired from survey and achieve more comprehensive understandings, we interviewed 10 managers from state-owned or private-owned companies to examine under which conditions acknowledged novelty or usefulness will be recognized as creativity. All these studies were designed to enhance the robustness of new created measures and the cross-validation of findings.

PILOT STUDY**Samples and Data**

Since there are not established measures of novelty elaboration, usefulness championing, novelty recognition, and usefulness recognition, we developed the measures of these constructs and test their content validity in pilot study. Following Hinkin's (1985) recommended practices for scale development, two studies were conducted to create and validate these variables. The first study was initiated to develop items were thought to tap the creativity domain based on theoretical evidence and our understandings in the focal study. For example, novelty elaboration was measured from aspects of specification, contrasting and structuring. We drew inspiration for the measures based on key theoretical findings and developed statements accordingly. To build up the logical validity of variable contents, we invited two experts majored in management to evaluate proposed items, gave constructive feedbacks and revised for several times and finally confirmed the proposed measures of these four variables.

To refine these measures based on reliability analysis and exploratory factor analysis (EFA), we initiated the second study to establish dimensionality and tests of convergent, discriminant and criterion-related validity. 116 MBA students at City University of Macau were requested to evaluate the quality of item contents first. Their feedbacks were well adopted in item revision process. All of these students were invited to fill in questionnaires anonymously. A cover letter

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that documented answer requirement, research purpose, and privacy policy was distributed to each student for their consent. Two doctoral students helped hand out and collect questionnaires. Finally, we got 116 copies of response with 100% response rate. Among these students, 44 were male (37.9%) and 72 were female (62.1%), average age was 26.84 ($SD = 5.01$), average work experience was 3.27 year ($SD = 4.58$). All the items were measured by 5-point Likert Scale.

Reliability and proposed factor structure of scales. Results show that the internal consistency reliability of the developed items of the four latent constructs were generally acceptable ($\alpha_{novelty\ elaboration} = .70$), $\alpha_{usefulness\ championing} = .60$), $\alpha_{novelty\ recognition} = .64$), and $\alpha_{usefulness\ recognition} = .65$). Since we conceptualized the constructs as higher-order latent variables that shapes reflective (vs. formative) dimensions with arrows flowing from the construct to the indicators, we estimated number of factors with explained variances in percentage (See Table 1) to verify the appropriateness ($KMO = .79$, Bartlett’s test of sphericity of $\chi^2 (78) = 399.98$, $p < .01$) of conducting exploratory factor analysis (EFA). The factor structure was shown (Table 1 and Table 2).

| |
|---------------------------|
| Insert Table 1 about here |
| Insert Table 2 about here |

Discriminant and convergent validity. To preliminarily test the cross-validation of the variables in our hypothesized model, 102 doctoral students and their former supervisors were invited to anonymously participate our survey with a 100% percent response rate. Among them, 27 were male (26.5 %) and 75 were females (73.5%) with average age of 31 years old ($SD = 4.82$) and average work experiences of 3.41 year ($SD = 0.74$). We ran EFA to test the model fit of

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baseline model comprised by novelty elaboration, usefulness championing, novelty recognition and usefulness recognition in comparison to alternative models. Results suggest that alternative factor structures demonstrated poorer fit than the proposed 4-factor structure ($\chi^2 (32) = 22.49$, $p < .01$, CFI = .09, TLI = .98, RMSEA = .01, SRMR = .04).

We also conducted confirmatory factor analyses (CFA) following guidelines for integrity and transparency (Cortina, Green, Keeler, & Vandenberg, 2017) to test the proposed structural model that composed by novelty elaboration, usefulness championing, novelty recognition, and usefulness recognition. The hypothesized four-factor model ($\chi^2 (59) = 42.68$, $p < .01$, CFI = .99, TLI = .98, RMSEA = .01, SRMR = .06) fits the data well. Alternative models tested were: (a) a three-factor model in which indicators of novelty elaboration and usefulness championing were loaded on a single factor ($\chi^2 (62) = 75.59$, $p > .1$, CFI = .87, TLI = .83, RMSEA = .05, SRMR = .08); (b) a three-factor-model in which indicators of novelty recognition and usefulness recognition were loaded on a single factor ($\chi^2 (62) = 45.59$, $p > .1$, CFI = .90, TLI = .89, RMSEA = .02, SRMR = .06); (c) a two-factor model which indicators of novelty elaboration and usefulness championing were loaded on a single factor while indicators of novelty recognition and usefulness recognition were loaded on another factor ($\chi^2 (64) = 76.70$, $p > .01$, CFI = .88, TLI = .85, RMSEA = .05, SRMR = .08); and (d) in which all indicators were loaded on a single factor ($\chi^2 (65) = 99.05$, $p < .05$, CFI = .67, TLI = .60, RMSEA = .07, SRMR = .09). Results suggest that alternative models demonstrated poorer fit than the hypothesized 4-factor model. The correlations among constructs primarily established their convergent validity.

STUDY 1

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Participants and Procedures

This study was conducted within the business context. To collect creativity data from high-tech companies with dyadic subordinator-supervisor samples, we adopted the non-probability sampling method, namely, judgment sampling in the focal study. With the help of two graduated DBA students, we distributed electric questionnaires to employees and their supervisors from 16 high-tech companies ranging across pharmacy, IT, information service ranging, and manufacture and located in Hainan and Guandong provinces of China. Since the electric questionnaires can't be successfully submitted unless fulfilled completely, the responses rate was 100%. The cross-sectional data was collected at three different time points, each of which with an interval of two weeks just in case that long time intervals would run the risk of employee turnover. A total of 415 matched electric copies were returned to us.

Employees who consented to anonymously take part in our study were required to report their demographical attributes of age, gender, education, and tenure and rated their political skills, novelty elaboration and usefulness championing. Among them, 141 were male (33.98%), the average education background was college or above ($Mean = 2.83$, $SD = .80$), and the average working experience was 4-6 years long ($Mean = 3.04$, $SD = 1.25$). Supervisors were invited to make assessment on novelty, usefulness and overall creativity of ideas, products or services that proposed by their subordinators and self-report their own demographical indicators such as age, gender, education, and tenure as well as their cognitive framing. To account for the possible confounding effects on novelty recognition, usefulness recognition and creativity recognition, we also asked supervisors to rate their perception of resource accessibility, conformity, and culture values (i.e., innovation, attention to details and outcome orientation) and indicated type of creativity (radical or incremental). Of the supervisors, 33% were male, the average education

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background was college or above (Mean = 2.86, $SD = .77$) with average working experience of 4-6 years (Mean = 3.14, $SD = 1.20$).

Measures

We applied the items of novelty elaboration, usefulness champions, novelty recognition, and usefulness recognition that primarily validated in pilot studies. Following Brislin's (1980) translation-back translation procedure, English scales were first translated into Chinese by one DBA student fluent in both English and Chinese, another DBA student, who was also fluent in both English and Chinese, translated the Chinese versions back into English; the two bilingual translators then discussed and resolved the discrepancies in the two English versions. All items without specific notes were measured by 5-point Likert-type scales that ranging from 1= *strongly disagree* to 5= *strongly agree*.

Independent variables. To comprehensively grasp the meaning, we adopt the 18-item measure of *political skills* ($\alpha = .89$) developed by Ferris, Treadway et al. (2005). The sample items of dimensions such as social astuteness, interpersonal influence, apparent sincerity, networking ability read "I understand people very well", "It is easy for me to develop good rapport with most people", "When communicating with others, I try to be genuine in what I say and do", and "I have developed a large network of colleagues and associates at work who I can call on for support when I really need to get things done".

Novelty elaboration. We adopted the same scale as in pilot study ($\alpha = .60$). The exemplary item reads "I introduce the new features and function of this product / service in details".

Usefulness championing. We adopted the same indicators as demonstrated in pilot study ($\alpha = .66$). The exemplary item reads "I explain the technical applicability of this product/service".

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Paradoxical Frame / Mindset. We adopt the 9-item measure ($\alpha = .93$) proposed by Miron-Spektor et al. (2018). The exemplary item reads “When I consider conflicting perspectives, I gain a better understanding”.

Dependent variables. We adopted the same items of *novelty recognition* ($\alpha = .61$) with the sample item of “I can recognize the new features of this product / service” and *usefulness recognition* in pilot study ($\alpha = .85$) with the exemplary item “I appreciate the utility of this product or service for customers”. We used the 4-item measure of *creativity recognition* ($\alpha = .73$) proposed by Soda, Stea, and Pedersen (2017) with exemplary item “I acknowledge that the employee’s product / service can improve this unit’s performance”.

Control variables. Demographic attributes such as *age*, *experience*, *gender* (0 = female, 1 = male) and *education* (from 1 = elementary school to 5 = graduate degree or above) are controlled. As evaluators may react less favorably to really new products than to incrementally new products when assessing (Alexander, Lynch & Wang, 2008). We adopt the 3-item measure of *radical creativity* ($\alpha = .64$) with the exemplary item “this idea suggests radically new ways for doing” and the 3-item measure of *incremental creativity* ($\alpha = .62$) with the exemplary item “this idea easily modifies previously existing work processes to suit current needs” (Madjar et al., 2011). To clarify the possible confounding effects of *resource* ($\alpha = .64$), *routine performance* ($\alpha = .60$), *presence of creative others*, cultural values such as *conformity* ($\alpha = .69$), *innovation* ($\alpha = .84$), *attention-to-details* ($\alpha = .60$), and *outcome orientation* ($\alpha = .60$) on creativity recognition (e.g., Zhou, Shin, Brass, Choi, & Zhang, 2009), we controlled for them and adopted the measures suggested by Madjar, et al. (2011) with the exemplary item of routine performance reads “How much effort does this person put into his / her work”. The exemplary item *presence* reads “I consider my peer colleague to be role model when I did assessment”. The exemplary item of conformity reads “I try

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not to oppose team members”. The sample question of innovation, attention-to-details and outcome orientation read “In my unit we look for new and fresh ways to deal with problems”, “Good in tasks that require dealing with details”, and “Budget constraints are met here”, respectively.

Analysis Strategy

As employees’ novelty recognition, usefulness recognition and creativity recognition data are assessed by several evaluators, coefficient of concordance among rates should be justified. Results demonstrate that inter-rater reliability was acceptable ($W > .70$). We calculated the correlations among variables (Table 3) and conducted Confirmative factor analysis (CFA) on the platform of Mplus 8 to test the fit indices of structural model composed by political skills, novelty elaboration, usefulness championing, novelty recognition, usefulness recognition, creativity recognition, and paradoxical frame to test for convergent and discriminant validity. We also did path-analysis on the direct and indirect effects and plotted the moderation effects.

Insert Table 3 about here

Results

CFA. The CFA results on the structural model that composed by latent variables of novelty elaboration, usefulness championing, novelty recognition, usefulness recognition, and creativity recognition ($\chi^2 (110) = 336.85, p < .01, CFI = .87, TLI = .83, RMSEA = .07$ with 90% CI [.062, .08], SRMR = .10) suggested that the baseline model fit was accepted. We also ran CFA on the integrated framework model that composed by all constructs and compared it with alternative models. The findings suggest that the original model fits better than the alternatives (see Table 4), thereby establishing the convergent and discriminant validity.

Insert Table 4 about here

Direct effects. The descriptive statistics were shown in Table 5. We also ran path-analysis via Mplus 8 to test the proposed hypotheses on direct effects. This analysis yielded significant effects of political skills on novelty elaboration ($\gamma = .71, SE = .13, p < .01$), and usefulness championing ($\gamma = .62, SE = .11, p < .01$), thus, Hypothesis 1a and Hypothesis 2a were supported. Also, the positive and significant effects of novelty elaboration on novelty recognition ($\beta = .13, SE = .06, p < .05$) and of usefulness championing on usefulness recognition ($\beta = .12, SE = .06, p < .01$) were both supported. Besides, the relationships between novelty recognition and creativity recognition ($\beta = .27, SE = .13, p < .05$) and between usefulness recognition and creativity recognition ($\beta = .47, SE = .12, p < .01$) were both significantly positive.

Insert Table 5 about here

Insert Table 6 about here

Insert Table 7 about here

Mediation effects. To test the mediation effects, we calculated the bootstrapped mediation effects via PROCESS (Hayes, 2017). The estimated mediation effect of political skills on novelty recognition via novelty elaboration was significantly positive (indirect effect = .15, $SE = .05$, with 95% CI [LL = .05, UL = .26]. The indirect effect of political skills on usefulness recognition via usefulness championing was also positive and significant (indirect effect = .08, $SE = .03$, with 95% CI [LL = .02, UL = .14]), providing support for H1b and H2b. Results also indicated that the indirect effects of political skills on creativity recognition through novelty elaboration was significantly positive (indirect effect = .11, $SE = .05$, with 95% CI [LL = .02, UL = .20], verifying Hypothesis 3(a). Likewise, the indirect relationship between political skills and creativity

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recognition through novelty recognition (indirect effect = .13, $SE = .03$, with 95% CI [LL = .07, UL = .20]) and the serial indirect effect of political skills on creativity recognition (indirect effect = .03, $SE = .01$, with 95% CI [LL = .01, UL = .07]) were both significantly positive, supporting Hypothesis 3(c). However, the indirect effect of political skills on creativity recognition through usefulness championing (indirect effect = .06, $SE = .03$, with 95% CI [LL = -.01, UL = .11]) was insignificantly positive, implying that the relationship between usefulness championing and creativity recognition may be fully mediated by usefulness recognition, rejecting Hypothesis 3b. The indirect effect of political skills on creativity recognition through usefulness recognition (indirect effect = .24, $SE = .04$, with 95% CI [LL = .17, UL = .32]) and the serial indirect effect of political skills on creativity recognition through usefulness championing then through usefulness recognition (indirect effect = .03, $SE = .01$, with 95% CI [LL = .01, UL = .05]) were both positive, supporting Hypothesis 3d. The overall results are demonstrated in Table 8.

Insert Table 8 about here

Moderation effects. Results yielded insignificant interaction effect between paradoxical frame and novelty recognition on creativity recognition ($\gamma = .03$, $SE = .04$, $p > .1$, 95% CI [LL = -.04, UL = .11]), denying Hypothesis 4a. Likewise, the interactional effect between paradoxical frame and novelty elaboration on novelty recognition is insignificantly negative ($\gamma = -.03$, $SE = .04$, $p > .1$, 95% CI [LL = -.09, UL = .06]), thereby, Hypothesis 4b was denied. Results yielded significant interaction effect between paradoxical frame (PF) and usefulness recognition on creativity recognition ($\gamma = .11$, $SE = .04$, $p < .01$, 95% CI [LL = .04, UL = .18]), such that when the level of PF was high (+1SD), the association between usefulness recognition and creativity recognition became stronger ($\gamma = .36$, $SE = .05$, $p < .01$, 95% CI [LL = .26, UL = .46]) than the level of PF is low (-1SD) ($\gamma = .17$, $SE = .05$, $p < .01$, 95% CI [LL = .08, UL = .27]), which support

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Hypothesis 5a. Contrary to our prediction, the interaction effect between PF and usefulness championing on usefulness recognition yielded reversed moderation results ($\gamma = -.10, SE = .04, p < .05, 95\% \text{ CI } [LL = -.19, UL = -.02]$), such that higher level of PF (+1SD) would be negatively related to usefulness recognition ($\gamma = -.05, SE = .06, p > .1, 95\% \text{ CI } [LL = -.15, UL = .06]$) than lower level of PF (-1SD) ($\gamma = .13, SE = .06, p < .05, 95\% \text{ CI } [LL = .02, UL = .24]$). The moderated mediation effect of PF on the indirect relationship between political skills and creativity recognition via usefulness championing is significantly negative ($\gamma = -.05, SE = .03, p < .05, 95\% \text{ CI } [LL = -.10, UL = -.01]$); while the moderated mediation effect of PF on the indirect relationship between political skills and creativity recognition via usefulness recognition ($\gamma = .09, SE = .03, p < .01, 95\% \text{ CI } [LL = .03, UL = .14]$) is significantly positive, supporting Hypothesis 5b. The overall structural equation modelling results (Figure 1) and single slop of moderation effects (Figure 2) were demonstrated. Summarized results of proposed hypotheses were shown in Table 9.

Insert Figure 1 about here

Insert Figure 2 about here

Insert Table 9 about here

Discussion

The generated results supported our proposition that political skills may positively influence creativity recognition: a) via novelty elaboration then via novelty recognition; b) through usefulness championing first then through usefulness recognition, while novelty recognition and usefulness recognition serve as orthogonal antecedents of creativity recognition. The moderating of paradoxical frame (PF) on the relationship between novelty recognition and creativity recognition and the serial mediation effect between political skills and creativity recognition

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through novelty elaboration and novelty recognition were both denied, which suggests that PF may not sufficiently enable the recognition of novel ideas as creativity. The possible reason could be that novel input requires exploration of new domains and development of new solutions for change, therefore, forms a schema violation of activated cognitive structure (i.e. increased number of ideas and solutions they consider) and makes the recognition target complex and ambiguous for information processing. The moderation effect of PF on the relationship between usefulness recognition and creativity recognition identifies that supervisors are pragmatic and have the propensity to view usefulness as creativity as usefulness is closely connected to organizational performance and goals. The moderation effect of PF on the indirect relationship between usefulness championing and usefulness recognition suggest that supervisor who have PF develop holistic thinking approach to processing information rather than endorse championed ideas readily.

STUDY 2

Design, Sample, and Procedure

Qualitative research method (i.e., interview) that uses insider-outsider approach to combining the perspective of knowledgeable participant and outsider researcher can largely illustrate the sensemaking process (i.e., Maitlis, 2005). More fine-grained process data with mixed methods is called for to modelling the sense-making process or dynamic relationship between noticing cues, creating plausible explanations, and taking action to test those explanations (Maitlis & Christianson, 2014). In this respect, we conduct qualitative research to identify: 1) supervisor's understanding of creativity in practical; 2) supervisors' perception of employees' political skills and impacts on creativity recognition; 3) the impact of supervisors' cognitive frame on creativity recognition. In doing so, we built up a framework and interviewed owners or managers from 10 companies as dominant figures (see Appendix 1 and 2). We defined the properties of companies

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based on their ownership and scale. The semi-structured interviews allow the exploration of perspectives and perceptions of supervisors and characterize their viewpoints and experiences for in-depth understanding (Guha, Harrigan, & Soutar, 2017), which commenced with general questions regarding participant's personal information (gender, age, educational qualifications), information in terms of the organization size, growth phase, number of employees, main products or services, emphasis of creativity, bureaucratic hierarchy, human capital, organizational culture, performance evaluation and so on, and gradually progress towards more elaborated discussions on our research questions (See Appendix 3). The duration of single interview was approximately 30-40 mins.

Data Analysis

The basic data analytical strategy used in this study is coding. Key words from interviews were selected and highlighted as themes. The inductive approach was taken with the purpose to avoid rigidity and premature closure that are risks of a deductive method (Lapadat, 2010: 926). Validity and reliability were ensured through prolonged engagement, persistent observation of sample respondents for rich and thick description (Onwuegbuzie & Leech, 2007).

Results

The findings suggest that managers place more emphasis on usefulness than on novelty when evaluating their subordinator's creativity in practical. As managers face pressure for higher performance and profitability, they may develop a bottom-line mentality in order to ensure short-term profit, while the value of novel ideas are uncertain. Therefore, managers may feel skeptical towards premature, novel ideas and hesitate to endorse them, but they are more likely to recognize usefulness as creativity. Our interviews suggest that managers, who are socially embedded in

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agentive behaviors and influenced by contextual features and resources, treat novelty and usefulness differently. The inherent discrepancy between novelty and usefulness may propose paradox for them to deal with. Their mindset may shape the extent to which novelty and usefulness can be integrated as key components of creativity. Results show that paradoxical mindset can facilitate scrutinizing of discrepancy and developing integrative solution. In addition, as organizations are partly political in nature, political skills are prevalently existed in organizations and proactively utilized to facilitate interpersonal communication, resource acquisition, and organizational environment navigation. Complementary to employees' intelligence and engagement, quality of relationships (i.e., reciprocity, guanxi) between supervisor and subordinates and political factors can influence creativity recognition. Political skills represent the comprehensive pattern of social competencies with cognitive, affective, and behavioral manifestations that underpins creativity recognition, career development and organizational efficiency.

GENERAL DISCUSSION

Creativity recognition represents a positive evaluation of a generated new idea and serves as a conduit through which an idea can be implemented in practical and add value to organizations. Nonetheless, creativity recognition as a type of work performance is partially subjective in nature and susceptible to a variety of individual and contextual influences. To figure out the antecedent and intermediary mechanisms that lead to creativity recognition, this research adopts the sensemaking theory to understand the two parties' (i.e., evaluators and employees) perception of creativity and their sensemaking process leading to creativity recognition. Focal research posits that employees who make sense of the organizational environment in a social political approach can leverage political skills to present and champion their creativity in favorable way to gain supervisors' endorsement. Representing a set of interrelated social competencies, political skills

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provides superior intrapsychic (i.e., stress management), behavioral (e.g., performance), and interpersonal (e.g., impression management) advantages for social effectiveness and goal attainment (Munyon et al. 2015). Employees' political skills not only reflect their competence, social influence, and good intention, but also prompt proactive endeavors such as novelty elaboration and usefulness championing to facilitate desired acknowledgement.

We articulate that evaluator may positively interpret employee's political skills and respond to employee's proactive endeavors (i.e., novelty elaboration and usefulness championing behaviors). Supervisors serve as evaluators and make sense of their surroundings by rationally evaluating various on-the-job behaviors and choose those they believe will lead to most valued rewards and outcomes. The attractiveness of a certain task performance or effort depends on whether it may lead to valued outcome. Since politically skilled employees are capable to leverage effective communication and relational skills to present their performance in influential ways (Ferris et al. 2007), evaluators who make sense of employees' past accomplishment may translate it as interpersonal competence and influence in work environment, establish buy-in relationships that offer trust, reciprocity, and sustain further development of creative ideas, and thereby to acknowledge employees' creativity.

Supervisors' cognitive configuration can play critical role in their sensemaking process and shape the extent to which novel or useful ideas can be valued and recognized as creativity. In specific, we argued that supervisors who possess paradoxical mindsets are willing and capable to capture the ambiguous facets or discrepant information, as a result, to integrate novelty and usefulness into creativity. Results of study (Albrecht & Hall, 1991) suggest that supervisors are more probably to integrate usefulness rather than novelty into creativity when making assessment for the reason that new ideas may represent disturbances in the status quo and power balances and

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challenges the current state of affairs. Our findings justify the proposition that given the choice, supervisors' low level of willingness to take risks on novelty may reinforce their preference and choice of usefulness as the safest alternative. Empirical results also imply that paradoxical mindset alone is not adequate to integrate novelty and usefulness, other cognitive factors should be taken into consideration when untangle the creativity integration problem.

Theoretical Implications

Our research establishes an integration of sensemaking theory and social political perspective through elaborating that employees who politically make sense of environmental cues can establish shared understandings and communicate information effectively with their supervisors. Political skills serve as a collection of social intelligence that not only affect evaluators' sensemaking process (i.e., attentional focus and priorities), propel goal-directed behaviors that contribute to common interests and creativity recognition, but also affect supervisors' sensemaking process, such that supervisor can buy into employees' political capabilities and endeavors rather than relying on their retrospective experiences or memories. Through processing the information and cues that conveyed by subordinators, evaluators may renew their knowledge content, adjust their framing structure, rebuild their sensemaking process, as a result to recognize employees' ideas. To this end, our research makes an attempt to contribute to the broader social-cognition adaption literature by examining the integration-adjustment mechanism that underlying the sensemaking process.

Our research builds up the dialogue between employees' political skills and evaluators' creativity recognition. Although political skills are documented to be directly related to career-relevant outcomes (Todd, Harris, Harris, & Wheeler, 2009) and moderate the relationship between predictors and outcomes (Ferris et al. 2007: 291), how will political skills affect creativity

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recognition is barely examined. As organizations are partially political in nature and conceptualized as sensemaking target that featured by ambiguities and uncertainties, employee's political skills serve as a comprehensive pattern of social competencies that enable proactive exploration of opportunities, initiate strategic endeavors (i.e., elaboration and championing) for the endorsement of creativity.

Our research integrates the paradox and cognitive mindset literature into extant research to deepen understandings about the nature, dynamics and outcomes of creativity recognition. We postulate that paradoxical mindset, a flexible, self-adaptive cognitive mindset, can enables supervisors to make sense of environment, interpret captured cues, make predictions on induced outcomes, and accounts for the discrepancies induced by novelty and usefulness by incorporating and synergizing them within a larger concept of creativity. Therefore, paradoxical mindset serve as a cognitive contingency and shape the extent to which supervisors synergize novelty and usefulness, and discretionally integrate them as creativity. By identifying the cognitive boundary condition of creativity recognition, our study enriches paradox thinking of creativity recognition literature.

Managerial Implications

Our research also offers some practical implications for practitioners. Given the majority of organizational systems are built on the notions of predictability, complying with routine norms or accomplishing designated organizational goals can construct sources of inertia and inflexibility (Sue-Chan & Hempel, 2015), hence, managers should figure out the inhibiting factors of creativity at macro level (i.e., culture) and at micro level (i.e., perception, attitude) and take actions to boost employees' confidence and enthusiasm for creativity in workplace. At macro level, organizational habit that tends to chase perfection, waiting to finish a perfect product before putting it into the

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market may construct a cultural deterrent to creativity and might be overridden by competitors as a result of inefficiency, managers who endorse employees' creativity should make discretionary selection between efficiency and perfection. Although short-term performance may positively contribute to effectiveness, they can undermine organization's long-term performance (Bunderson & Sutcliffe, 2003), prosperity and longevity. At micro level, managers need to combat efficiency-thinking, that is, to devoid of hard-coded expectations for quantifiable results and give breathing room for creative ideas to generate and progress along their natural course. Beyond that, managers should break the fixed-pie bias and bottom-line mentality to make balances between routine performance and creativity for future grownups.

Our research raises alarm on the adverse impact that resource scarcity and time pressure may impose on creativity recognition. Creativity requires time to incubate and mature, whereas time pressure and limited resources (i.e., time, manpower, or budgets) can reduce epistemic motivation (i.e., the desire to develop an accurate and clear understanding of the environment), psychological support, intelligence, self-esteem, and skills that critical for creativity, in turn to be detrimental to creativity. Employees may lose interests on creativity as they may not see the potential or benefit of creativity and prefer routine performance (i.e., Madjar et al. 2011) when resources are unavailable or inadequate. Time pressure and resource constraint may constrain or reframe supervisor's cognitive mindset (i.e. increasing preference for low-risk solutions), thereby, reducing time that invested on deep thinking or alternatives examination can eliminate managers' willingness to recognize creativity.

Present study also shed light on those positive impacts of employees' political skills in enhancing work efficiency and communication effectiveness. Employees can utilize their political skills to navigate organizational environment, promote common understandings with others, and

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gain support when advocating their initiatives. Political skills can also inspire proactive behaviors, which in turn functions in soliciting supervisor's recognition.

Limitations and Future Studies

As with any research endeavor, there are some limitations. A related limitation is the lack of a causal explanation to the study. Yet our research uses cross-sectional data with time segmentation and interview data to test the proposed framework. Though the research suggests that the measures are related, one cannot unequivocally say from this study that political skills cause novelty elaboration and usefulness champion, which then induce creativity recognition. Future studies should consider other research designs (i.e., longitudinal, experimental studies) to further support the causal direction of our predictions.

Even though our study advocates the positive impact of political skills on creativity recognition, the dark side of political skills should not be omitted. Political skills may also cast shadow over change-oriented initiatives. As politically skilled individuals possess social savvy and know the organizational rope, they may choose to stay in their secure and comfortable zones, manipulate the environment they accustomed to and exploit benefits through opportunistic behaviors, instead of traveling extra miles to seek chance for change. Moreover, as political skills can manage work demands, avoid extra-role load strategically and set limitation on others' expectations (Cullen, Gerbasi, & Chrobot-Mason, 2015), they may eliminate work engagement and endeavors. Furthermore, trust between employees and evaluators may skew creativity recognition, for the reason that individuals place more trust in in-group members rather than outgroup members, while outgroup members have to overcome suspicion and interpersonal obstacles (Weber, Malhotra, & Murnighan, 2004) for acknowledgement.

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Given that impact of political skills on creativity recognition is determined by boundary conditions, alternative moderators should be introduced. Past research suggest that situational variables serve as a key determinant in whether an actor could effectively enact political influence (Ferris & Judge, 1991). For example, a high justice environment can be viewed as a “strong” situation where rules dictate actions, while personality traits and political skills are less vital to succeed (Andrews, Kacmar, & Harris, 2009). Strong situation may weaken the impact of political skills so that they become less prominent, in which consistent and accurate information could limit the effectiveness of political skills. In contrast, a low justice environment can be viewed as a “weak situation”, which may create uncertainty, causes individuals with different characteristics to act in different ways, and therefore, encourage those high in political skill to recognize appropriate actions and skillfully enact them (Andrews et al. 2009). Given that individuals who modify their behavior in response to environmental stimuli do not behave stably and independently, instead, they are adaptive and responsive to the situation, their responses would be strong in weaker situation and less prominent in strong situations (Andrews et al. 2009). Political skilled individuals are more probable to build social capital in weak situations, where interpersonal influence tactics are likely to pay off, for example, political supervisors who do not base outcome allocations solely on formal rules and policies are likely to be prime targets for such influence attempts (Shi et al. 2013). Moreover, effects of employees’ political skill may also be enhanced by high levels of supervisor political behavior, better supervisor-subordinate relationship, and available resources (Shi et al. 2013). Conceptualized as an informal personal relationship between individuals who are linked by social norms that govern the exchange of favors, mutual commitment, loyalty, and obligation (Chen & Chen, 2004), *guanxi* is a distinct research domain that subsumes social network research, leader-member-exchange, and relationship making (Chen, Chen, & Huang, 2013).

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Guanxi networks were formed under conditions of resource scarcity and may probably lead to negative outcomes such as fragmentation, intervention, and rent-seeking (Lin & Si, 2010). Guanxi acts as a pervasive relationship lubricant that helps seize opportunities in uncertain and competitive environment (Luo, Huang, & Wang, 2012). Politically skills individuals possess advantages in a wide range of contexts, and they may use guanxi-making techniques exploit in this political climate.

CONCLUSION

In present study, we set out to examine whether employees' political skills impacted evaluators' creativity recognition through novelty elaboration and usefulness championing, then through novelty recognition and usefulness recognition. Subsequently, we find that evaluators' paradoxical cognitive mindset may constrain the extent to which employees' usefulness championing will be connected to usefulness recognition as well as determine the extent to which endorsed usefulness will be recognized as creativity. Our research provides a more balanced viewpoint of creativity recognition by taking both initiators and evaluators' sensemaking processes into consideration and elaborate on the subjectivity property of creativity recognition, such that employees can employ their political skills to initiate elaboration and championing behaviors, in turn to propel evaluators' recognition of their creativity. Overall, we explore the dynamic nature of creativity recognition while examining the bilateral sensemaking interactions that are particularly relevant to creativity recognition processes and consequence.

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Table 1 Eigenvalues and explained variances of factors in pilot study

| Factor | Initial Eigenvalues | | Extraction Sums of Squared Loadings | | |
|--------|---------------------|---------------|-------------------------------------|---------------|--------------|
| | Total | % of variance | Total | % of variance | Cumulative % |
| 1 | 4.142 | 31.86 | 4.142 | 31.86 | 31.86 |
| 2 | 1.55 | 11.91 | 1.55 | 11.91 | 43.78 |
| 3 | 1.17 | 8.98 | 1.17 | 8.98 | 52.76 |
| 4 | 1.04 | 8.01 | 1.04 | 8.01 | 60.77 |

Table 2 Exploratory factor analysis results of pilot study

| Item | Factor | | | |
|---|---------------------|------------------------|---------------------|------------------------|
| | Novelty Elaboration | Usefulness Championing | Novelty Recognition | Usefulness Recognition |
| I introduce the new features of the idea / product /service in details. | .61 | .07 | .02 | .04 |
| I elaborate the similarities and differences between this new idea /product / service and existed ones. | .75 | .16 | - .05 | .01 |
| I systematically explain the difference this new idea /product/ service will make here. | .35 | .05 | - .25 | - .00 |
| I explain the technically applicability of this idea /product / service. | .19 | .25 | .05 | - .22 |
| I explain that this idea / product /service can satisfy customers' requirement. | .19 | .41 | .08 | .01 |
| I highlight the market value of this idea /product/service. | .10 | .60 | .16 | .04 |
| I emphasize the legitimacy of implementing this idea /product/service here. | .17 | .97 | .10 | .23 |
| I can recognize the new technical features of this idea /product / service. | - .04 | .11 | .84 | .15 |

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| | | | | |
|---|------|-----|-----|------------|
| I can recognize the new selling point that the proposed idea /product / service bears. | .09 | .10 | .14 | .08 |
| I can indicate the changes this idea /product / service will bring to this company. | -.03 | .20 | .02 | .37 |
| I can realize the utility of this idea /product / service for our customers. | .03 | .16 | .15 | .65 |
| I feel confident that this idea /product / service can be developed or manufactured in practical. | .12 | .12 | .06 | .43 |
| I acknowledge the legitimacy of this idea / product / service in this company. | .02 | .10 | .24 | .37 |

Note: factor-loading coefficients equal to or larger than .55 were recorded in bold.

Table 3 Descriptives, reliabilities, and intercorrelations of employee variables in study 1

| Variable | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------------------|------|------|--------|------|-------|------|--------------|--------------|--------------|
| 1.Age | 2.24 | 1.02 | | | | | | | |
| 2.Gender | 0.34 | .48 | -.01 | | | | | | |
| 3.Education | 2.83 | .80 | .40** | .01 | | | | | |
| 4.Experience | 3.04 | 1.25 | .51** | .01 | .30** | | | | |
| 5.Political skills | 3.48 | .56 | -.10* | -.04 | -.08 | .10* | (.89) | | |
| 6.NE | 3.33 | .72 | -.14** | -.00 | -.08 | .09 | .67** | (.60) | |
| 7.UC | 3.25 | 0.64 | -.08 | -.03 | -.03 | .09 | .46** | .51** | (.66) |

Notes: N = 415 individuals. For age, 1=18-30 years, 2=31-45 years, 3= 46-60 years, 4= 61 years or above; for gender, 0= female, 1= male; for education, 1= secondary school or below, 2 = college, 3 = undergraduate, 4= postgraduate or above; for experience, 1= less than 1 year, 2= 1-3 years, 3= 4-6 years, 4= 7-10 years, 5= more than 10 years. NE = Novelty elaboration, UC = Usefulness championing. Values in the brackets are Cronbach's alpha coefficients.

* $p < .05$, ** $p < .01$; two-tailed.

Table 4 Results of confirmative factor analysis of proposed model in Study 1

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| Proposed Model | Factor | χ^2 (d.f) | CFI | TLI | RMSEA | SRMR | 90% CI |
|----------------------------|---|-----------------------|-----|-----|-------|------|--------------|
| 7-factor model | PS, NE, UC, NR, UR, CR, PF | $\chi^2(839)=1322.72$ | .94 | .93 | .034 | .05 | [.034, .042] |
| 6-factor model | PS, NR,UR,CR, PF, with NE and UC loaded on one factor | $\chi^2(845)=1388.65$ | .92 | .91 | .04 | .053 | [.036, .043] |
| alternative 6-factor model | PS, NE, UC, CR, PF, with NR and UR loaded on one factor | $\chi^2(888)=1561.56$ | .92 | .91 | .043 | .077 | [.039, .046] |
| 5-factor model | PS, CR, PF, with NE and UC loaded on one factor, NR and UR loaded on another factor | $\chi^2(850)=1403.47$ | .91 | .90 | .04 | .06 | [.036, .043] |
| 4-factor model | PS, PF, with NE and UC loaded on one factor, with NR, UR, and CR loaded on another factor | $\chi^2(854)=1474.48$ | .90 | .89 | .045 | .07 | [.041, .048] |
| 3-factor model | PS, PF, with NE, UC, NR, UR, and CR loaded on one factor | $\chi^2(857)=1600.29$ | .90 | .89 | .047 | .07 | [.043, .05] |
| 2-factor model | PF, with PS, NE, UC, NR, UR, and CR loaded on one factor | $\chi^2(859)=1777.93$ | .87 | .86 | .047 | .07 | [.043, .05] |
| 1-factor model | with all factors loaded on one factor | $\chi^2(860)=3864.43$ | .61 | .59 | .092 | .1 | [.089, .095] |

Note: PS= Political skills, NE= Novelty elaboration, UC= Usefulness championing, NR= Novelty recognition, UR= Usefulness recognition, PF = paradoxical frame

Table 5 Descriptives, reliabilities, and intercorrelations of supervisor variables in study 1

| Variable | Mean | S D | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|--------------|------|--------|------|------|------|------|------|------|------|------|---|----|----|----|----|----|----|----|----|----|----|----|
| 1.Age | 2.27 | .99 | | | | | | | | | | | | | | | | | | | | |
| 2.Gender | .33 | .47 | .01 | | | | | | | | | | | | | | | | | | | |
| 3.Education | 2.86 | .77 | .42* | -.13 | | | | | | | | | | | | | | | | | | |
| 4.Experience | 3.14 | 1.20 | .53* | -.08 | .30* | | | | | | | | | | | | | | | | | |
| 5.Resource | 3.45 | 0.69 | -.01 | -.02 | -.07 | .11* | (.64 | | | | | | | | | | | | | | | |
| 6.Conformity | 3.46 | 0.69 | -.07 | .02 | -.02 | .05 | .52* | (.69 | | | | | | | | | | | | | | |
| 7.Presence | 3.48 | 0.98 | -.00 | -.02 | .04 | .03 | .39* | .43* | | | | | | | | | | | | | | |
| 8.VI | 3.50 | 0.72 | -.05 | -.03 | .01 | .08 | .52* | .52* | .44* | (.84 | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|------|----------|------------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------|--|--|--|
| 9.AD | 3.51 | 0.7 2 | -.17 ** | -.04 | -.04 | -.04 | .41 | .51* * | .39* * | .57* * | (60) | | | | | | | | | | | | | | |
| 10.OO | 3.52 | 0.7 9 | -.12 ** | -.05 | -.03 | .05 | .37* * | .43* * | .35* * | .46* * | .55* * | (60) | | | | | | | | | | | | | |
| 11.RC | 3.48 | 0.7 2 | -.11 * | .03 | -.06 | .03 | .44 | .46* * | .38* * | .50* * | .54* * | .43* * | (64) | | | | | | | | | | | | |
| 12.IC | 3.48 | 0.7 3 | -.07 * | .01 | -.11 * | .03 | .43* * | .50* * | .31* * | .46* * | .51* * | .42* * | .56* * | (62) | | | | | | | | | | | |
| 13.RP | 3.46 | 0.7 8 | -.03 * | .01 | -.01 * | .14* * | .37* * | .42* * | .24* * | .38* * | .40* * | .28* * | .41* * | .47* * | (60) | | | | | | | | | | |
| 14.PS | 3.48 | 0.5 6 | -.04 | -.06 | -.01 | .08 | .52* * | .57* * | .42* * | .55* * | .61* * | .55* * | .56 * | .54* * | .51* * | (89) | | | | | | | | | |
| 15.NE | 3.33 | 0.7 2 | -.14 ** | .02 | -.03 | -.02 | .36* * | .50* * | .27* * | .47* * | .57* * | .40* * | .48* * | .46* * | .38* * | .67* * | (60) | | | | | | | | |
| 16.UC | 3.25 | 0.6 4 | -.06 | .00 | -.01 | -.05 | .29* * | .34* * | .21* * | .36* * | .38* * | .30* * | .34* * | .32* * | .25* * | .46* * | .51* * | (66) | | | | | | | |
| 17.NR | 3.50 | 0.7 5 | .03 | -.00 | .07 | .14* * | .42* * | .45* * | .32* * | .44* * | .47* * | .38* * | .47* * | .47* * | .41* * | .55* * | .46* * | .25* * | (61) | | | | | | |
| 18.UR | 3.52 | 0.7 7 | -.02 | -.00 | .01 | .09 | .37* * | .44* * | .31* * | .46* * | .55* * | .43* * | .49* * | .50* * | .41* * | .58* * | .47* * | .36* * | .56* * | (85) | | | | | |
| 19.PF | 3.31 | 0.8 7 | -.08 * | .08 | -.00 | -.01 | .30* * | .36* * | .26* * | .30* * | .32* * | .23* * | .39* * | .35* * | .29* * | .39* * | .35* * | .32* * | .35* * | .36* * | (93) | | | | |
| 20.CR | 3.46 | 0.7 1 | -.14 ** | .07 | -.06 | -.03 | .44* * | .47* * | .35* * | .48* * | .55* * | .42* * | .59* * | .56* * | .43* * | .56* * | .47* * | .37* * | .49* * | .57* * | .62 ** | (73) | | | |

* $p < .05$, ** $p < .01$; two-tailed.

| Variable | Novelty elaboration | | Usefulness champion | | Novelty recognition | | Usefulness recognition | | Creativity Recognition | | |
|-----------------|---------------------|----------|---------------------|-----------|---------------------|----------|------------------------|----------|------------------------|----------|----------|
| | M1 | M2 | M3 | M4 | M5 | M6 | M7 | M8 | M9 | M10 | M11 |
| Constant | 3.45(.14) | .48(.20) | 3.25(.13) | 1.43(.22) | .72(.24) | .72(.24) | .40(.25) | .40(.25) | .93(.22) | .83(.22) | .72(.22) |

POLITICAL SKILLS AND CREATIVITY RECOGNITION

| Control variable | | | | | | | | | | | |
|------------------------------|-------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Age | -.16**(.04) | -.08(.03) | -.11**(.04) | -.05(.03) | .01(.04) | .01(.04) | -.02(.03) | -.02(.03) | -.04(.03) | -.04(.03) | -.03(.03) |
| Gender | -.01(.07) | .03(.05) | -.05(.07) | -.02(.06) | -.06(.06) | -.06(.06) | .07(.07) | .07(.07) | .06(.06) | .03(.06) | .04(.06) |
| Education | -.05(.05) | -.01(.04) | -.01(.04) | .03(.04) | .03(.04) | .03(.04) | .03(.04) | .03(.04) | -.03(.04) | -.04(.04) | -.04(.04) |
| Experience | .13**(.03) | .05(.03) | .09**(.03) | .04(.03) | .02(.03) | .02(.03) | .05(.03) | .05(.03) | -.01(.03) | -.02(.03) | -.02(.03) |
| Independent variable | | | | | | | | | | | |
| PS | | .73**(.05) | | .51**(.05) | .58**(.07) | .58**(.07) | .71**(.06) | .71**(.06) | .43**(.07) | .38**(.06) | .27**(.07) |
| Mediator | | | | | | | | | | | |
| NE | | | | | .18**(.06) | | | | .12**(.05) | | .06(.05) |
| UC | | | | | | | | .14**(.05) | | .11**(.05) | .10**(.05) |
| NR | | | | | | | | | .24**(.05) | | .15**(.05) |
| UR | | | | | | | | | | .34**(.04) | .28**(.05) |
| R² | .06 | .45 | .03 | .22 | .32 | .32 | .35 | .35 | .37 | .42 | .44 |
| adjustedR² | .05 | .45 | .02 | .21 | .31 | .31 | .34 | .34 | .36 | .41 | .42 |
| ΔR² | .05 | .40 | .02 | .19 | .26 | -.13 | .32 | .13 | .05 | .07 | .01 |
| F | 6.20 | 67.89 | 3.16 | 22.75 | 32.52 | 32.52 | 36.83 | 36.83 | 34.73 | 41.85 | 34.81 |

Notes: N = 415 individuals. Unstandardized coefficients are reported. Standard errors (SEs) are presented in brackets. Dashed lines indicate nonsignificant relationships. PS=Political skill, NE= Novelty elaboration, UC= Usefulness championing, NR= Novelty recognition, UR= Usefulness Recognition. ΔR^2 of Model 5 was compared with that of Model 1; ΔR^2 of Model 6 was compared with that of Model 2; ΔR^2 of Model 7 was compared with that of Model 3; ΔR^2 of Model 8 was compared with that of Model 4; ΔR^2 of Model 9 was compared with that of Model 6; ΔR^2 of Model 10 was compared with that of Model 8.

* $p < .05$, ** $p < .01$, two-tailed.

Table 7 Hierarchical Regression Analyses of Supervisor Data of Study 1

| Variable | Novelty recognition | | | Usefulness recognition | | | | Creativity Recognition | | | | |
|------------------|---------------------|----------|----------|------------------------|-----------|-----------|----------|------------------------|----------|-----------|-----------|-----------|
| | M1 | M2 | M3 | M4 | M5 | M6 | M7 | M8 | M9 | M10 | M11 | M12 |
| Constant | .34(.23) | .13(.24) | .12(.24) | .20(.23) | -.03(.24) | -.11(.25) | .35(.21) | .29(.21) | .27(.21) | -.08(.19) | -.00(.39) | -.25(.41) |
| Control variable | | | | | | | | | | | | |
| Age | .01(.04) | .02(.04) | .02(.04) | -.01(.04) | .00(.04) | .00(.04) | .00(.03) | .00(.03) | .00(.03) | -.03(.03) | -.03(.03) | -.03(.03) |

POLITICAL SKILLS AND CREATIVITY RECOGNITION

| | | | | | | | | | | | | |
|-------------------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Gender | -.15**(.06) | -.12(.06) | -.12(.06) | -.06(.06) | -.03(.06) | -.02(.06) | -.02(.06) | -.01(.05) | -.00(.05) | .07(.05) | .08(.05) | .07(.05) |
| Education | .04(.04) | .04(.04) | .04(.04) | .03(.04) | .03(.04) | .03(.04) | .03(.04) | .03(.04) | .03(.04) | .01(.03) | .01(.03) | .01(.03) |
| Experience | .03(.03) | .02(.03) | .01(.03) | .06**(.03) | .05(.03) | .04(.03) | -.01(.03) | -.02(.02) | -.02(.02) | -.03(.02) | -.02(.02) | -.03(.02) |
| Resource | .10(.06) | .07(.06) | .08(.06) | .00(.06) | -.03(.05) | -.03(.05) | .06(.05) | .07(.05) | .06(.05) | .06(.04) | .05(.04) | .06(.04) |
| Conformity | .10(.06) | .07(.06) | .06(.06) | .06(.06) | .03(.06) | .02(.06) | .03(.05) | .03(.05) | .03(.05) | -.02(.04) | -.02(.04) | -.02(.04) |
| Presence | .02(.04) | .01(.04) | .02(.04) | .01(.04) | .00(.04) | .00(.04) | .02(.03) | .02(.03) | .02(.03) | .01(.03) | .00(.02) | .01(.03) |
| VI | .06(.06) | .05(.06) | .04(.06) | .07(.06) | .05(.06) | .05(.06) | .04(.05) | .03(.05) | .03(.05) | .04(.04) | .05(.04) | .04(.04) |
| AD | .15**(.06) | .11**(.06) | .10(.06) | .27**(.06) | .23**(.06) | .23**(.06) | .16**(.05) | .11**(.05) | .11**(.05) | .10**(.04) | .14**(.05) | .10**(.05) |
| OO | .06(.05) | .02(.05) | .02(.05) | .09(.05) | .05(.05) | .04(.05) | .01(.04) | .00(.04) | .00(.04) | .03(.04) | .03(.04) | .03(.04) |
| RC | .11**(.06) | .09(.06) | .09(.06) | .12**(.06) | .10(.06) | .09(.06) | .22**(.05) | .21**(.05) | .20**(.05) | .14**(.04) | .15**(.04) | .10**(.05) |
| IC | .15**(.06) | .13**(.06) | .13**(.06) | .17**(.06) | .16**(.05) | .16**(.05) | .17**(.05) | .14**(.05) | .14**(.05) | .13**(.04) | .14**(.04) | .13**(.04) |
| RP | .12**(.05) | .09(.05) | .09(.05) | .12**(.05) | .07(.05) | .07(.05) | .06(.04) | .05(.04) | .05(.04) | .04(.04) | .05(.04) | .04(.04) |
| IV | | | | | | | | | | | | |
| PS | | .27**(.08) | .22**(.09) | | .31**(.08) | .28**(.08) | .12*(.06) | .05(.07) | .04(.08) | .04(.07) | .08(.07) | .03(.07) |
| Mediator | | | | | | | | | | | | |
| NE | | | .09**(.05) | | | | .02(.05) | | -.00(.05) | -.03(.05) | -.02(.05) | |
| UC | | | | | | .07*(.04) | | .06(.04) | .07*(.04) | .00(.04) | | .00(.04) |
| NR | | | | | | | .21**(.10) | | .20**(.10) | .03(.04) | .08(.09) | |
| UR | | | | | | | | .20**(.04) | .18**(.05) | .15**(.04) | | .12(.10) |
| Moderator | | | | | | | | | | | | |
| PF | | | | | | | | | | .30**(.03) | .33**(.10) | .25**(.11) |
| Interaction | | | | | | | | | | | | |
| NR* PF | | | | | | | | | | | -.01(.03) | |
| UR* PF | | | | | | | | | | | | .11**(.04) |
| R ² | .38 | .40 | .40 | .43 | .45 | .45 | .49 | .52 | .52 | .63 | .61 | .63 |
| adjusted R ² | .36 | .38 | .38 | .41 | .43 | .43 | .47 | .50 | .50 | .61 | .60 | .61 |
| ΔR ² | .38 | .02 | .00 | .43 | .02 | .00 | .11 | .07 | .03 | .11 | .12 | .11 |
| F | 19.12 | 18.97 | 17.90 | 22.94 | 23.02 | 21.65 | 24.10 | 26.98 | 24.05 | 35.08 | 34.94 | 37.06 |

Notes: N = 415 (415 employees rated by 58 supervisors). Unstandardized coefficients are reported. Standard errors are presented in brackets. Dashed lines indicate nonsignificant relationships. PS=Political skill, Presence = Presence of creative coworkers, NE= Novelty elaboration, UC= Usefulness championing, NR= Novelty recognition, UR= Usefulness recognition, RC= Radical creativity, IC = Incremental creativity, RP= Routine performance, OO= Outcome

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orientation, AD= Attention-to-details, VI= Values of innovation, PF= Paradoxical frame. ΔR^2 of Model 7 was compared with that of Model 3; ΔR^2 of Model 8 was compared with that of Model 6; ΔR^2 of Model 9 was compared with that of Model 7; ΔR^2 of Model 10 was compared with that of Model 9; ΔR^2 of Model 11 was compared with that of Model 7; ΔR^2 of Model 12 was compared with that of Model 8.

* $p < .05$. ** $p < .01$; two-tailed.

Table 8 Summary of PROCESS Bootstrapping results of the serial mediation model (Study 1)

| Effect type | Coefficient | SE | CI |
|---|-------------|-----|-------------|
| Direct Path | | | |
| Political skills → Novelty elaboration (H1a) | .69** | .05 | [.58, .80] |
| Political skills → Novelty recognition | .59** | .07 | [.44, .73] |
| Political skills → Creativity recognition | .43** | .07 | [.29, .57] |
| Novelty elaboration → Novelty recognition | .17** | .06 | [.06, .29] |
| Novelty recognition → Creativity recognition | .23** | .05 | [.14, .32] |
| Novelty elaboration → Creativity recognition | .13** | .05 | [.13, .23] |
| Political skills → Usefulness championing (H2a) | .53** | .05 | [.43, .63] |
| Political skills → Usefulness recognition | .71** | .06 | [.59, .84] |
| Usefulness championing → Usefulness recognition | .14** | .05 | [.04, .25] |
| Usefulness championing → Creativity recognition | .11** | .05 | [.01, .20] |
| Usefulness recognition → Creativity recognition | .33** | .04 | [.25, .42] |
| Indirect effects | | | |
| Political skills → Novelty elaboration → Novelty recognition (H1b) | .15** | .05 | [.05, .26] |
| Political skills → Novelty elaboration → Creativity recognition (H3a) | .11** | .05 | [.02, .20] |
| Political skills → Novelty recognition → Creativity recognition (H3c) | .13** | .03 | [.07, .20] |
| Political skills → Novelty elaboration → Novelty recognition → Creativity recognition(H3c) | .03** | .01 | [.01, .07] |
| Political skills → Usefulness championing → Usefulness recognition (H2b) | .08** | .03 | [.02, .14] |
| Political skills → Usefulness championing → Creativity recognition (H3b) | .06 | .03 | [-.01, .11] |
| Political skills → Usefulness recognition → Creativity recognition (H3d) | .24** | .04 | [.17, .32] |
| Political skills → Usefulness championing → Usefulness recognition → Creativity recognition (H3d) | .03** | .01 | [.01, .05] |

Note: N=415 individuals, CI= confident interval. Coefficients are unstandardized. Confidence intervals were estimated via PROCESS bootstrapping, 95% CIs were reported for direct and indirect effects.

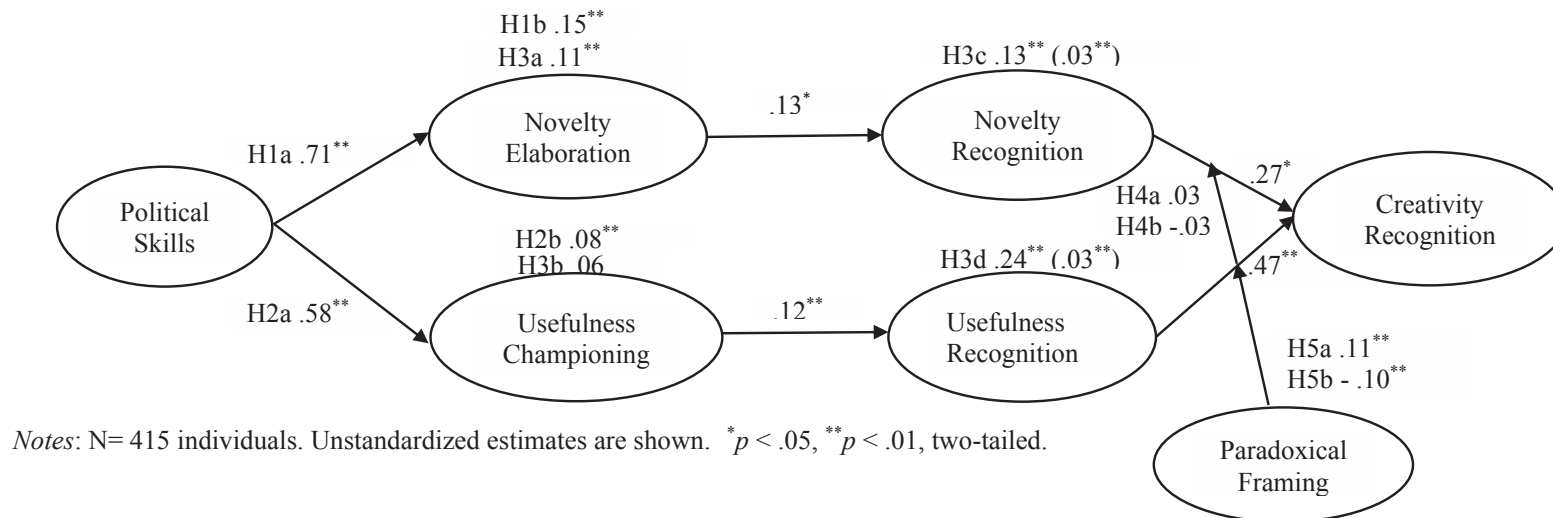
* $p < .05$, ** $p < .01$; two-tailed.

POLITICAL SKILLS AND CREATIVITY RECOGNITION

Table 9 Summary of hypotheses testing results

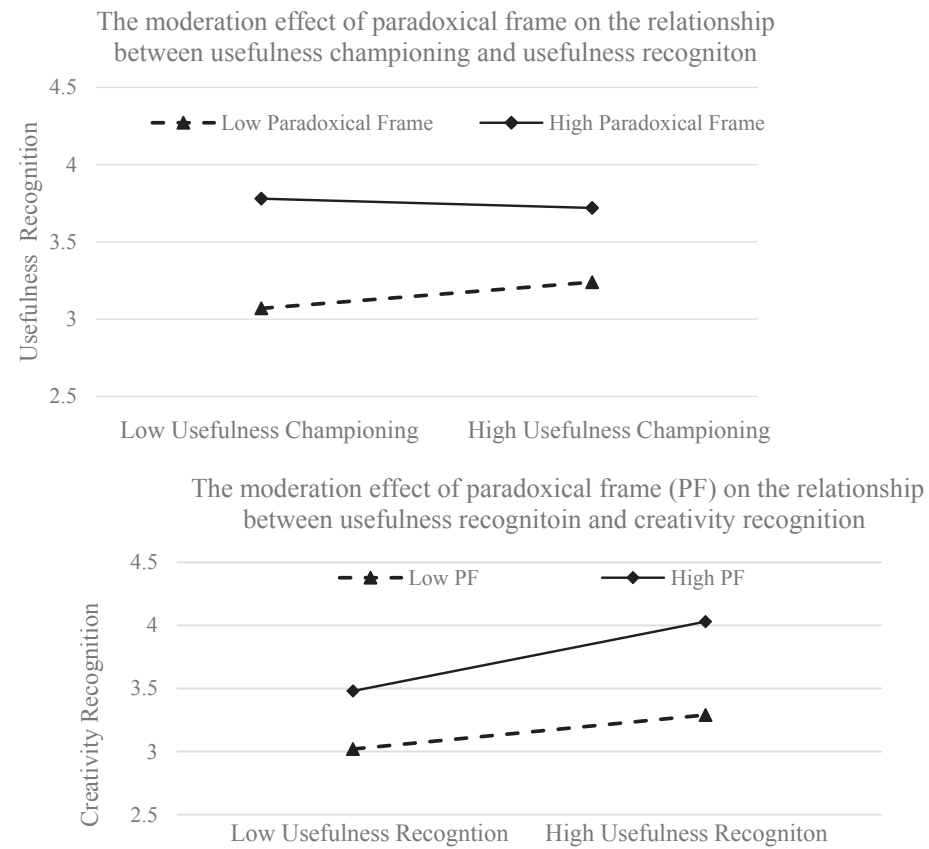
| Hypothesis | Testing result |
|---|---------------------|
| H1a. Political skills → Novelty elaboration | Supported |
| H1b. Political skills → Novelty elaboration → Novelty recognition | Supported |
| H2a. Political skills → Usefulness championing | Supported |
| H2b. Political skills → Usefulness championing → Usefulness recognition | Supported |
| H3a. Political skills → Novelty elaboration → Creativity recognition | Supported |
| H3b. Political skills → Usefulness championing → Creativity recognition | Rejected |
| H3c. Political skills → Novelty elaboration → Novelty recognition → Creativity recognition | Supported |
| H3d. Political skills → Usefulness championing → Usefulness recognition → Creativity recognition | Supported |
| H4a. Moderating effect of paradoxical frame on relationship between novelty recognition and creativity recognition | Rejected |
| H4b. Moderating effect of paradoxical frame on the indirect relationship between novelty elaboration and creativity recognition via novelty recognition | Rejected |
| H5a. Moderating effect of paradoxical frame on relationship between usefulness recognition and creativity recognition | Supported |
| H5b. Moderating effect of paradoxical frame on the indirect relationship between usefulness championing and creativity recognition via usefulness recognition | Partially Supported |

Figure 1 Structural equation modelling results of Study 1



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Figure 2 Plotting on the moderating effect of paradoxical frame



Stream 1: Mana Wahine Treaty Claims and
Redress: implications for organisations and
business

Mana Wahine Treaty Claims and Redress: implications for organisations and
business

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Stream 1: Mana Wahine Treaty Claims and Redress: implications for organisations and business

OVERVIEW

This paper relates to the Māna Wāhine Kaupapa Inquiry, a Treaty Claim before the Waitangi Tribunal. Te Tiriti o Waitangi, the Treaty of Waitangi in English, was signed between Māori and the British Crown on the 6th February 1840, after which New Zealand became a British Colony. Since 1975, with the creation of the Waitangi Tribunal, Māori have been able to lodge claims against the Crown relating to breaches of the Treaty. In 1985, the Tribunal was given the power to look retrospectively to 1840. Since then, thousands of claims have been lodged, most relating to the treatment of tribes. However, some relate to breaches that are multi-tribal. These are addressed as kaupapa claims.

According to the Waitangi Tribunal website, “The Tribunal’s kaupapa inquiry programme is designed to provide a pathway to hear nationally significant claim issues that affect Māori as a whole or a section of Māori in similar ways” (Waitangi Tribunal, ND, 1). There are multiple claims relating to Māori women, under the general title of mana wāhine, about which the Tribunal notes:

Wai 2700, the Mana Wāhine Kaupapa Inquiry, will hear outstanding claims which allege prejudice to wāhine Māori as a result of Treaty breaches by the Crown. These claims extend across many fields of Crown policy, practice, acts, and omissions, both historical and contemporary, and of related legislation, service provision, and State assistance.

Waitangi Tribunal (ND, 2)

The Mana Wāhine Kaupapa Inquiry, brings together more than 150 Claims, relating to grievance suffered by Māori women. The WAI2700 Claim was initiated on 20th December

Stream 1: Mana Wahine Treaty Claims and Redress: implications for organisations and business

2018, bringing together all previous claims under a single inquiry. Once initiated, there has followed a series of Waitangi Tribunal hearings, known as tuārapa, around the country over 2021 and 2022.

According to one of the legal firms representing claimants,

The Mana Wāhine Inquiry will hear claims which allege prejudice to wāhine Māori as a result of Treaty breaches by the Crown. These claims extend across many ambits of Crown policy, practice, acts and omissions, both historical and contemporary, and of related legislation, service provision and state assistance.

McCaw Lewis, 2021

The Minister for Women at the time, Julie Anne Genter, allocated special funding to the Mana Wāhine Kaaupapa Inquiry in 2019, to enable the research and hearings to begin. She is quoted as saying:

The Mana Wāhine Kaupapa Inquiry will be looking for opportunities to make early acknowledgements of problems and focus on what can be changed now and into the future to address injustice and inequality. The data confirms that wāhine Māori continue to have poorer social, economic, educational, employment, and health outcomes, compared to Pakeha women.

Genter, 2019

Stream 1: Mana Wahine Treaty Claims and Redress: implications for organisations and business

The primary purpose of this discussion is to critically explore the range of options the Crown might consider, if and when the Waitangi Tribunal finds for claimants. The Tribunal has the right to call upon the government to provide redress. As has occurred with other claims that have extended across many fields of Crown policy (e.g., Fisheries, Māori Language, Māori Broadcasting), the settlements have taken many years, provided for a complex range of redress, and required substantive legislative change.

One might ask then, what form of redress might best ameliorate the grievances that have negatively impacted on Māori women since 1840. To better address that question, we need to look at the grievances, and the context out of which those grievances arose.

CURRENT UNDERSTANDING

Prior to WAI 2700, the original claim (WAI 381) was lodged with the Waitangi Tribunal in July 1993, by a group of prominent Māori women. It stated that:

This claim concerns Crown laws, policies, practices, actions and omissions in relation to the interests and rights of wāhine Māori. The Claimants say that the Crown has denied the inherent mana of wāhine Māori and the role they play in the practice of tikanga as individuals and as iwi, hapū and whānau members.

Waitangi Tribunal, 2020

According to one of the original claimants, Ripeka Evans, WAI 381 was prompted by the removal of Dame Mira Szaszy from the shortlist of appointees for the inaugural Treaty of

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Waitangi Fisheries Commission in 1993. Her displacement, as the only woman, evoked a groundswell of support as well as distress from around the country, but particularly, the Maori Women's Welfare League, an organisation setup by Māori women, and formalised in 1951, to address the growing needs of Māori women, which were exacerbated during the urban migration in the post World War II era (Szászy, Rogers & Simson, 1993).

It should be no surprise that the original claimants included Presidents of the League, among them, Areta Koopu, (President in 1993); Dame Whina Cooper, the first League President, best known for leading the Māori Land March in 1975; and Dame Mira Szászy, one of the first Māori women to graduate with a university degree in 1945. Others, known throughout te ao Māori, as important and transformational leaders included: Dr Erihapeti Murchie, Dame Georgina Kirby, Violet Pou, Dame June Mariu, Hine Potaka, Aroha Rereti-Crofts being past Presidents of the League. They were joined by Ripeka Evans, Professor Papaarangi Reid, Donna Awatere-Huata, Lady Rose Henare, Katerina Hoterene, Teparā Mabel Waititi, and Kare Cooper-Tate. Ripeka Evans, Materoa Dodd, Tania Rangiheuea, Donna Awatere-Huata, Papaarangi Reid, Kathy Ertel, Dame Āreta Koopu, Dame Georgina Kirby, Miria Simpson, Moe Milne, and Rona Ensor led the original research for the Claim.

Some of the key themes that emerged from that research, and highlighted by Evans (2021) in her evidence to the Tribunal, included:

- (a) The whakamana of wāhine Māori present in tikanga Māori (traditional practice), te reo Māori (Māori language), and ātua wāhine (female ancestors and supernatural beings)

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- (b) The political power and leadership of wāhine Māori
- (c) The perversion of tikanga Māori by western patriarchy and the subsequent effects on the relationship between wāhine Māori, tāne Māori and tikanga Māori
- (d) The challenges of today's world on being wāhine Māori (in academia, politics, feminism, education, health, culture, law, science, and in the whānau)

Evans (2021) also highlights the ways that women chiefs were actively dissuaded from signing Te Tiriti o Waitangi, referring to four from the Far North, where Evans maintains tribal links. These are Takurua and Ana Hamu who were present and signed on 6th February at Waitangi. Marama and Ereonora signed at Kaitia the 28th April 1840. In particular she refers to Ereonora, who was married to the influential chief Nopera Pana-kareao, with both signing on the same day. Thus, the signing of Te Tiriti o Waitangi by wāhine Māori is clear evidence that they held the rangatiratanga (chieftainship), and mana (status) to do so. However, Evans also points to the Crown and its agents, actively trying to deny women that right. She refers to Te Pehi,

.. the daughter of the Ngāti Toa chief, Te Pehi, was not permitted to sign Te Tiriti because she was a woman. This restriction was imposed by colonial officials who did not recognise that women of rank represented the mana of their people. This was an early indication that relations between Māori women and the colonial state would be problematic.

Evans, 2021, p. 11

Taken today, these events show that Māori women have been, and continue to be, activists for change to improve the lives of Māori women and their whānau (families).

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RESEARCH QUESTION

The key question underpinning this research focuses on the kind of redress the Crown might confer, and the potential implications for government entities and the corporate sector, many of whom may be influenced by government policy and practice, e.g. parental leave (IRD, nd). Given that this Claim is moving towards the next phase of settlement, the pressing issue the Crown will face is how to provide redress to a significant proportion of the population, located around the country and offshore.

RESEARCH APPROACH

This study draws together literature relating to the Mana Wāhine Kaupapa Inquiry. It also incorporates findings from a chapter in a thesis, which focused on the role and status of Māori women in traditional society (Henry, 1995). The abridged version of that chapter was submitted as evidence to the tuāpapa hearing (Waitangi Tribunal regional hearing), held in Whangarēi in July 2021. These kernels of information inform a thought-piece, around the implications and potential impacts, of settlement of the Mana Wāhine suite of claims.

FINDINGS

The evidence to the Waitangi Tribunal (Henry, 1995) highlighted the status of wāhine Māori prior to Te Tiriti o Waitangi, in which they played equal and complementary roles, in the public, political, economic and social affairs of their communities. Extensive examples of what were termed gender complementarity, were identified. That is, the duality, which is reflected in ancient Māori cosmology, the duotheism of Ranginui, the sky father, and

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Papatūānuku, the earth mother. It was also recognised that early anthropologists, most of whom were male and European, were more used to dealing with patrilineality, and when societies were isolated, which did not conform to their ideas, they might ignore or overlook these examples all together (Keesing, 1975).

Davidson (1987) critiqued the historian S. Percy Smith, about whom she notes that he did not merely record tradition but was found to have edited material, to better reflect his own worldview. In effect, the power of writing and recording history passed to Māori men, because Pākehā ethnographers actively sought them out and employed them, thereby universalising their mātauranga (knowledge). Over time, the intrinsic rightness of certain ideas, such as Māori male supremacy, has come to be accepted as the norm (Henry, 1995).

The status of wahine Māori changed irrevocably on the 6th February 1840, when we became British citizens, at a time when the women of Britain, where, according to English common law, the head of the family, be they father or husband, who was in control of the household, whilst "women and children were chattels to be used and abused by the paterfamilias as he chose" (Mikaere, 1994, p 129).

It is not known when the Mana Wāhine Kaupapa Inquiry will conclude, or what the final report from the Tribunal will include. However, there are a range of forms of redress, which relate to other kaupapa claims. For example, the previously mentioned Te Reo Māori (WAI 11) was lodged in 1985, asking that the Māori language receive official recognition, because the Crown failed to protect te reo, a tāonga (something precious) which was guaranteed protection in Clause 2 of Te Tiriti.

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According to NZ History (updated 2022), “The Waitangi Tribunal found in favour of the claimants and recommended a number of legislative and policy remedies. Māori was made an official language of New Zealand under the Māori Language Act 1987. There are now many institutions, most set up since the 1980s, working to recover te reo”. Among these institutions are the Māori Language Commission, Taura Whiri i Te Reo, an autonomous Crown entity setup in 1987, which promotes te reo, and leads the government Māori language strategy; Te Māngai Pāho, established in 1994, a funding agency to support Māori language culture in broadcasting; Māori Television, a Treaty partnership between Māori and the Crown to produce and promote Māori language and culture.

If the Crown takes a similar approach, we might see a public and formal apology to wāhine Māori women; the formation of an autonomous Crown entity to promote and protect the status of Māori women, through publication of accurate history, education programmes, the selection of Māori women on Crown governance boards, programmes to address the ongoing inequities facing Māori women in terms of social, economic, educational, employment, and health outcomes. This will contribute to empowerment of Māori women, perhaps greater numbers of graduates and successful entrepreneurs, all of whom may become attractive partners and employees in the business sector. The challenge will be for government and corporate organisations to ensure they provide equity, protection and support for Māori women, which will, no doubt, have positive flow-on effects for all women in Aotearoa New Zealand.

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8. Business Processes, Innovation and Supply Chain

Fresh Produce Supply Chain Coordination with Option Contract under Uncertainty: Analyzing the Decision Strategies of Supplier and Buyer

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ABSTRACT

Fresh produce supply chains encounter challenges due to uncertain demand and supply, leading to poor coordination between suppliers and buyers, affecting the supply chain's performance. This study aims to develop a dyadic fresh produce supply chain structure and propose an option contract mechanism for improved coordination and performance. By reviewing the literature, we identify challenges faced by fresh produce supply chains and existing coordination mechanisms. We analyze decision strategies and determine optimal contract parameters. Using simulation, we evaluate the option contract's effectiveness in reducing costs and improving coordination. This study offers practical guidelines for fresh produce industry stakeholders and contributes to supply chain literature by introducing and assessing a novel coordination mechanism.

Keywords

Fresh produce supply chain, supply uncertainty, demand uncertainty, option contract, channel coordination.

INTRODUCTION

Fresh produce supply chains encounter various challenges due to uncertain demand and supply, leading to poor coordination and channel inefficiencies. This study proposes an option contract mechanism to enhance coordination in the fresh produce supply chain. The Indian Council of Agricultural Research (2016) reported significant crop losses during harvest, post-harvest operations, handling, and storage, highlighting the impact of yield uncertainty on the value distribution between customers and producers. Buyers face risks from both unpredictable consumer demand and uncertain yields, such as the case of stranded freshwater aquatic products in China due to heavy snow (Gurnani and Tang, 1999).

Previous research suggests that wholesale price contracts are insufficient for coordinating decentralized supply chains. Revenue-sharing contracts, similar to buyback contracts, have shown slight superiority in supply chain coordination (Cachon and Lariviere, 2005). However, option contracts have gained attention as a means of mitigating supply chain uncertainty, reducing the risk of demand uncertainty in agricultural supply chains (Chen et al., 2014). Many firms across various industries have adopted option contracts to address unpredictable demand, price fluctuations, and unreliable supplies (Ghalebeigi, 2015). It is evident that option contracts effectively mitigate uncertainties, improve coordination, and enhance supply chain operational effectiveness (Wang and Chen, 2017).

In this study, we propose an option contract mechanism to coordinate a dyadic fresh produce supply chain under uncertain demand and supply. Our mathematical model analyzes the decision-making strategies of the supplier and buyer, comparing the option contract mechanism to wholesale price contracts. The study contributes to the literature by providing practical guidelines for optimizing decision-making strategies and improving fresh produce supply chain performance.

RELATED LITERATURE

This paper focuses on the decision-making process and supply chain coordination in the presence of supply (or yield) and demand uncertainty. A literature review has been conducted on these topics.

Supply chain decision-making under yield uncertainty

Studies by [Li and Zheng \(2006\)](#), [Talay and Özdemir-Akyldrm \(2019\)](#), and [Wang \(2009\)](#) have investigated the impact of uncertain yield on supply chain decision-making. [Henig and Gerchak \(1990\)](#) explored the effect of yield uncertainty on production quantity, while [Wang and Gerchak \(1996\)](#) developed a production model to assess its impact on production decisions. [Dada, Petruzzi, and Schwarz \(2007\)](#) analyzed the impact of multiple reliable and unreliable suppliers on a buyer's ordering decisions using a newsvendor model. [Federgruen and Yang \(2008\)](#) proposed a method for buyer's supplier selection and order allocation based on demand and supply risks. [Deo and Corbett \(2009\)](#) discussed the influence of yield uncertainty on the influenza vaccine market. [Kazaz and Webster \(2011\)](#) examined the impact of trading costs and risk preferences on production quantity and retail price decisions in an agricultural market with uncertain supply. [Fang and Shou \(2015\)](#) investigated the influence of supply uncertainty and competition intensity on order quantity, finding that reliable suppliers and less reliable competitors' suppliers led to larger orders. Strategies for mitigating yield risk and reducing losses have also been explored. [Tang and Kouvelis \(2011\)](#) demonstrated the effectiveness of supplier diversification in controlling yield uncertainty. [Giri \(2011\)](#) analyzed the trade-off between cost and reliability when selecting suppliers. [He and Zhao \(2016\)](#) explored supply chain coordination with a seller facing uncertain production and a buyer facing uncertain demand. They found that traditional contracts like wholesale price, buyback, or revenue sharing fail to coordinate both supplier production and retailer ordering decisions. To improve coordination, they proposed a Vendor-Managed Inventory (VMI) contract where the buyer provides a production cost subsidy to the seller. They concluded that consignment VMI alone cannot achieve coordination. [Lei Xie, Junhai Ma, and Mark Goh \(2021\)](#) introduced a distinct assumption where the buyer provides the contract to the seller, with the seller offering payment for every unsold product. They also addressed yield uncertainty by assigning

responsibility to the buyer instead of the seller. Their findings suggested that the effectiveness of the buyback contract depends on the stability of the yield rate and the bargaining power between the parties involved in the supply chain.

Channel coordination in fresh produce supply chain

There are various well-established contracts in the literature for coordinating supply chains, each with its own unique coordination mechanism. These contracts include the wholesale price contract (van Ryzin and Mahajan, 1999; Yu, Chen, and Yu, 2006), wholesale (quantity) discount contract (Lal and Staelin, 1984), two-part tariff contract (Ingene and Parry, 1995a, 1995b), revenue-sharing contract (Cachon and Lariviere, 2005), buyback contract (Pasternack, 1985), and sales-rebate contract (Taylor, 2002).

Research suggests that the effectiveness of these contracts depends on specific circumstances. For example, under demand disruptions, Qi, Bard, and Yu (2004) used a wholesale discount contract to coordinate a supply chain. Hua, Zhang, and Xu (2011) employed a revenue-sharing contract to enhance the performance of the seller and buyer in a product design problem. Chen and Bell (2011) demonstrated the coordination effectiveness of a two-part tariff contract by profit allocation. Other studies have explored different combinations and variations of contracts. Hu, Lim, and Lu (2013) proposed a coordination mechanism combining a revenue-sharing contract and additional reimbursement. Chen, Zhang, and Sun (2012) used a two-part tariff contract for profit allocation. Tang and Kouvelis (2014) presented a pay-back-revenue-sharing contract. He and Zhao (2012) examined a three-echelon supply chain with uncertain demand and supply for the buyer, as well as uncertain supply for the seller.

Furthermore, recent studies have focused on specific supply chain contexts. Shi et al. (2022) investigated a two-level supply chain with yield uncertainty and demand uncertainty, finding that an amended revenue-sharing agreement can improve profitability and coordinate the supply chain. Jia et al. (2022) examined a supply chain for fresh fruit incorporating option contracts and freshness-related demand. Yan et al. (2022) explored supply chain coordination requirements in the context of fresh produce with option contracts under only demand uncertainty. In contrast, this paper proposes an option contract as an alternative to coordinate the fresh produce supply chain under uncertain yield and demand.

Our study considers a more complex scenario where the buyer faces both uncertain demand and supply, providing a more realistic representation of the multiple risks in the supply chain.

Research gaps

1. Limited studies address the coordination of single supplier and retailer in the fresh produce supply chain facing uncertain supply and demand.
2. While previous research has examined purchasing decisions and pricing strategies with buyback and revenue-sharing contracts under uncertain yield and demand, the use of option contracts in the fresh produce supply chain remains relatively unexplored.

MODEL DESCRIPTION

In our study, we examine a single period dyadic fresh produce supply chain consisting of a supplier and a retailer. The retailer purchases fresh goods from the supplier and sells them to end customers, facing uncertain demand and supply. Due to the short selling season and long lead time, the retailer cannot restock inventory once the season starts.

We compare two contract types: the wholesale price contract, which only involves the wholesale price parameter, and the call option contract, which includes the option price and exercise price parameters. Under the call option contract, the retailer purchases call options to have the right (but not the obligation) to buy fresh produce from the supplier at a predetermined exercise price after demand is observed. The supplier guarantees the supply, ensuring it meets or exceeds the retailer's order quantity. The wholesale price contract exposes the retailer to risks such as unsold products, price volatility, and supply unreliability, while the call option contract provides price stability, supply flexibility, and reliability. Additionally, any excess product can be used to fulfil the retailer's unfilled demand.

To account for the features of fresh produce, we introduce the stochastic recovery factor $\beta \in [\underline{\beta}, \overline{\beta}]$ to represent the quantity loss of $(1 - \beta)$ due to various factors like handling, packing, and transportation, etc. A smaller value of β , i.e., a larger value of $(1 - \beta)$ implies a higher loss, resulting in fewer products reaching the retailer. We assume that the recovery factor (β) follows a uniform

distribution, considering it as an essential and practical aspect of our model. Table 1 summarizes the notations used in this paper.

Table 1. Notations

| Notation | Description |
|-----------------------------|--|
| D | The stochastic demand that the retailer faces during the selling season, which is continuous and differentiable. |
| $f(x), F(x)$ | Probability density, Cumulative distribution function, of D |
| μ_x | Mean of stochastic demand D |
| β | The stochastic recovery factor of fresh produce $\beta \in [\underline{\beta}, \overline{\beta}]$ |
| $g(\beta), G(\beta)$ | Probability density, Cumulative distribution function of β |
| $\mu_\beta, \sigma_\beta^2$ | Mean, Variance of stochastic recovery factor β |
| w | Unit wholesale price of fresh produce through the firm order |
| p | Retailer's unit retail price |
| o, e | Unit option and exercise price |
| c | Unit production price of |
| q_w | Retailer's wholesale order quantity |
| q_o | Retailer's option order quantity |
| q_{s_w} | Supplier's wholesale production quantity for fresh produce |
| q_{s_o} | Supplier's option production quantity for fresh produce |
| q_c | Supplier's production quantity for a centralized fresh produce supply chain |
| $E(\pi_{s_c})$ | Centralised supply chain's expected profit |
| $E(\pi_{s_w})$ | Supplier's expected profit under the wholesale contract |
| $E(\pi_{R_w})$ | Retailer's expected profit under the wholesale contract |
| $E(\pi_{s_o})$ | Supplier's expected profit under the option contract |
| $E(\pi_{R_o})$ | Retailer's expected profit under the option contract |

RESULTS AND DISSCUSIONS

Centralized Fresh Produce Supply Chain

We initially consider a centralized fresh produce supply chain as a benchmark model for evaluating the performance of subsequent contracts. In this fresh produce supply chain, the optimal

production and maximum expected profit can be achieved. The centralised fresh produce supply chain's expected profit is:

$$\begin{aligned} E(\pi_{s_c}) &= E(p \min\{D, \beta q_c\} - cq_c) \\ &= p \int_{\underline{\beta}}^{\overline{\beta}} \left[\beta q_c - \int_0^{\beta q_c} F(x) dx \right] dG(\beta) - cq_c \end{aligned}$$

From above, the total sales revenue minus production costs in a centralised fresh produce supply chain, equals the expected profit.

Proposition 1. *The expected profit in the centralised fresh produce supply chain $E(\pi_{s_c})$ is concave in q_c and the optimal production q_c^* is uniquely decided by*

$$\int_{\underline{\beta}}^{\overline{\beta}} (1 - F(\beta q_c^*)) \beta dG(\beta) = \frac{c}{p}$$

Optimal production in the centralised fresh produce supply chain is shown in [Proposition 1](#). Which shows that supply and demand uncertainty both have an impact on the optimal production.

Lemma 1. *With random demand D following uniform distribution (\underline{x}, \bar{x}) and the uncertain supply with mean μ_β and variance σ_β^2 . From proposition 1 the optimal production quantity q_c^* is derived as follows:*

$$q_c^* = \frac{\bar{x}(\mu_\beta p - c) + c\underline{x}}{p(\sigma_\beta^2 + \mu_\beta^2)}$$

Decentralized Fresh Produce Supply Chain

Wholesale price contract

In contrast to the centralized fresh produce supply chain, in the decentralized fresh produce supply chain setting, the retailer places a certain order quantity with the supplier by paying a certain price. In this setting, both the supplier and the retailer aim to maximize their individual expected profits,

which can lead to a suboptimal outcome, as the sum of their expected profits may be lower than that in the centralized model due to double marginalization. Specifically, the supplier's expected profit is given by:

$$\begin{aligned} E(\pi_{s_w}) &= E(w \min\{D, \beta q_{s_w}\} - c q_{s_w}) \\ &= w \int_{\underline{\beta}}^{\bar{\beta}} \left[\beta q_{s_w} - \int_0^{\beta q_{s_w}} F(x) dx \right] dG(\beta) - c q_{s_w} \end{aligned}$$

As demonstrated in above equation, the first term represents the supplier's revenue from fulfilling the retailer's order while the second term denotes the production cost. The supplier can optimize their production quantity to maximize their profit.

Then we can obtain following proposition.

Proposition 2. *In the decentralized model, the supplier's optimal production quantity $q_{s_w}^*$ is uniquely solved by :*

$$\int_{\underline{\beta}}^{\bar{\beta}} (1 - F(\beta q_{s_w}^*)) \beta dG(\beta) = \frac{c}{w}$$

The optimal production in the decentralised supply chain for wholesale contract is shown in [Proposition 2](#). Above equation shows that supply and demand uncertainty both have an impact on the optimal production.

Lemma 2. *With random demand D following uniform distribution (\underline{x}, \bar{x}) , and the uncertain supply with mean μ_β and variance σ_β^2 . From proposition 2 the optimal production quantity $q_{s_w}^*$ derived as follow*

$$q_{s_w}^* = \frac{\bar{x}(\mu_\beta w - c) + c \underline{x}}{w(\sigma_\beta^2 + \mu_\beta^2)}$$

Next, we focus on the retailer's profit maximization decision. The expected profit function of the retailer can be expressed as:

$$E(\pi_{R_w}) = E(p \min\{D, \beta q_w\} - w q_w)$$

$$= p \int_{\underline{\beta}}^{\bar{\beta}} \left[\beta q_w - \int_0^{\beta q_w} F(x) dx \right] dG(\beta) - w q_w$$

Given the predetermined wholesale price w , the retailer can optimize their order quantity to maximize their profit. Then we can obtain following proposition.

Proposition 3. *In the decentralized model, the retailer's optimal order quantity q_w^* is uniquely solved by :*

$$\int_{\underline{\beta}}^{\bar{\beta}} (1 - F(\beta q_w^*)) \beta dG(\beta) = \frac{w}{p}$$

The optimal order in the decentralised supply chain for wholesale contract is shown in [Proposition 3](#).

Lemma 3. *With random demand D following uniform distribution (\underline{x}, \bar{x}) , and the uncertain supply with mean μ_β and variance σ_β^2 . From proposition 3 the optimal order quantity q_w^* derived as follow*

$$q_w^* = \frac{\bar{x}(\mu_\beta p - w) + w \underline{x}}{p(\sigma_\beta^2 + \mu_\beta^2)}$$

Option contract

The option contract, which is used to hedge the supply chain's demand risk and coordinate a decentralized supply chain. Call option contract is the most used kind of option contract. It allows the retailer to reorder when market demand exceeds the initial order quantity to reduce the underage risk. Then, the expected profit function of the fresh produce supplier, with the call option contract is:

$$\begin{aligned} E(\pi_{s_o}) &= E(e \min\{D, \beta q_{s_o}\}) + (o - c)q_{s_o} \\ &= e \int_{\underline{\beta}}^{\bar{\beta}} \left[\beta q_{s_o} - \int_0^{\beta q_{s_o}} F(x) dx \right] dG(\beta) + (o - c)q_{s_o} \end{aligned}$$

Above equation reveals the supplier's profit function, in which the first term represents the supplier's sales revenue and the second term represents revenue gained from retailer minus cost of producing products. Given the predetermined exercise and option price the supplier can optimize their production quantity to maximize their profit. Then we can obtain following proposition

Proposition 4. *In the decentralized model, the supplier's optimal production quantity $q_{s_o}^*$ is uniquely solved by:*

$$\int_{\underline{\beta}}^{\overline{\beta}} (1 - F(\beta q_{s_o}^*)) \beta dG(\beta) = \frac{(c-o)}{e}$$

The optimal production quantity in the decentralised supply chain for option contract is shown in [Proposition 4](#).

Lemma 4. *With random demand D following uniform distribution (\underline{x}, \bar{x}) , and the uncertain supply with mean μ_β and variance σ_β^2 . From proposition 4 the optimal production quantity $q_{s_o}^*$ derived as follow*

$$q_{s_o}^* = \frac{\bar{x}(\mu_\beta e - c + o) + (c - o)\underline{x}}{e(\sigma_\beta^2 + \mu_\beta^2)}$$

Then, the expected profit function of the fresh produce retailer, considering supply and demand uncertainty, with the call option contract

$$\begin{aligned} E(\pi_{R_o}) &= E((p - e) \min\{D, \beta q_o\} - o q_o) \\ &= (p - e) \int_{\underline{\beta}}^{\overline{\beta}} \left[\beta q_o - \int_0^{\beta q_o} F(x) dx \right] dG(\beta) - o q_o \end{aligned}$$

The above equation reveals the retailer's profit function, in which the first term represents the retailer's sales revenue and the second term is cost of purchasing products from the supplier. Given the predetermined exercise and option price the retailer can optimize their order quantity to maximize their profit. Then we can obtain following proposition

Proposition 5. *In the decentralized model, the retailer's optimal order quantity q_o^* is uniquely solved by*

$$\int_{\underline{\beta}}^{\overline{\beta}} (1 - F(\beta q_o^*)) \beta dG(\beta) = \frac{o}{(p - e)}$$

The optimal order in the decentralised supply chain for option contract is shown in Proposition 5. Equation shows that supply and demand uncertainty both have an impact on the optimal order.

Lemma 5. *With random demand D following uniform distribution (\underline{x}, \bar{x}) , and the uncertain supply with mean μ_β and variance σ_β^2 . From proposition 5 the optimal order quantity q_o^* derived as follow*

$$q_o^* = \frac{\bar{x}(\mu_\beta(p-e)-o)+ox}{(p-e)(\sigma_\beta^2+\mu_\beta^2)}$$

Fresh produce supply chain coordination

From proposition 4 the supplier's expected profit is concave in q_{s_o} we can find optimal production value $q_{s_o}^*$ given by $\int_{\underline{\beta}}^{\bar{\beta}} (1 - F(\beta q_{s_o}^*)) \beta dG(\beta) = \frac{(c-o)}{e}$ For centralized fresh produce supply chain the optimal production value can be find from $\int_{\underline{\beta}}^{\bar{\beta}} (1 - F(\beta q_{s_w}^*)) \beta dG(\beta) = \frac{c}{w}$ Which is $q_{s_w}^*$ from [proposition 1](#). Fresh produce supply chain coordinated if $q_{s_w}^* = q_{s_o}^*$ i.e., $\frac{c}{p} = \frac{(c-o)}{e}$ and we gain $e = \frac{p(c-o)}{c}$.

Numerical Example

This section presents numerical examples to demonstrate the decision-making process of the fresh produce supplier regarding wholesale and option pricing contract. We consider a uniformly distributed stochastic demand $D \in (500, 1500)$. To perform and explore various scenarios, we modify the stochastic recovery factor β . The remaining parameters will be held constant according to the following specifications: $p = 50, o = 9, e = 24, w = 31, \mu_\beta = 0.75$.

Table 2. Supplier optimal production quantity

| Variance of Recovery Factor (σ_β^2) | Wholesale Contract | Option Contract |
|--|--------------------|-----------------|
| 0.01 | 1401.60 | 1892.28 |
| 0.25 | 987.59 | 1333.33 |

Table 3. Retailer optimal order quantity

| Variance of Recovery Factor (σ_β^2) | Wholesale Contract | Option Contract |
|--|--------------------|-----------------|
| 0.01 | 882.09 | 1360.42 |
| 0.25 | 621.53 | 958.57 |

Table 2 demonstrates that as the standard deviation of the recovery factor increases, the option contract exhibits a greater number of optimal production quantities compared to the wholesale contract case. Similarly, Table 3 illustrates that with an increase in the standard deviation of the recovery factor, the option contract shows a higher number of optimal order quantities compared to the wholesale contract case. This indicates that when faced with uncertainty in the recovery factor, opting for the option contract proves to be more beneficial in determining the optimal quantity.

These findings suggest that under conditions of uncertainty regarding the recovery factor, the option contract outperforms the wholesale contract in terms of determining the optimal production and order quantities. This highlights the advantage of utilizing option contracts when the recovery factor is subject to variability, as it provides more flexibility and adaptability in managing the production and ordering decisions.

CONCLUSION

Retailers, also known as buyers, play a critical role in connecting producers and consumers within the supply chain. However, in assuming this role, retailers face risks stemming from uncertainties associated with both producers and consumers. Our research focuses on understanding the intricate dynamics among retailers, producers, and consumers in the context of fresh produce supply chain management. Specifically, we examine optimal ordering decisions in both centralized and decentralized supply chains, taking into account the impacts of uncertain supply and demand factors under wholesale and option price contracts.

Our findings demonstrate that uncertainties in supply and demand have significant implications for optimal order decisions in both types of supply chains. In the centralized fresh produce supply chain, where a single entity coordinates the entire supply chain, the optimal order quantity is influenced by uncertainties in both supply and demand. Conversely, in the decentralized fresh produce supply chain with a wholesale price contract, retailers tend to adopt a conservative ordering approach due to the risks associated with uncertain demand. However, the introduction of option price contracts leads to more aggressive ordering behaviour by retailers, capitalizing on the flexibility provided by options to coordinate the fresh produce supply chain.

The findings underscore the significance of considering various factors, including supply and demand uncertainties, and contract types when making optimal ordering decisions. This study contributes to the existing literature on supply chain management and offers practical implications for enhancing the efficiency and effectiveness of fresh produce supply chains.

Limitations and Future Research Direction

It is important to note some limitations of our current model. Firstly, our analysis only considers a single supplier and a single retailer, while real-world scenarios often involve multiple retailers in the fresh produce supply chain. Thus, a key future research direction is to explore supply chains involving multiple fresh produce retailers and different market structures. Additionally, our analysis is based on a one-period setting, and there is potential for further research to extend the analysis to a multi-period setting, allowing for a more comprehensive understanding of long-term dynamics and decision-making in fresh produce supply chains.

APPENDIX

Proof of Proposition 1. The second order derivative of the centralized fresh produce supply chain expected profit function is : $\frac{\partial^2 E(\pi_{sc})}{\partial q_c^2} = -p \int_{\underline{\beta}}^{\bar{\beta}} f(\beta q_c) \beta^2 dG(\beta) < 0$. Hence, the centralized fresh produce supply chain expected profit function is concave in centralized fresh produce supply chain optimal production quantity. Thus, from the first order derivative,

$\frac{\partial E(\pi_{sc})}{\partial q_c} = p \int_{\underline{\beta}}^{\bar{\beta}} [1 - F(\beta q_c^*)] \beta dG(\beta) - c = 0$, we get the equilibrium result as mentioned in this proposition. \square

Proof of Proposition 2. The second order derivative of the supplier's expected profit function is :

$\frac{\partial^2 E(\pi_{sw})}{\partial q_{sw}^2} = -w \int_{\underline{\beta}}^{\bar{\beta}} f(\beta q_{sw}) \beta^2 dG(\beta) < 0$. Hence, the supplier's expected profit function is concave in supplier's optimal production quantity. Thus, from the first order derivative,

$\frac{\partial E(\pi_{sw})}{\partial q_{sw}} = w \int_{\underline{\beta}}^{\bar{\beta}} [1 - F(\beta q_{sw}^*)] \beta dG(\beta) - c = 0$, we get the equilibrium result as mentioned in this proposition. \square

Proof of Proposition 3. The second order derivative of the retailer's expected profit function is :

$$\frac{\partial^2 E(\pi_{R_w})}{\partial q_w^2} = -p \int_{\underline{\beta}}^{\bar{\beta}} f(\beta q_w) \beta^2 dG(\beta) < 0. \text{ Hence, the retailer's expected profit function is concave in}$$

retailer's optimal order quantity. Thus, from the first order derivative,

$$\frac{\partial E(\pi_{R_w})}{\partial q_w} = p \int_{\underline{\beta}}^{\bar{\beta}} [1 - F(\beta q_w^*)] \beta dG(\beta) - w = 0, \text{ we get the equilibrium result as mentioned in this}$$

proposition. \square

Proof of Proposition 4. The second order derivative of the supplier's expected profit function is :

$$\frac{\partial^2 E(\pi_{s_o})}{\partial q_{s_o}^2} = -e \int_{\underline{\beta}}^{\bar{\beta}} f(\beta q_{s_o}) \beta^2 dG(\beta) < 0. \text{ Hence, the supplier's expected profit function is concave in}$$

supplier's optimal production quantity. Thus, from the first order derivative,

$$\frac{\partial E(\pi_{s_o})}{\partial q_{s_o}} = e \int_{\underline{\beta}}^{\bar{\beta}} [1 - F(\beta q_{s_o}^*)] \beta dG(\beta) + (o - c) = 0, \text{ we get the equilibrium result as mentioned in}$$

this proposition. \square

Proof of Proposition 5. The second order derivative of the retailer's expected profit function is :

$$\frac{\partial^2 E(\pi_{R_o})}{\partial q_o^2} = -(p - e) \int_{\underline{\beta}}^{\bar{\beta}} f(\beta q_o) \beta^2 dG(\beta) < 0. \text{ Hence, the retailer's expected profit function is}$$

concave in retailer's optimal order quantity. Thus, from the first order derivative,

$$\frac{\partial E(\pi_{R_o})}{\partial q_o} = (p - e) \int_{\underline{\beta}}^{\bar{\beta}} [1 - F(\beta q_o^*)] \beta dG(\beta) - o = 0, \text{ we get the equilibrium result as mentioned}$$

in this proposition. \square

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**Gendered Displays: Managers' Use of Negative Emotion
to Influence Employee Behaviour**

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Gendered Displays: Managers' Use of Negative Emotion to Influence Employee Behaviour

ABSTRACT: *Despite large (albeit siloed) literatures on influence tactics and emotion displays in the workplace, surprisingly little is known how managers use negative emotion displays to influence employee behaviour. We interviewed 42 Australian managers about their experiences using emotion to change an employee's problematic behaviour. Thematic analysis demonstrates that managers used three types of emotion display: positive, serious (mild negative), and negative (strong negative). Male managers usually experienced success across all three display types: Employees changed their behaviour and employee-manager relationships were maintained. But female managers were almost twice as likely to be unsuccessful, deploying low clarity expressions that weakened their emotion display's signalling function. Our findings suggest emotion expression and gender stereotypes operate as boundary conditions on influence tactic effectiveness.*

Keywords: Emotion Displays, Gender, Interpersonal Communication, Influence Tactics, Leadership, Management

My manager is one of these people that has dead set no emotion, no face at all. He's amazing [but] he is just one of these people, you can't read him ... there is no emotion. It's really difficult. (Mia, interviewee)

Managers' emotion displays can be strong information signals, communicating managers' expectations to employees and influencing employees' attitudes, judgements, and behaviours (Côté & Hideg, 2011; Keltner & Haidt, 1999; Rafaeli & Sutton, 1989). But when researchers investigate how managers address problematic employee behaviour, the typology of managers' tactics (rational persuasion, exchange, inspirational appeal, etc.) rarely refers to the emotion display (positive, negative, or somewhere in between) that accompanies the manager's communication.

Some research indicates when leaders want to motivate employee behaviour, *negative* emotion displays are particularly powerful management tools. Project managers believe expressing anger motivates employees to complete projects more effectively (Lindebaum & Fielden, 2010), and military leaders use anger displays to focus subordinate attention and elicit desired behaviour (Lindebaum, Jordan, & Morris, 2015). However, female leaders experience significantly worse negative consequences when they show anger than male leaders (Brescoll & Uhlmann, 2008; Lewis, 2000; Schaubroeck & Shao, 2012). And women know it. In interviews, women say that they perceive less freedom to express anger in their workplace roles; they describe the outcomes resulting from anger

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less positively than men (Davis, LaRosa, & Foshee, 1992; Gibson, Schweitzer, Callister, & Gray, 2009). So, while anger has the potential to be effective, women may feel constrained to show it. Brescoll's (2016) work on the gender stereotypes of emotion argues that female leaders can be penalised for even minor or moderate displays of emotion. But being emotionally *unexpressive* may also result in penalties because unemotional women are seen as 'failing to fulfill' their stereotypical 'warm, communal role as women' (Brescoll, 2016, p. 241). If women are unable to express even mild negative emotion, how do these constraints affect the day-to-day realities of organisational life?

Lindebaum and Jordan (2012, p. 1028) drew attention to 'the disjuncture' between researchers' examination of an emotion variable and workers' enactment of the same emotion in practice. Experimental research investigating the outcomes that result from negative emotion displays generally uses actors to produce standardised stimuli (Brescoll & Uhlmann, 2008; Côté, Hideg, & Van Kleef, 2013; Lewis, 2000; Van Kleef et al., 2009). However, actors are trained to override the naturally occurring psychological dissonance that managers might experience when they violate stereotypes to meet role responsibilities. Interview research on emotion tends to focus on distinct emotions like anger or disappointment (Gibson et al., 2009; Lindebaum & Fielden, 2010). Managers are able to describe discrete emotions when prompted by interview questions, but their responses may not capture the full range of emotions they experience or try to display. Our research investigates how and when managers use emotion to change employee behaviour, and whether female and male managers have different experiences with the same types of displays.

METHODS

Qualitative interviews were used to gain insights from Australia-based managers working in supervisory roles across a range of industries. We used physical and virtual flyers, supplemented by snowball sampling (Strauss & Corbin, 1998), to recruit interviewees. Forty-two semi-structured 60-minute audio recorded interviews were conducted with managers from a range of jobs including HR & Finance Manager, Grocery Store Manager, and Manager Water Science. Women represented 69 per cent ($n = 29$) of the sample, and 90 per cent ($n = 38$) of participants identified as Caucasian. Almost 60 per cent ($n = 27$) of managers were over 40 years of age, and nearly 80 per cent ($n = 31$) had at least an

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undergraduate education. The mean management or supervisory experience of participants was 14 years (*SD* = 8.04) ranging from one year to 35 years. Sixty-nine per cent of managers (*n* = 29) were in middle management roles or higher with 90 per cent (*n* = 38) of the sample working full-time. The highest percentage of participants worked in Health (31%) and Education (29%) sectors.

Interview questions focussed on identifying the emotion display managers used to influence employee behaviour and the outcomes that resulted. The protocol invited a manager to describe a pivotal conversation in which they attempted to influence an employee’s behaviour. We used an open-ended question (‘tell me about a time when you needed an employee to change their behaviour’) so managers could tell their stories in the way that made sense to them. Because emotions are displayed through verbal (words, tone and pitch) and nonverbal (body language) cues (DePaulo & Friedman, 1998; Ekman & Rosenberg, 1997; Jang & Elfenbein, 2015; Rafaeli & Sutton, 1989), we probed for details about how managers enacted their displays in facial expressions, body language, and words. We asked managers for ‘a visual metaphor, an image that comes to mind or a scene from a movie that represents how you were feeling’. Finally, we asked a series of outcome questions: ‘did you get the change you were looking for?’, ‘has there been any effect on your working relationship with that employee?’ and ‘were there any unexpected outcomes?’ In this study we were interested in managers’ lived experiences in how they use emotions — especially negative emotions — to change employee behaviour.

Guided by the method used by Pratt, Rockmann, and Kaufmann (2006) and Sandhu and Kulik (2018), analysis proceeded by categorising the raw data into first-order themes, abstracting and consolidating the empirical themes into second-order conceptual categories, and bringing the conceptual categories together into theoretical dimensions. Figure 1 illustrates the process.

Insert Figure 1 about here

Coding of manager emotion displays was guided by Ekman’s (Ekman, 1993; Ekman & Rosenberg, 1997) distinction between verbal and nonverbal cues. Verbal cues include vocal tone (talking quietly, talking assertively, etc.) and emotive statements that label the emotion (‘I’m happy’,

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‘This is so disappointing’, etc.). Nonverbal cues include facial expression (smiling, frowning, etc.) and body language (crossed arms, fists on table, etc.). We grouped managers’ emotion displays into three types: positive, serious and negative. Positive displays are differentiated from the serious displays and negative displays by *valence*. The serious displays and negative displays do not include positive emotions and are differentiated from each other by *intensity*. Specifically, the serious display category encapsulates mild negative emotions related to being strict or stern but deliberately not a strong negative display, while the negative display encapsulates strong negative emotions that are related to being angry or disappointed. We used managers’ descriptions of their ‘emotion expressiveness’, ‘expectations’, and ‘repeated attempts’ (first-order codes) to generate second-order conceptual categories that captured concepts related to the content of the influence display (‘fully expressed/muted display’, ‘direct/indirect verbal strategy’) and the context of the influence display (‘few/many previous influence attempts’). These were then aggregated to the theoretical dimensions ‘emotion expression’, ‘verbal strategy’, and ‘influence cycles’, respectively.

The outcomes were identified using the same process. First-order codes about the ‘manager-employee relationship’ generated second-order category labels (‘improved’, ‘stayed the same’, ‘diminished’) and aggregated to the theoretical dimension ‘relationship impact’. First-order codes about the ‘employee behaviour change’ generated second-order category labels (‘full behavioural change’, ‘partial/no behavioural change’ and aggregated to ‘problem success’. In our presentation of the findings, we compare managers who achieved full behaviour change in employees (‘successful’) and managers who did not achieve full behaviour change (partial or no change: ‘unsuccessful’). Table 1 presents the managers based on their emotion display and the outcomes they achieved.

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FINDINGS

I don’t think there’s anything wrong with emotion at work ... a lot of [managers] just struggle with showing emotion. (Roy, interviewee)

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As shown in Table 1, regardless of the emotion display they chose, male managers were almost always successful in changing employee behaviour. But for female managers, the probability of success was cut in half; in all three emotion display categories, female managers were as likely to fail as they were to succeed in changing the employee's behaviour.

Research on gender-based stereotype violations suggests that negative emotion displays are agentic behaviours aligned with male stereotypes (Eagly & Karau, 2002; Heilman, 2001). Therefore, it is perhaps unsurprising that women were less successful than men in wielding negative emotion. However, the data in Table 1 are unexpected in two other respects. First, female managers were also less successful than men in using positive displays (even though positive displays are stereotype-congruent for women) and in using serious displays (even though serious displays should be less severe violations of gender stereotypes than negative displays). Second, although less successful than their male counterparts, some female managers were still successful in using serious (five managers) and negative (five managers) emotion displays. Overall, the patterns in Table 1 suggest that women are not failing to change employee behaviour because they choose the wrong emotion displays. The patterns suggest a more subtle explanation for women's lower success rates: they might be using the same emotion display as men, but are wielding it differently, with different consequences.

Positive Display: The Friendly Invite

When positive displays (friendliness and smiles) were successful, managers created space for the employee to own the problem or the solution: '[It was] just a friendly pleasant chat ... I [was] trying to get her buy in' (Sarah, Positive Display, Full Change). Positive displays were particularly effective when there was no urgency: 'It wasn't like an incident just happened and I went straight in to deal with it ... I took my time' (Charles, Positive Display, Full Change). Positive displays maintained or even improved relationships: 'She is [like] my lieutenant ... I knew I would have no issue with her and me' (Patrick, Positive Display, Full Change).

Positive displays were not always successful, especially for female managers. Female managers persisted with positive displays despite accumulating evidence that the employee's behaviour was not budging: 'It became a broken record ... the constant [display of] empathy had just

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sucked the life out of everybody’ (Brianna, Positive Display, No Change); and ‘We have this conversation a few times ... and repeated phone calls of similar conversations ... you have to be persistent, friendly and empathise ... but then it [the performance problems] would come up again’ (Cathy, Positive Display, Partial Change).

Serious Display: The Firm Request

When serious displays (sternness, frowning) were successful, managers motivated employees to pick up their game. Serious displays focused employee attention when previous friendly invitations had gone unheeded: ‘We had casual chats, very impromptu ... [but] she’s heard this [feedback] before ... now this has to be more of a forthright conversation ... my tone and my demeanour was more serious’ (Jacob, Serious Display, Full Change); ‘The few earlier conversations were much more friendly ... if I’d taken kinda the same tone all the way through, I don’t think he would have got it’ (Melissa, Serious Display, Full Change).

Serious displays were effective when managers let their emotion openly show on their faces: ‘She knew straightaway, ‘oh shit’. It was a serious face ... a furrowed brow ... frowning’ (Shaun, Serious Display, Full Change); ‘It’s a pretty serious face, I probably look a little bit ashen because I feel really uncomfortable ... but there was a formal complaint about her behaviour, and I needed to make her aware before [her behaviour] got worse’ (Lauren, Serious Display, Full Change). Serious displays helped managers emphasize the undesirable consequences of their employees’ behaviour and identify ways to meet their role expectations: ‘I am saying ‘look this cannot go on, these are the consequences’ ... I acknowledged what great work he has been doing, but if this carries on the consequences could be going through to the future’ (Scott, Serious Display, Full Change); ‘You set it quite black and white, that if it [the behaviour] doesn’t improve, this is where it’s going to get to, it’s going down the performance [management] path ... people also take it a little more seriously’ (Emma, Serious Display, Full Change).

Managers who changed employee behaviour with serious displays managed to maintain positive relationships with employees: ‘It was fantastic ... no, it didn’t change at all’ (Scott, Serious Display, Full Change). Some managers even felt their relationships improved: ‘It was better, the

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respect was there, he was more respectful and understanding and engaged' (Robert, Serious Display, Full Change); 'Yeah it did [change], how could it not? She took me more seriously, it got a little more distant, but it was respectful, and I wanted it professional' (Margot, Serious Display, Full Change).

However, unsuccessful female managers tended to deploy serious displays only after a history of problematic behaviour: 'We've talked about [his behaviour] a lot ... it had become a battle of wills ... in hindsight I should have said something earlier' (Selena, Serious Display, No Change); 'After his probation, it went downhill ... so, this was within the first 12 months of him being here, and it's been two years' (Regina, Serious Display, No Change). Then, despite intending to use a serious display, female managers muted their expressions. They displayed neutral or blank faces rather than serious ones: '[I'm] not pissed off or angry ... but not my general self, you know, not warm, but probably very neutral much more neutral than I would normally be' (Amanda, Serious Display, No Change); 'I tried to keep [my emotion] pretty low key ... yeah, probably would be more neutral, professional ... [my face] was pretty blank' (Tracey, Serious Display, No Change). And instead of explicitly presenting their own expectations, female managers persisted with inviting employees to initiate change: 'I just kept repeating myself ... and trying to encourage him to come up with other solutions [to solve his behavioural problem] ... it didn't solve anything' (Olga, Serious Display, No Change); 'I thought if I just spoke about it [the employee's behaviour] without going the extra mile [of talking about what will happen next] ... maybe he'll go, 'okay and let's move on', but it got worse' (Selena, Serious Display, No Change).

When managers were unsuccessful in changing employees' problematic behaviour, the relationship deteriorated: 'I would not say I have the best working relationship with him ... I document everything, the thought of actually speaking to him direct, I just don't want to go there' (Regina, Serious Display, No Change); 'Deep down I would have loved if the guy resigned to be honest, because I'd rather not work with him ... I don't trust him' (Selena, Serious Display, No Change).

Negative Display: The Hard Tell

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Negative displays (anger, disappointment) were successful in two situations: when managers used it as a quick strike or to switch gears. In a quick strike, managers reacted immediately and clearly communicated that the employee's behaviour must change immediately: 'My intention was to send the fear of God into him, that he would have no more chances, that bullying is not acceptable ... he apologised. I thought, that's the first time I've ever heard him apologise' (Troy, Negative Display, Full Change). To switch gears, managers 'upped the ante' and emphasised that only immediate compliance would head off undesirable consequences: 'She knew I was pissed ... we had a number of conversations leading up to this ... I said, so because this has happened ... we are about to start a [performance management] plan ... by the end of that night, she had [rectified the problem]' (Jolene, Negative Display, Full Change). Managers who successfully used negative displays always described fully expressing the emotion on their faces, in their specific gestures, and in their general demeanour: 'He would have seen anger, no question. I looked at him straight in the eye, it was really direct ... I said, I will not tolerate that behaviour [and] it really stopped, there was such a cut off' (Malcom, Negative Display, Full Change); 'I think she might have seen in my face [I was] a little bit pissed off with her. She accepted it then, and we did talk about it' (Jenna, Negative Display, Full Change).

Managers usually reported that negative displays improved working relationships. Sometimes negative displays brought the manager and employee closer together: 'We became really good mates ... it generated respect ... he was one of the people I got along best with from that point on because he knew that there was no shroud ... we had a great working relationship' (Malcom, Negative Display, Full Change); 'I didn't feel that we had a really solid working relationship [before] but we were okay, but after that, we had trust ... I view our relationship now as one of the best working relationships I have' (Jolene, Negative Display, Full Change). But sometimes negative displays improved relationships by creating distance: 'I'm always professional, polite ... we'll say good morning ... but I just keep that distance so that he knows that I'm watching him, so it's a subliminal message of control to let him know that he's still on notice' (Troy, Negative Display, Full Change).

Unlike successful managers, unsuccessful female managers were reluctant to express anger or disappointment directly. They tried to maintain a neutral face, but they leaked frustration: 'The look

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on my face, yeah it spoke of laboured frustration because that's what I would've been feeling ... it was just like yeah, again!?' (Abigail, Negative Display, No Change); 'I was friendly at the beginning, I thought he'd forgotten ... no, you didn't forget, you're doing it on purpose ... I'm showing my frustration but he's, 'why are you persisting with it, you know I'm not going to do it?' (Brenda, Negative Display, No Change). When managers decided that employees were unable or unwilling to change, their negative displays became half-hearted: 'There was just no getting through to her, there was no influencing her' (Abigail, Negative Display, No Change); 'I thought I was dealing with a different type of issue, and not actually something embedded in someone's behaviours, that this is who they are ... and we all know that now' (Josie, Negative Display, Partial Change). Ultimately, female managers who were unsuccessful with negative displays experienced difficult working relationships: 'The relationship was okay, but that was an effort because I do not respect this person ... any emotion you could think of, all of the bad ones, I felt towards this person' (Abigail, Negative Display, No Change); 'It's very challenging ... [the relationship] didn't really change, no, nor did I expect it to ... the next time I spoke to him was a routine catch up, and it was like the conversation hadn't happened' (Brenda, Negative Display, No Change).

DISCUSSION

Our analysis identified several *How* factors that impact the effectiveness of emotion displays as influence tactics. Successful managers (both male and female) leveraged high clarity displays in which the intended emotion was openly visible on their faces, and they verbalised direct statements about their expectations and/or the consequences if employee behaviour did not change. In contrast, unsuccessful managers (almost always female) delivered low clarity displays characterised by muted (neutral, blank) facial expressions and failed to present expectations or consequences.

We also identified *When* managers would move between emotion displays over a series of influence attempts. Male managers were not always successful on their first attempts, but they were more likely to switch to tougher displays after failed influence attempts. They upped the ante and switched from a positive display to a serious display, or from a serious display to a negative display. Although some female managers made a quick switch, the majority did not. Unsuccessful female

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managers persisted with their display choices despite accumulating evidence that employee behaviour was not changing; they looped back over the same conversations time and again.

We found that distinct *How* and *When* configurations were associated with manager success in changing employee behaviour. Male managers almost exclusively used high clarity emotion displays with quick switches to change their employee's behaviour. And although some female managers acted the same way, more female managers used low clarity displays in persistent loops and were unable to achieve full change. The strong gender effect in these findings prompts us to question why so many female managers engage in ineffective emotion displays and to consider the practical implications for managers, organisations, and researchers.

What's Wrong with Neutral Displays?

Successful managers knew that the look on their face would authentically set the 'meaning frame' (Lanigan, 2022, p. 279) and focus their employee's attention on the manager's desired outcome. Aligning with the social functional perspective (Van Kleef, 2009, 2014), a manager's fully expressed emotion made it clear to the employee that their own behaviour had generated the manager's displeasure. When managers fully expressed a negative emotion (anger, disappointment, etc.), employees could rapidly identify the emotion and correctly infer the manager's level of dissatisfaction. However, a neutral face limits the expression markers (Ekman & Friesen, 1975) available to employees for emotion identification; the display fails to focus the employee's attention because the employee is not accurately interpreting the manager's intention. Further, when the neutral facial display does not match the message, as when a manager repeats an earlier conversation about a problem behaviour without intensifying their emotion display, the display may be seen as inauthentic (Côté & Hideg, 2011). Displays are likely to be perceived as inauthentic when managers engage in response-focused surface acting, an emotion regulation strategy in which managers feel one way, but publicly express another (Gross, 1998; Hochschild, 1983). In our study, the tendency to mute face expressions and use neutral or blank faces in their influence attempts were particular to female managers.

Why Do Women use Neutral Displays?

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Female managers' low clarity muted emotion displays may be a learned behavioural response, a strategic attempt to avoid the backlash that arises from stereotype violations. The expectation that women are (and should be) warm and friendly is a robust feature of the feminine stereotype (Fiske, Cuddy, Glick, & Xu, 2002). The cultural phenomenon of 'resting bitch face', in which women are derided for a resting face that is not naturally shaped with a smile (Hester, 2019), is a prime example of the societal pressure women are under to always be seen as 'nice'. Therefore, a failure to display positive emotion is a stereotype violation, and stereotype violations often attract punishment (Brescoll & Uhlmann, 2008; Lewis, 2000; Schaubroeck & Shao, 2012). By the time women come into management roles, the reluctance to fully express even mild negative emotion is likely to be instinctive behaviour.

In contrast, being nice is not a feature of the masculine stereotype. The male stereotype values competence and negative emotion displays align with agentic behaviour (Eagly & Karau, 2002; Fiske et al., 2002; Heilman, 2001). Men are less likely to have experienced a history of sanctions for negative emotion display. When they come into management roles, they are able to fully express negative emotions or switch to strong negative emotions as the situation requires. The gender contrasts in our data demonstrate the value of applying a gender lens to understanding the effectiveness of influence tactics.

Practical Implications

Based on our research, it might be tempting to adopt a 'fix the women' approach (Kolb, 2009). We could advise female managers to practice their negative displays — to display negative emotions more frequently and more directly. But that advice fails to recognize the costs of failed display attempts for female managers and for their organisations. Managers who were unable to change employee behaviour experienced deteriorating work relationships, team disharmony, and plummeting self-confidence. Over the long run, repeated ineffective negative displays could create a toxic workplace (Lawrence, 2008).

Instead, we advise organisations to focus on developing a context in which both men and women can express authentic emotions, including the occasional display of strong negative emotions.

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One important element is psychological safety — the freedom of expression and the feeling of safe interpersonal risk-taking (Frazier, Fainshmidt, Klinger, Pezeshkan, & Vracheva, 2017). Organisations can deliver interpersonal communication training so that female managers learn to recognise situations that require negative emotion displays, gain confidence displaying negative emotion to employees, and overcome their own psychological resistance to expressing negative emotion. Recognising that female managers are routinely judged harshly for appropriate but stereotype-violating negative emotion displays, organisations can review the systems through which repercussions manifest as career damage. Finally, organisations should review their human resource policies and procedures to ensure that they support managers in their efforts to direct employee behaviour toward organisational goals.

Future Research Agendas

Our research focused on the manager's perspective on using emotion displays. Research on emotion displays usually emphasises positive and negative (Koning & Van Kleef, 2015; Van Kleef et al., 2009). However, we found that many female managers deliberately choose neutral displays. Neutral emotion displays need to be recognised as an influence tactic and included in investigations of display effectiveness. Further, we encourage future research to incorporate an employee perspective. Managers can explain the forces that drive or constrain their emotion display choices, but subordinates could help us to understand how those emotion displays — especially neutral displays — are being interpreted. Finally, we encourage future research on emotion displays to use diverse samples. Our participants identified as women and men; they did not use a non-binary/third gender option that we made available to them. Further, the majority of our sample identified as White/Caucasian. However, cultural norms influence both the display and interpretation of emotional displays (Frijda & Mesquita, 1994). A more diverse sample might yield more variations in emotion displays and identify additional forces that make emotion displays effective influence tactics.

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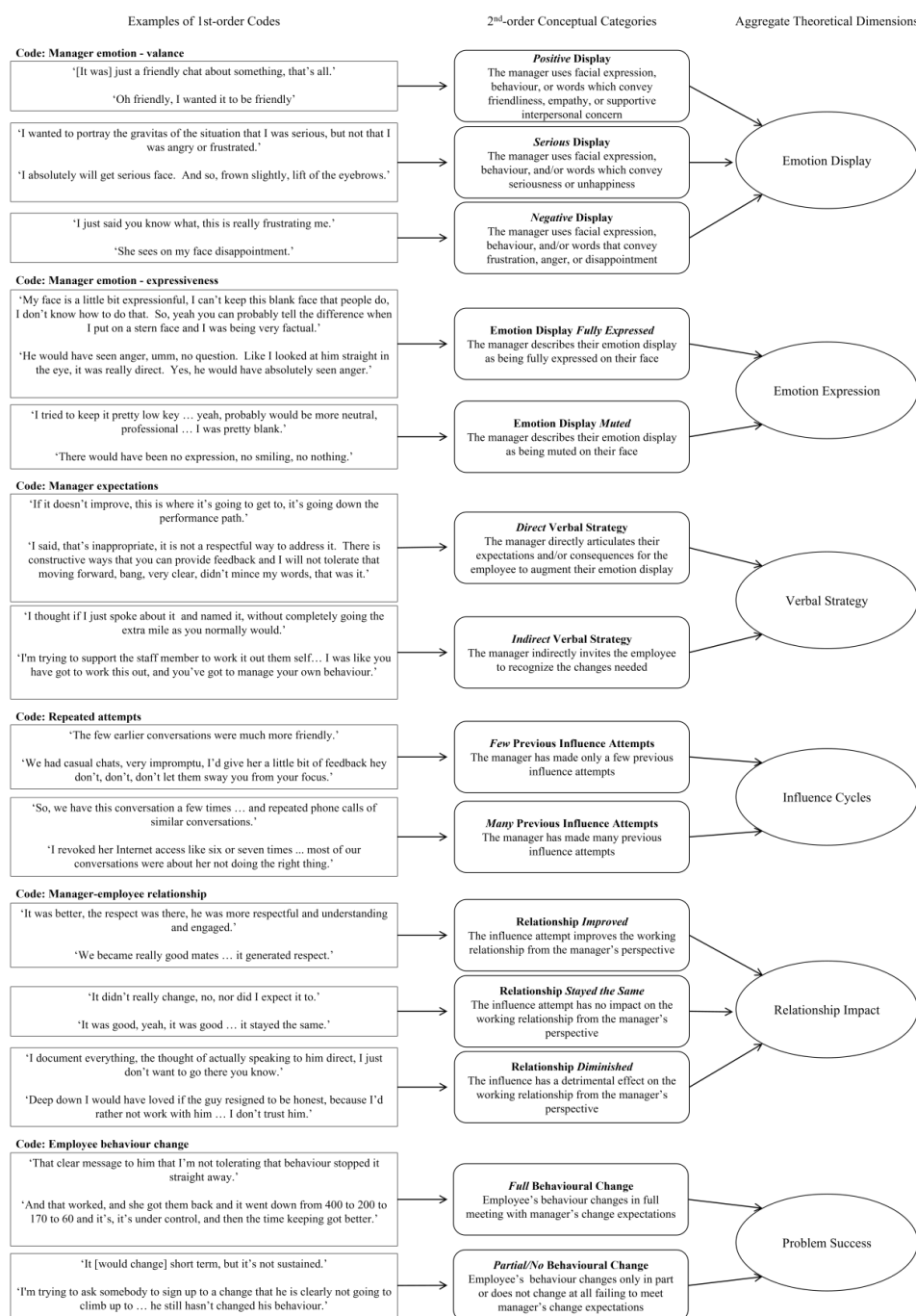
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Table 1: Emotion Displays, Gender and Problem Success

| Male Managers (<i>n</i> =13; bold) - Female Managers (<i>n</i> =29; italics) | | | | |
|--|---|---|--|--|
| Behaviour Change Outcome | Positive Display (6) The Friendly Invite | Serious Display (22) The Firm Request | Negative Display (14) The Hard Tell | |
| Successful | Full Change | Charles Patrick <i>Samantha</i> <i>Sarah</i> | Shaun Jackson Jacob Scott Robert <i>Melissa</i> <i>Lauren</i> <i>Margot</i> <i>Emma</i> <i>Tessa</i> | Marco Malcom Troy Roy <i>Mia</i> <i>Jenna</i> <i>Maureen</i> <i>Hannah</i> <i>Jolene</i> |
| | Partial Change | <i>Cathy</i> | Henry <i>Sylvia</i> <i>Juliet</i> <i>Rosemary</i> <i>Wanda</i> <i>Jennifer</i> | Perry <i>Josie</i> |
| | No Change | <i>Brianna</i> | <i>Regina</i> <i>Selena</i> <i>Amanda</i> <i>Tracey</i> <i>Sophia</i> <i>Olga</i> | <i>Abigail</i> <i>Jane</i> <i>Brenda</i> |
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Figure 1: Data Structure



3. Sustainability and social issues

Conceptualising the sustainability integration through the lens of strategic orientation: A multiple theory approach.

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3. Sustainability and social issues

Conceptualising the sustainability integration through the lens of strategic orientation: A multiple theory approach.

ABSTRACT: *The literature has widely discussed sustainability integration within business organisations. However, mere integration may not support the companies to gain a higher level of sustainability performance outcomes. While stakeholders pressure the companies to integrate sustainability practices, organisations show different levels of integration and different performance effects. Hence, exploring managers' intention to integrate sustainability is timely. Consequently, this paper broadly conceptualises and extends the current understanding of the relationship between the stakeholder pressures for sustainability and the sustainability integration within the organisation and internal decision-making through sustainability orientation lens using two theories and a comprehensive strategic orientation taxonomy. Further, it emphasises the significance of strategic orientation for responding to broader stakeholders and integrating them within internal decision-making to contribute to long-term sustainable development.*

Keywords: Sustainability, Strategic orientation, Institutional theory, Sustainability control system

INTRODUCTION

Even though business organisations are critical for global development, some of their activities are criticised for creating social and environmental sustainability issues (Schaltegger, Lüdeke-Freund, & Hansen, 2016; Schaltegger & Wagner, 2011). However, long-term sustainable development cannot be achieved without the support of organisations (Slacik, Grub, & Greiling, 2022). Recently, sustainability has become a key topic in the organisational strategic agenda as well as a critical social issue that broader stakeholders increasingly pressure the companies to consider the environmental and social impacts of their business activities within the business organisation and internal decision-making (Corsi & Arru, 2020; Gond, Grubnic, Herzig, & Moon, 2012). While many companies now increasingly implementing sustainability practices within business organisations and decision-making, they demonstrate diverse levels of sustainability integration and sustainability performance outcomes (Dyllick & Muff, 2016; Gunarathne & Lee, 2019; Jabbour & Santos, 2006). Therefore, how sustainability integration can be expanded with effective approaches has not been well-explored yet. Therefore, this paper provides a literature review and a theoretical conceptualisation for answering the recent calls (Bastini, Getzin, & Lachmann, 2022; Ditillo & Lisi, 2016; Ghosh, Herzig, & Mangena, 2019) and to address the main

question of ‘what approaches can business organisations adopt to integrate sustainability to contribute to long-term sustainable development materially?’

Even though organisations implement diverse sustainability practices, all these practices cannot guarantee equal and higher levels of sustainability performance (Kuckertz & Wagner, 2010). Hence examining sustainability integration from managers’ strategic focus is warranted Ghosh et al. (2019). Despite few studies examining environmental sustainability integration, the social sustainability perspective is largely negligent (Gunarathne & Lee, 2019; Jabbour, 2010; Jabbour., Oliveira., & Soubihia., 2010). Thus, managers’ strategic intention seems crucial in effective and proper balance of social and environmental sustainability integration and contributing to long-term sustainable development. In literature, little is known about how sustainability practices are integrated into organisational practices and internal decision-making (i.e., sustainability control system) from a strategic orientation perspective (Bastini et al., 2022; Ditillo & Lisi, 2016; Dyllick & Muff, 2016; Ghosh et al., 2019; Gunarathne & Lee, 2019). Consequently, this paper has two objectives; (1) Discuss the recent literature and theoretical lenses appropriate to examine sustainability integration within organisational practices and internal decision-making, and (2) Propose an extended conceptualisation to examine stakeholders’ interests for sustainability within organisation and decision-making using crucial and limitedly explored perspective namely ‘strategic orientation’.

As such, this paper examines the role of strategic orientation as a determinant to embedding institutional interests in sustainability within the organisation, which in turn influence to implement sustainability control system (SCS). Consequently, the study adopts two theoretical lenses; institutional theory and sustainability control system theory (DiMaggio & Powell, 1983; Simons, 1995), to achieve study objectives. In literature, the studies to comprehensively investigate sustainability orientation as a strategic approach to bridge stakeholder expectations and sustainability integration by implementing SCS have yet to be fully recognised. Hence, the following literature review conceptualises the integration of stakeholder’s social and environmental sustainability interests within organisational practices and strategies from strategic orientation lens. Hence firstly, institutional theory (DiMaggio &

Powell, 1983) is discussed to explain external pressure for sustainability integration within organisational practices whereas SCS theory (Simons, 1995) is discussed to examine the adoption of SCS as an effective approach include stakeholders interests in sustainability integration within internal decision making (Dyllick & Muff, 2016; Schaltegger & Burritt, 2018; Windolph, Dorli, & Schaltegger, 2014a; Windolph, Schaltegger, & Herzig, 2014b). Adding to this, the current understanding of sustainability integration is extended with the adoption of strategic orientation perspective (Kuckertz & Wagner, 2010). Finally, a new conceptualisation is proposed to include broader stakeholder interest for sustainability within SCS through the lens of strategic orientation using a comprehensive orientation taxonomy (Azzone & Bertelè, 1994; Bui & de Villiers, 2017; Jabbour & Santos, 2006) for managing sustainability to make effectively contribute to long-term sustainable development.

LITERATURE REVIEW

Corporate social and environmental sustainability commitments have gained increasing attention from broader stakeholders worldwide, and they demand tangible sustainability performance outcomes with greater transparency (de Villiers, Low, & Samkin, 2014). Hence, integrating sustainability practices within organisational disclosures and business activities is inadequate unless they are used in everyday decision making and control (Corsi & Arru, 2020). Recent studies have started examining the integration of sustainability commitments within organisational practices and managerial decision-making (i.e., Sustainability control system) as a response to both internal and external pressures leading to gain sustainability performance outcomes (Corsi & Arru, 2020; Wijethilake & Ekanayake, 2018). Effective sustainability integration and management is the key to achieve sustainable development goals and other sustainability objectives (Bansal, 2005; Gond et al., 2012). Business organisations integrate sustainability mainly due to external transparency and internal performance management (Corsi & Arru, 2020; Lueg & Radlach, 2016). Despite many prior studies exploring how corporations respond to internal and external pressure for sustainability integration, the influence of different strategic intentions to integrate sustainability has not been fully recognised (Ditillo & Lisi, 2016; Ghosh et al., 2019). Therefore, this literature review proposes a novel conceptualisation to explore sustainability integration and extent its understanding through the lens of strategic orientation. Firstly, the broader stakeholder

pressure for sustainability integration is discussed through the lens of institutional theory (DiMaggio & Powell, 1983) as a more comprehensive and widely accepted behavioural theory.

Institutional theory

Nowadays, the early contribution of institutional theory by DiMaggio and Powell (1983) is widely accepted to examine management accounting (Scapens, 2012), sustainability management and organisational behaviour patterns (Wijethilake & Ekanayake, 2018; Windolph et al., 2014a). This theory outlines how businesses might increase their capacity to expand and endure in competitive contexts by gratifying a larger circle of stakeholders and social actors (Bansal, 2005; Beddewela & Fairbrass, 2016; de Villiers et al., 2014). According to institutional theory, organizations tend to become more similar due to external pressures from institutions called homogenization or “isomorphism” (DiMaggio & Powell, 1983). Hence, changes in organizational structure are mainly driven by bureaucratic processes and other forms of organizational transformation rather than solely by competition or the pursuit of efficiency (DiMaggio & Powell, 1983). There are three institutional isomorphism pressures: coercive, normative, and mimetic.

Coercive isomorphism for sustainability

Coercive isomorphism is a political pressure that appears as explicit regulative processes which lead to gaining social legitimacy by complying with the rules set to guarantee the companies’ integration of sustainability (DiMaggio & Powell, 1983). It directly influences organisational activities (Wijethilake & Ekanayake, 2018; Wijethilake & Appuhami, 2017), and organizations might interpret these pressures as coercive or even as an invitation to engage in collusion (Bansal, 2005; Gunarathne & Lee, 2019).

Normative isomorphism for sustainability

Normative pressure for sustainability stems from professional bodies and industry associations (Bansal, 2005) in the form of standards and values (Corsi & Arru, 2020). DiMaggio and Powell (1983) define it as “the collective struggle of members of an occupation to define the conditions and methods of their work, to control “the production of producers,” and to establish a cognitive base and legitimation for their occupational autonomy” (p. 152). Industry type seems to be a critical factor in determining sustainability practices (Bansal, 2005; DiMaggio & Powell, 1983) because they may introduce industry-

specific standards and practices that organisations in that industry are expected to comply with (Wijethilake & Ekanayake, 2018).

Mimetic isomorphism for sustainability

Mimetic pressure refers to organizations that seek to imitate others' practices to respond to uncertainty (DiMaggio & Powell, 1983). According to this isomorphism, organisations with ambiguous goals, poor technologies, unclear solutions or symbolically uncertain environments may model themselves on other organisations (DiMaggio & Powell, 1983). Thus, memetic pressure can use to operate an organisation that is acceptable by other similar organisations to face uncertain and unclear circumstances (Gunaratne & Lee, 2019; Wijethilake & Ekanayake, 2018).

Understanding institutional pressure for sustainability integration within organisations and internal decision-making (SCS).

The institutional theory explains how organisational fields can influence to embed of sustainability within organisations, such as in external reporting and business practices (Jabbour, 2010; Jabbour & Santos, 2006; Jabbour. et al., 2010) and internal decision-making (Corsi & Arru, 2020). While prior studies examined the influence of institutional theory directly on sustainability control system (Corsi & Arru, 2020; Wijethilake & Ekanayake, 2018), this conceptualisation paper adopts it to examine sustainability integration within organisational practices directly and sustainability control system indirectly, which can lead effective sustainability management.

Sustainability integration facilitates sustainability management, which involves the integration of business, environment, and society (Bansal, 2005; Dyllick & Muff, 2016; Windolph et al., 2014a). Sustainability management is an essential prerequisite for achieving development goals and long-term sustainable development of the economy, environment, and society (Bebbington & Larrinaga, 2014; Bebbington & Thomson, 2013; Dyllick & Muff, 2016; Montiel, 2008). Sustainability management is defined as “all activities which design, measure, analyse and improve environmental, social, and economic activities to create sustainable development of organisation itself firstly, and secondly to enable the company to contribute to the sustainable development of the society as a whole” (Schaltegger

& Burritt, 2018, p. 2). These activities can be identified as ‘practices’ or ‘strategies’ that are adopted to enable firms to shape business operations to act and react to internal and external pressure groups (Whittington, 2006; Wijethilake, Munir, & Appuhami, 2017) and to achieve sustainability objectives. Sustainability-oriented strategies effectively tackle possible environmental and social issues that impact sustainable development and a broader range of stakeholders (Bansal & Roth, 2000; González-Benito & González-Benito, 2006; Stead & Stead, 2008; Windolph et al., 2014a). They hold great importance in achieving SDGs from a business standpoint (Claro & Esteves, 2021; Dyllick & Muff, 2016). Hence, these practices need to be embedded not only within external reporting and organisational activities but also within internal decision-making and organisational strategies through sustainability control system (Beusch, Frisk, Rosén, & Dilla, 2022) to achieve sustainability objectives at the firm level (Dyllick & Muff, 2016).

Sustainability Control System and sustainability strategy integration

Sustainability control system (SCS) is an emerging management accounting and control approach (Crutzen, Zvezdov, & Schaltegger, 2017; Lueg & Radlach, 2016) that can facilitate the implementation of sustainability strategies and enhance sustainability performance leading to achieve long-term development and SDGs (Gond et al., 2012; Wijethilake, 2017). Since SCS is still emerging, the definitions, operationalisation, and performance effects of SCS are sporadic and fragmented (Crutzen et al., 2017; Lueg & Radlach, 2016). Hence, different authors define SCS in various ways. For instance, Johnstone (2019) defines SCS as “management accounting tools that connect by providing an information and direction, as well as monitoring and motivating employees to continually develop sustainable practices and procedures for future improved sustainability performance” (Johnstone, 2019, p. 34). Hence, it focuses on embedding internal interest in sustainability integration for sustainability performance management (Corsi & Arru, 2020). The sustainability integration within SCS can be better examined as a holistic approach using SCS theory (Bouten & Hoozee, 2016; Simons, 1995).

Sustainability (Management) control system theory

According to the system theory, more than one control is needed to promote integration and achieve better organisational performance (Bedford & Malmi, 2015; Simons, 2000). It emphasises that

management controls are a “set of systems of controls operated in an interdependent and complementary fashion” (Malmi & Brown, 2008; Otley & Berry, 1980; Simons, 1995). Simons (1995) Levers of Control (LoC) is the most popular framework to examine system approach, which includes a system of four interdependent levers: belief, boundary, interactive and diagnostic. It is the most suitable framework for this conceptualisation as it emphasises controls designed by managers that focuses on competitive and strategic aspects that can properly identify and compare SCS adoption among business organisations. The following section briefly describes the Levers of Control framework (Simons, 1995, 2000).

Levers of Control (LoC) framework

Simons (1995) Levers of Control framework consists of four broader control levers; belief, boundary, interactive and diagnostic that work together to improve the organisational performance (Beusch, Frisk, Rosen, & Dilla, 2022; Gond et al., 2012; Simons, 1995; Wijethilake et al., 2017; Wijethilake & Appuhamy, 2017). The belief lever deals with communicating organisational commitments towards sustainability via core values and formal documents such as mission and purpose statements (Gond et al., 2012). Boundary lever focuses on avoiding strategic risk and limiting employee opportunity seeking by using codes of conduct, sustainability policies and guidelines (Beusch, Frisk, Rosén, et al., 2022). The interactive lever includes the dialogues between bottom-up and top-down processes among top managers and subordinates (e.g. planning, meetings), and the diagnostic lever focuses on measuring performances (e.g. KPIs, performance measurement systems) (Beusch, Frisk, Rosen, et al., 2022; Simons, 1995; Wijethilake & Upadhaya, 2020).

Exploring the sustainability integration within SCS through the lens of strategic orientation

Albeit institutional fields exert pressures to integrate social and environmental sustainability within organisations (Corsi & Arru, 2020; Wijethilake & Ekanayake, 2018), managers can respond to these pressures in diverse ways depending on different strategic intentions or responses (Ditillo & Lisi, 2016; Wijethilake & Appuhami, 2017) and implement various sustainability practices even operated in similar environments (Bastini et al., 2022). Hence, external interests for sustainability integration within organisations and internal decision-making can vary based on organisational strategic orientation. Despite effective sustainability integration and management can generate tangible benefits while gaining

long-term SD (Dyllick & Muff, 2016; Windolph et al., 2014a), unfortunately, many companies still manage sustainability either for profit-seeking intention (Gao & Bansal, 2013) or legitimacy-seeking intention (Beddewela & Fairbrass, 2016) by merely reacting to societal pressures for sustainability (Bansal, 2005; Schaltegger & Burritt, 2018). However, corporate commitments to sustainability management interests of stakeholders should focus on reducing adverse social and environmental impacts and contributing to achieve SDGs and long-term development (Gond et al., 2012). Moreover, implementing mounting sustainability practices is not adequate for effectively managing sustainability unless they are adopted with truly sustainability-related intentions (Bansal, 2005; Collins, Roper, & Lawrence, 2010; Dyllick & Muff, 2016; Windolph et al., 2014a).

Hence, mere SCS implementation does not support achieving sustainability objectives unless linked with managers' strategic intentions (Ghosh et al., 2019; Windolph et al., 2014a). Therefore, examining SCS adoption without inquiring about managers' strategic orientation leads to lower and more sporadic sustainability performance outcomes (Ghosh et al., 2019). So far, scant attention has been given to examining the role of strategic orientation in implementing SCS (Bastini et al., 2022; Cavicchi, Oppi, & Vagnoni, 2022; Ditillo & Lisi, 2016). While Ditillo and Lisi (2016) attempted to examine the surface of managers' orientation by adopting reactive and proactive orientation perspectives to explain sustainability integration within SCS from the technical integration lens, the control mechanism for sustainability from the strategic orientation lens is yet to explore (Ditillo & Lisi, 2016; Ghosh et al., 2019). Even though strategic orientation can be identified as a critical determinant of sustainability integration within the organisation and SCS (Ditillo & Lisi, 2016) so far, studies on how institutional pressure affects shaping environmental and social sustainability practices indirectly within SCS depending on different orientations have been under-researched. Examining this relationship is crucial as it indirectly facilitates the inclusion of broader stakeholder expectations within internal decision-making and in achieving sustainability performance outcomes. Extending this understanding from strategic orientation is crucial as it provides a comprehensive examination of sustainability integration leading to determining and promoting effective orientations to adopt to make genuine sustainability performance outcomes.

Strategic Orientation

Strategic orientation is an emerging phenomenon (Azzone & Bertelè, 1994; Bastini et al., 2022; Bui & de Villiers, 2017; Ditillo & Lisi, 2016; Kuckertz & Wagner, 2010; Wood & Robertson, 1997). It represents managers' mental models, perceptions and interpretations that motivate them to implement and integrate social and environmental strategies (sustainability strategies) within organisations and internal systems (Basu & Palazzo, 2008; Bui & de Villiers, 2017; Carroll, 1979; Ditillo & Lisi, 2016; Kuckertz & Wagner, 2010). Sustainability orientation is defined as 'certain management attitudes, desires or perceptions that induce the planning and development processes for deciding future organisational direction' (O'Dwyer, 2003; Schaltegger & Burritt, 2018; Wood & Robertson, 1997). It conveys different managerial intentions or wills (or corporate orientations) for implementing sustainability practices (Schaltegger & Burritt, 2018). Consequently, strategic orientation can be considered as a key determinant of the current and future sustainability strategies that affect what firms do and will do in line with firms' direction and end goals (Bui & de Villiers, 2017; Wood & Robertson, 1997). Even though stakeholders pressure the companies to consider social and environmental sustainability within corporations equally, prior studies have focused more on investigating the influence of stakeholder pressure towards environmental management (Gunarathne & Lee, 2019; Jennings & Zandbergen, 1995). To date, the sole or mere focus on environmental or social sustainability is inadequate for effectively managing sustainability, having healthy relationships with broader stakeholders to obtain social licence to operate and gaining sustainable performance for bridging micro-level development and macro-level decline (Dyllick & Muff, 2016; UN, 2020; Voyer & van Leeuwen, 2019). Therefore, strategic intention is critical to include the sustainability expectations of broader stakeholders within organisations and internal decision-making (Bansal, 2005; Windolph et al., 2014a; Windolph et al., 2014b).

Albeit many sustainability management studies have adopted evolutionary taxonomies ranging from proactive to reactive sustainability strategic orientation (Hart, 1995; Jabbour & Santos, 2006; Jabbour. et al., 2010; Porter, 1980; Russo & Fouts, 1997; Stead & Stead, 2008), (Bastini et al., 2022; Ditillo & Lisi, 2016; Gunarathne & Lee, 2019; Jabbour. et al., 2010) this conceptual paper propose an

adapted version of a progressive taxonomy ranging from reactive to creative (reactive, preventive, proactive and creative) sustainability intentions (Azzone & Bertelè, 1994; Bui & de Villiers, 2017; Jabbour & Santos, 2006; Russo & Fouts, 1997; Schaltegger & Burritt, 2018).

While it is sufficiently comprehensive to capture a broad orientation range for better explaining the present level of competitive sustainability intention to integrate social and environmental sustainability strategies within organisational strategies and systems (Azzone & Bertelè, 1994; Bui & de Villiers, 2017; Jabbour et al., 2010), it shows different transitionary wills (choices) that managers' orientation can change the organisational direction from a lower level of sustainability management and integration to a very higher level (Azzone & Bertelè, 1994; Bui & de Villiers, 2017; Carroll, 1979; Jabbour et al., 2010). Finally, it is more suitable to address the limitations of prior classifications (Carroll, 1979; Jabbour & Santos, 2006; Jabbour et al., 2010; O'Dwyer, 2003; Wood & Robertson, 1997) and promote novel configurations and paths to consider companies' sustainability integration beyond proactive orientation to undertake more creative and innovative sustainability practices to address the urgent need of achieving micro and macro level development (Ghosh et al., 2019; UN, 2020). The proposed strategic orientation classification for the analysis purpose is illustrated below.

Creative strategic orientation

Creative orientation focuses on implementing creative strategies which search for adopting new environmental and social technologies rather than focusing on mere differentiation at the proactive stage. It involves a significant commitment of top managers and organisations (Azzone & Bertelè, 1994; Bui & de Villiers, 2017). It focuses on investing in technological advancements for improved environmental and social sustainability initiatives at both product and process innovations, which are critical dimensions for organisational change and development (Schaltegger & Burritt, 2018) (Azzone & Bertelè, 1994; Bui & de Villiers, 2017).

Proactive strategic orientation

Proactive orientation involves an active response in implementing social and environmental practices. It considers sustainability issues as opportunities/threats and includes them in the strategic mission (Azzone & Noci, 1998; Jabbour & Santos, 2006; Sharma, 2000). Therefore, social and environmental

issues affecting business have been intentionally selected and managed to enhance performance (O'Dwyer, 2003) and gain corporate economic well-being (Stead & Stead, 2008). It focuses on designing proactive strategies that gain competitive advantages in the external environment (Azzone & Bertelè, 1994; Jabbour & Santos, 2006).

Preventive strategic orientation

Preventative orientation is a beyond-compliance or compliance-plus orientation perception to integrate social and environmental strategies within business strategies and systems (Azzone & Bertelè, 1994; Bui & de Villiers, 2017; Jabbour & Santos, 2006; Jabbour. et al., 2010). (Roome, 1992). Managers' strategic choice at this stage tends to shift from mere adoption to prevention of environmental and social impact costs. However, it is a transitional orientation that does not intend to integrate sustainability strategies fully and systematically into the business model (Carroll, 1979; Jabbour & Santos, 2006; Jabbour. et al., 2010; Roome, 1992).

Reactive strategic orientation

Reactive orientation involves a passive response to social and environmental sustainability management (Jabbour & Santos, 2006). This approach is taken by managers to merely ensure compliance with laws and regulations applicable to the organisation (Azzone & Bertelè, 1994). Reactive managers design reactive strategies, which fail to gain competitive advantages as they merely respond to legislations rather than involve sustainability thinking and hence are generally associated with lower levels of sustainability management (Jabbour & Santos, 2006; Roome, 1992; Sharma & Vredenburg, 1998) as a coping or buffering strategy that minimally responds to regulatory and stakeholder demands (Azzone & Bertelè, 1994; Wood & Robertson, 1997).

Overall, a new conceptualisation is proposed to answer recent calls (Ghosh et al., 2019) and to (1) respond the integration of stakeholders' sustainability interests within organisations directly and internal systems (i.e., SCS) indirectly through the lens of strategic orientation leading to embed sustainability strategies within organisational strategies for achieving sustainability performance outcomes at the firm level and (2) promote the importance of strategic orientation for effectively

contributing long-term development (Bansal, 2005; Collins et al., 2010; Dyllick & Muff, 2016; Windolph et al., 2014a).

CONCLUSION

Despite business organisations extensively implementing sustainability management practices within the organisation and internal decision-making, the world is experiencing more sustainability issues than ever and showing slow progress towards achieving SDGs (Dyllick & Muff, 2016; UN, 2020). However, business organisations can play a crucial role in contributing long term development (Corsi & Arru, 2020; Crutzen et al., 2017; Dyllick & Muff, 2016; Gray, 2010). Since the mere implementation of many sustainability practices is not adequate to gain tangible sustainability performance outcomes, a new conceptualisation was warranted (Corsi & Arru, 2020; Ditillo & Lisi, 2016). Consequently, a new framing of effective sustainably integration approach has been proposed combining it with sustainability-related strategic intentions (Kuckertz & Wagner, 2010). Accordingly, an extension of the current understanding of sustainability integration is provided to contribute to long-term global development effectively (Crutzen et al., 2017; Slacik et al., 2022).

Thus, this literature review proposes a novel sustainability integration conceptualisation to explore and extend the current understanding of the existing corporate sustainability integration. In the new framing, external pressure for sustainability integration within organisation is examined directly using different forms of isomorphism. Next, SCS theory is used to examine how external institutional pressure for social and environmental sustainability practices has been indirectly embedded in internal decision-making. Simons (1995) Levers of Control framework is adopted to explore SCS as a system. Consequently, a novel conceptualisation is proposed to provides an extension to the current understanding of sustainability integration by adopting managers' strategic orientation as a critical factor to responds broader stakeholder's sustainability interests, and to implement various sustainability practices within organisation and embed them into organisational strategies (SCS) to effectively contributing to long-term sustainable development (Bansal, 2005; Collins et al., 2010; Ditillo & Lisi, 2016; Dyllick & Muff, 2016; Windolph et al., 2014a).

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**Work readiness skill requirements for early career project management
professionals: Ascertaining different stakeholder perspectives**

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Work readiness skill requirements for early career project management professionals: Ascertaining different stakeholder perspectives

ABSTRACT: *This research investigates the work readiness skill requirements of early career project managers (ECPMs) working in the Architecture, Engineering and Construction (AEC) industry. The study is novel in its adoption of a multi-vocal methodology to explore the work readiness skill needs of ECPM talent. Seventy-five semi-structured interviews were conducted with five key stakeholder groups (Educators, Students, ECPMs, Employers, and Professional bodies). All stakeholders agreed that i) effective communication, ii) problem solving, and iii) foundational disciplinary knowledge were key work readiness skills. Furthermore, the results revealed how the different stakeholder groups can better foster work readiness skills in project professionals, ensuring they are better prepared to succeed in their early careers and project-based work.*

Keywords: early career development, multi-vocal study, project management, workforce development, work readiness

In the Architecture, Engineering and Construction (AEC) industry, workforce development has become more important than ever, with scholars (Zhang, Cheung, Albert & Jin, 2022, p.1) identifying it as “the main driver for post-COVID economic recovery”. Researchers are calling for more studies of the skills and capabilities needed by the AEC workforce as “it is critical that the AEC industry adopts effective workforce development strategies to ensure that workers are adequately skilled to meet the increasing production demands” (Zhang et al., 2022, p.1). Despite this, the industry continues to struggle with the hire, management and retention of its broad construction workforce (Ashtab & Ryoo, 2022; Ayodele et al., 2020), posing significant human resource management challenges. While a large proportion of literature has tended to focus on the AEC workforce holistically or indeed, been skewed towards looking at the older construction workforce (e.g., Kamardeen & Hasan, 2022) who are typically in their mid to late careers, this paper focuses on a specific AEC industry workforce component – *early career project*

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managers (ECPMs). In doing so, this research contributes to an under-researched area within the AEC literature.

To succeed in the early phase of their careers in the AEC industry, ECPMs are required to be *work ready*, i.e., equipped with the competencies needed by the job market (Borg & Scott-Young 2021). Studies indicate there is often a gap between the skills that AEC employers seek in their early career employees and the skills that these professionals possess (Molla & Cuthbert 2015). This phenomenon is observed globally and across different professions including construction (Chipulu, Neoh, Ojiako & Williams, 2013) where there is a shortage of PM skills (PMI, 2017; 2021) which has been exacerbated by the post-pandemic ‘Great Resignation’ (PMI & PWC, 2021). The demand for PMs is high in the AEC industry (Ashtab & Ryoo 2022; Low, Gao & Ng, 2021), with a projected need for over 15% more PM-based roles in the highly projectized construction sector by 2030 (PMI & PWC, 2021). In the aftermath of the COVID-19 pandemic, there is an unprecedented need for new early ECPM professionals who possess the necessary work ready skills to address this shortage.

The purpose of this research is to explore the work readiness skills required by ECPMs entering the Australian AEC industry from different stakeholder perspectives. The following key stakeholder groups are included in this study:

- i) PM educators preparing PMs for the AEC industry,
- ii) PM students intending to work in the AEC industry,
- iii) ECPMs working in the AEC industry,
- iv) AEC industry employers of PMs and,
- v) PM professional bodies.

In this way, this research responds to recommendations for a closer alignment between stakeholder perspectives of work readiness (Ahn, Pearce & Kwon, 2012; Mason et al., 2009; Manthe & Smallwood 2007), while contributing to literature on the career pathways of project managers (Akkermans, Keegan, Huemann & Ringhofer, 2020) within the under-researched context of the AEC industry (Borg & Scott-Young, 2021). This research explores the alignments and misalignments in perspectives of the different AEC stakeholders pertaining to skills required by ECPMs. The following research questions are addressed:

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RQ1. What do the different stakeholder groups perceive are the work readiness skill requirements of ECPMs working in the AEC industry?

RQ1a. How aligned are the perspectives of key stakeholders?

RQ2. What are the roles of key stakeholder groups in ensuring ECPMs are equipped with the work readiness skills required for the AEC industry?

LITERATURE REVIEW

Graduate work readiness

With reference to the uniqueness of the PM career path, scholars (Akkermans et al., 2018) have advocated for more research to explore the factors that determine PM career success. We contribute to this discourse by positing that *work readiness* is a contributing factor to the early career success of ECPMs working in the AEC industry. Work readiness is considered an essential component of performing well in the world of work (Cranmer, 2006), with work-ready individuals considered to be well-prepared to navigate the challenges of work after their completion of tertiary studies (Caballero & Walker 2010; Spanjaard et al., 2018). For employers, the term work readiness encompasses the necessary values, behaviours and skills which facilitate an individual's successful transition into the workplace (Business Council of Australia, 2016; Hora, 2017). This definition is consistent with the academic literature (e.g. Caballero & Walker, 2010) and is the definition adopted for this study. A smooth transition into the workforce is associated with higher levels of interaction and mutual support in the workplace, as well as a significant reduction in staff turnover (Argyle, 1989). In effect, individuals who are work ready will be better placed to make positive contributions to the industries in which they work. Within the context of the AEC industry, where organisations are particularly struggling with managing the construction workforce demand (Ashtab & Ryoo, 2022), it is imperative that early career professionals are equipped with the skills they need to thrive in and contribute to the industry.

Work Readiness of ECPMs in the AEC industry

Recently, scholars have begun to acknowledge that ECPMs form an important portion of the talent pool (Lloyd-Walker et al., 2016), particularly in industries like AEC (Borg & Scott-Young, 2021). The

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forecasted global PM skills shortage (PMI & PWC, 2022), coupled with a strengthening Australian labor market for PM professionals in the infrastructure and construction sectors (ABS, 2016), underscores the need to ensure that ECPMs entering the Australian AEC industry are work-ready, i.e., they possess the values, behaviours and skills to enable them to successfully contribute to their workplace and the development of their profession (Priksht et al., 2018). Specifically, this research is contextualised within the Australian AEC industry.

Theoretical Framework

The methodology of this research is in alignment with the interpretivist view and is underpinned by *Stakeholder Theory* (Freeman & Reed, 1983). Stakeholder Theory has been recently used as a theoretical framework to explore work readiness (e.g. Borg & Scott-Young, 2021; Priksht *et al.*, 2018), based on the understanding that fostering work readiness requires the cooperation of multiple key stakeholders (Cavanagh et al., 2015). Alongside Stakeholder Theory, this research uses the theoretical principles of *Shared Value* (Buchholz & Rosenthal, 2005) and the *Resource Based View* (Barney, 1991). The '*Shared Value Perspective*' posits that engagement between all five identified stakeholder groups will generate win-win situations for all involved, in terms of improving graduate work readiness for ECPMs in the AEC industry. Moreover, the *Resource Based View* is adopted since improving ECPM work readiness generates competitive advantage for each stakeholder group.

METHODOLOGY

The research strategy entailed a multi-vocal qualitative interview study of 75 in-depth interviews across the five stakeholder groups. A total of 75 interviews were required as the authors wanted to achieve data saturation (Braun & Clarke, 2013) in each of the 5 participant groups, as is considered best practice in qualitative research. Ethics approval to conduct the research was given from the researchers' university committee for human research ethics committee, after which data collection commenced.

Sample

Interview participants were purposively selected (Saunders et al., 2009) based on their experience in working with ECPMs in the AEC industry. Unique selection criteria were developed for each

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participant group. Table 1 provides details of the participants, including number of participants in each stakeholder group and details of the participant selection criteria.

INSERT TABLE 1 ABOUT HERE

Participants were recruited via professional networks to attract individuals who met the selection criteria. Participants were also recruited through the peak PM professional associations: the Project Management Institute (PMI); and the Australian Institute of Project Management (AIPM). To reach PM students and ECPMs, calls for PM students and ECPM participants were advertised via university student and alumni channels.

Data Collection

The unit of analysis took the form of the perspectives on ECPM work readiness derived from the five key stakeholder groups. The study was designed for producing “perceptual triangulation” (Bonoma 1985, p.203) which is defined as “the accumulation of multiple entities as supporting sources of evidence to assure that the facts being collected are indeed correct” (Meredith, 1988, p.443). Interviews ranged from 45 minutes to 1.5 hours and were audio-recorded for transcription. A semi-structured interview guide was developed for each stakeholder group where participants were asked to reflect on their experiences.

Data analysis

Data collection and analysis occurred simultaneously with the number of interviews guided by the principle of saturation (Braun & Clarke, 2013); where no new themes emerged for each participant group, no further interviews were conducted. An inductive approach to thematic analysis was utilised to analyse the interview responses due to its strength in providing a richer description of the overall data set; it is considered a useful method when investigating under-researched areas (Braun and Clarke, 2013). Following the phases set out by Braun and Clarke (2013), the steps for thematically analysing

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the data involved: (1) familiarization with the data, (2) generation of initial codes, (3) searching for themes, (4) reviewing the themes, (5) defining/naming the themes, and (6) writing up the results. The two authors of this paper followed the steps as set out by Braun and Clarke (2013), using NVivo 2.0 as a tool to assist with data organisation.

RESULTS AND DISCUSSION

This research identified alignments and misalignments in stakeholders’ perspectives regarding the work readiness skill requirements of ECPMs working in the AEC industry. Table 2 presents a cross-comparison of a total of 14 themes identified through analysis of the in-depth interviews. The themes encapsulate each stakeholder group’s perspectives of what constitutes work readiness.

| |
|---------------------------|
| INSERT TABLE 2 ABOUT HERE |
|---------------------------|

Stakeholders’ Understanding of Work Readiness: A meta-level analysis

In identifying the alignments in stakeholder perspectives, several key findings emerged and will be discussed in the following sections.

The three main attributes that constitute work readiness for ECPMs

Common to different stakeholders’ understanding of what constitutes work readiness for ECPMs in the AEC industry were three main attributes: i) *effective communication*, ii) *problem solving*, and iii) *foundational disciplinary knowledge*. The most common of these was *effective communication* which was identified by all five stakeholder groups. As illustrated by the interview excerpts below, from stakeholders’ perspectives, communication was an essential attribute through which the ECPMs could ‘*build rapport*’ and work well with people.

‘The main thing is communication; they can build rapport with people.’ – AEC employer, female

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'I think you need communication; you don't need to be an extrovert, but you need to work and build those relationships, to talk and understand the people you work with.' – PM body representative, male.

The Business Council of Australia (2016) defines *problem solving* as the 'ability to find solutions to simple through to complex issues (p.3). As illustrated by the excerpts below, the findings show that stakeholders acknowledged that dealing with and solving problems was a key role of ECPMs.

'Anyone can probably be a project manager 80% of time because if you have a good team, you'll have a good outcome. It's really when things go wrong where you have to deal with things, think of things outside the square – that 20% shines out for a real project manager, in your ability to be a good PM.' – PM body representative, male

'I think the thing that will be challenging is managing and working, and getting other people to come to the table and meet deadlines – I think that is where the problems will lie and that will require the most amount of skill and effort.' – PM student, female

Foundational disciplinary knowledge was also identified as a key work readiness requirement for ECPMs. For employers in particular, it was essential that ECPMs had an understanding of base construction knowledge. Similarly, PM students and ECPMs reflected on how valuable a basic understanding of construction was, for ECPMs in the AEC industry.

'As a PM in construction you are dealing with so many disciplines and it is challenging if you don't know how it all works together.' – ECPM, female

'A general knowledge of the industry is an expectation we have – a concept and understanding of construction.' – PM employer, male

Work readiness is a combination of hard and soft skills

While effective communication and problem solving can be classified as 'soft' skills, foundational disciplinary knowledge can be classified as a 'hard' technical skill (Ruge & McCormack, 2017). This suggests that, for ECPMs, work readiness constitutes both soft and hard skills. This is consistent with the extant literature, which recognises that soft skills are increasingly important alongside technical skills (Lippman et al., 2015). The work-readiness attributes identified by the stakeholders as important within the context of PM are in alignment with those identified in the PM literature. Problem solving (Hölzle, 2010) and communication (Skulmoski & Hartman, 2010) are identified as soft skills required of PMs. The skills of communication and problem solving are amongst the most sought-after skills by

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employers of construction PM graduates (Olawale, 2015). This suggests that, overall, the attributes identified as contributing to work readiness are consistent with previous studies.

Educators were vague in defining work readiness

Of all the stakeholders, PM educators showed the greatest difficulty in identifying work readiness attributes. Similar to the other stakeholders, educators identified communication as a key requirement of ECPM work readiness. However, no further attributes were identified by the educators, other than by their perception that work readiness encompasses both hard and soft skills. A recent study (Sin et al., 2019) observed similar results, noting that there was no homogenous understanding of work readiness among a sample of academics. Universities have a responsibility to develop the attributes their graduates need to thrive in the workplace (Kalfa & Taksa, 2015), however our finding of their lack of clarity on work readiness suggests they are not well-positioned to articulate the needs of the industry. This is a matter for concern given that preparing work-ready graduates is a key role of higher education (Jackson, 2019). Our results suggest that educators' lack of knowledge on work readiness may be contributing to employers' observations that graduates lack the skills required by industry (Chipulu et al., 2013) and their skills are misaligned with those valued by employers (Burga, Leblanc & Rezanian, 2020). Considering this finding, we recommend that educators need to engage in direct dialogue with industry so that they can be better informed.

Greater inclusion of industry-based knowledge

Only the AEC employers and professional body representatives mentioned specific discipline-based knowledge when articulating the work readiness skills required in industry. Prior studies have observed that when recruiting PMs, employers regard generic work competencies more highly than the technical knowledge (Chipulu et al., 2013) and contend that technical expertise is only one of the many skills required by industry (Gruden & Starey, 2018). However, this research shows that, for AEC employers, AEC industry technical knowledge is considered a key component of the work readiness of PMs. This finding is key as it suggests that work readiness may be contextual to the industry. It is important to note that, unlike recent studies that have found a gap in PM technical knowledge being taught by tertiary

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education institutions (e.g. Burga et al., 2020), the findings from our study suggest that it is not the PM technical skills that are lacking (e.g. risk management, project procurement) but rather the application of these skills in the context of the AEC industry. Burga et al., (2020) attributed the lack of focus found in their research to the fact that the programs were not purely PM degrees. In contrast, the findings from our study highlight that the PM degrees the ECPMs completed seem to be adequately developing PM technical skills, but not AEC industry-specific technical knowledge. Our finding suggests that higher education institutions may benefit from offering elective courses that contextualise PM skills within specific industries like AEC. In this way, universities will be better able to equip their graduates with AEC industry-specific technical skills alongside the usual interdisciplinary PM skills.

Stakeholders’ Roles in Fostering Work Readiness: A Meta-level Analysis

Table 3 presents a cross-comparison of the different stakeholder groups’ perceptions about other stakeholders’ roles in developing work readiness skills for ECPMs in the AEC industry.

INSERT TABLE 3 ABOUT HERE

Stakeholders recognise they have a part to play but limited collaboration is occurring

Stakeholders ascertained that key to their roles in ensuring work readiness, was a requirement to engage in dialogue with the other stakeholder groups. This is in alignment with the Resource Based View (Wernerfelt, 1984) which posits that competitive advantage stems from having positive relationships with external stakeholders. The findings show that AEC employers and professional body representatives believed that educators’ role in fostering work readiness encompassed facilitating industry engagement. Similarly, professional body representatives and educators identified that employers had an obligation to engage with universities which is consistent with previous study findings (Borg & Scott-Young, 2021). In identifying the lack of collaboration among stakeholder groups, professional body representatives suggested that, in their endeavours to contribute to work readiness, they could serve as the bridge to foster dialogue between all stakeholders. The Shared Value

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Perspective posits that limited understanding of stakeholder expectations may lead to problems among stakeholder groups (Nankervis et al., 2018), hindering the potential for effective solutions for all (Hickman & Akdere, 2017) in the process. Therefore, in highlighting that stakeholder recognised shared responsibility for fostering work readiness, this finding shows a promising foundation for developing a common understanding of graduate work readiness.

Educators are not providing career education

PM students, ECPMs, AEC employers and PM professional bodies all expressed their view that PM educators should be providing their students with career education, with a specific focus on career mapping and planning their career trajectories. This finding is in alignment with recent research (Dicker et al., 2019; Jackson, 2019) which has emphasized the importance of university-led career development learning, career guidance and career fairs. Jackson (2019) found that students believed that career education improved their understanding of employment opportunities and further enhanced their understanding of the skills and knowledge required for particular roles. Our research revealed that students expected that universities would provide career education, however ECPMs expressed their views that this was not the case. This is consistent with recent findings that students in most disciplines believed that universities lacked attention to career development education, resulting in them feeling uncertain about their career prospects (Jackson, 2019) and roles (Savage et al., 2010) after graduation.

Employers and peak professional bodies need to be active in training and mentoring

All stakeholder groups considered that training and mentoring graduates were key responsibilities of industry, with employers themselves naming mentoring and training as initiatives that they can implement to assist ECPMs in the transition to work. Formal training offered by organisations and professional bodies is considered important for the development of employees. Such training further enhances project management skills (Ekrot, Kock & Gemünden, 2016), allows early career employees to succeed in their roles (Burga et al., 2020), and fosters their retention (Havermans et al., 2019). Providing PM practitioners with these developmental initiatives and clear career pathways improves job satisfaction and are therefore less likely to leave their organisations (Ekrot et al., 2016). Within the

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context of the AEC industry, this is particularly important given the current workforce demand and retention challenges (Ashtab & Ryoo, 2022; Ayodele et al., 2020). Based upon the stakeholders' views regarding work readiness, the findings of this research suggest that work readiness of ECPMs is not necessarily fully attained upon their graduation from university; rather, that there is a need to continue to bolster work readiness skills after new graduates transition into the AEC industry. This research suggests that AEC employers and peak professional bodies have a key role in supporting ECPMs through the provision of industry-based mentoring and training to enhance their work-readiness.

CONCLUSION

This paper contributes new knowledge about early career work readiness, which remains largely under-researched within the context of PM and the AEC industry. While the results cannot be generalized to other country contexts, the findings provide insights into stakeholder perspectives of ECPMs within the Australian AEC industry. In consolidating the perspectives of key stakeholders on ECPMs' work readiness requirements, this research provides a multi-vocal perspective about the attributes that ECPMs need to successfully navigate their early years in the AEC industry. These findings may be useful to human resource management practitioners within the AEC industry, who can look for these skills when sourcing early career PM talent. Moreover, the findings illustrate that while stakeholders recognize they have a part to play in enhancing work readiness, there is currently limited collaboration occurring. In light of this, one of the most significant contributions of this research lies in our identification of the responsibilities of key stakeholder groups in ensuring the work readiness of ECPMs in the AEC industry. Future studies may wish to undertake similar studies in other contexts, both in terms of geography and of other early career professionals.

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Table 1. Participant details.

| Participant Group | Number | Gender (%) | Selection criteria for participation |
|--|-----------|----------------|--|
| <i>PM educators</i> | 9 | 44% F 56% M | Required to have at least 2 years of experience teaching PM students. |
| <i>PM students</i> | 18 | 45% F 55% M | In their final 1-2 years of their degrees, enabling them to reflect on their journey to date and upcoming transitions into the workplace. |
| <i>ECPMs working in AEC industry</i> | 20 | 40% F 60% M | Between 1 to 5 years of experience working as a PM professional in the AEC industry. |
| <i>AEC industry employers</i> | 18 | 23% F 77% M | A minimum of 5 years' experience supervising ECPMs in their organisations. |
| <i>PM peak professional body representatives</i> | 10 | 20% F 80% M | Holding a position on the local/regional board of one of two professional associations: <ul style="list-style-type: none"> ○ Project Management Institute (PMI) ○ Australian Institute of Project Management (AIPM). |
| Total | 75 | | |

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Table 2. Stakeholder perspectives of work readiness skills required by ECPMs in the AEC industry.

| <i>Stakeholders</i> | <i>Identified Themes</i> | <i>Interview excerpts corresponding to the identified themes</i> |
|----------------------------------|---|--|
| PM educators' perspective | Blending of hard and soft skills | <ul style="list-style-type: none"> • 'By definition, managing should have both soft and hard skills' – PM educator, female • 'The technical skills are there because they have to understand these and use these in different projects, but then there are all other aspects; which is the soft side of this, which is much more important in this role.' – PM educator, male • 'Wherever they end up going, they will need to develop their PM thinking and PM skills and more soft skills.' – PM educator, male |
| | Communication skills | <ul style="list-style-type: none"> • 'As I usually say it is important to have really well-defined communication skills in Project Management because you are working with people.' – PM educator, male • 'Being able to schedule a project isn't good enough anymore. You need to be able to write and communicate and show people what you think as well.' – PM educator, female |
| PM students' perspective | Resilience | <ul style="list-style-type: none"> • 'You need to be pretty resilient in your role in that you need to be defiant and persistent in delivering your role such as not taking no for answer if there's a specific task that needs to be delivered by a specific date.' – PM student, female • 'I think resilience seems to be a huge one...being able to bounce back if someone is a d*ckhead.' – PM student, male |
| | Communication skills | <ul style="list-style-type: none"> • 'Communication skills will probably be the most important.' – PM student, male • 'I think the most important is communication skills... I think communicating with all the people you're working with is important. I think oral communication is the most important but emailing as well.' – PM student, female |
| | People management | <ul style="list-style-type: none"> • 'I think managing people will be the primary skill that I will need to master. I think the thing that will be challenging is managing and working and getting other people to come to the table and meet deadlines – I think that is where the problems will lie and that will require the most amount of skill and effort.' – PM student, female |

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| | | <ul style="list-style-type: none"> • <i>‘Managing a team – you need to have everyone on board to deliver the project successfully and meet the deadline.’ – PM student, female</i> |
| ECPMs’ perspective | Leading meetings | <ul style="list-style-type: none"> • <i>‘I felt I was able to chair meetings; at uni we had a lot of practice presenting & talking to people so I had the communication and presentation skills.’ – ECPM, male</i> • <i>‘I was able to chair meetings and give direction to people... I think I was prepared for that because I had sat in on a lot of meetings in my previous role.’ – ECPM, male</i> |
| | Communication with external stakeholders | <ul style="list-style-type: none"> • <i>‘Communicating with stakeholders was key – I had to communicate with around 12 different consultants a day.’ – ECPM, female</i> • <i>‘I came to find that stakeholder management was a really critical skill to have – you should really be able to build those relationships. Too much tension and things can go pear shaped – you need to be able to manage that.’ – ECPM, male</i> |
| | Professional conduct | <ul style="list-style-type: none"> • <i>‘I think it’s all about how you present yourself – you learn that pretty quickly.’ – ECPM, male</i> • <i>‘I felt very comfortable and that was noticed afterwards by my employers – them saying ‘Oh you were very comfortable with that, you didn’t get nervous or freeze up’. So, I think that uni definitely did prepare me and made me feel comfortable just in terms of what’s expected in certain professional situations.’ – ECPM, female</i> |
| AEC employers’ perspective | Construction knowledge | <ul style="list-style-type: none"> • <i>‘A general knowledge of the industry is an expectation we have – a concept and understanding of construction.’ – AEC employer, male</i> • <i>‘Fundamental for me is a background in construction – AEC employer, female</i> |
| | Passionate disposition | <ul style="list-style-type: none"> • <i>‘I guess the number one thing is trying to establish a passion and an interest, a genuine interest in the field of project management. So that’s what we look for. I guess we have the best of success when we find that alignment and the true passion.’ – AEC employer, male</i> • <i>‘We also look at their own ambition, so you know, where they want to be, where do they see themselves and a key focus is what pulls them to the industry. We look at why they came to the construction industry and what’s their ambition and drive.’ – AEC employer, male</i> |

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| | | |
|--|----------------------------------|---|
| | Empathic communication | <ul style="list-style-type: none"> • <i>'The main thing is communication; they speak well, write well, they speak to people and not just do everything by email. They can build rapport with people.'</i> - AEC employer, female • <i>'Communication needs to be listed...I always make a big deal of it to make sure it's not just a zip word – I like to explain the concept of communication as that of understanding the person and where they're coming from, of empathizing.'</i> - AEC employer, male • <i>'The major thing is communication skills, an ability to read emotions...I look for those skills. I decipher that in grads; their ability to communicate with not only client but with other staff too.'</i> – AEC employer, male |
| PM professional bodies' perspective | Foster communication | <ul style="list-style-type: none"> • <i>'I think communication is a massive advantage in project management.'</i> – PM body representative, female • <i>'I think the ability to communicate concepts and process is probably the most important thing.'</i> – PM body representative, female • <i>'I know that communication is a basic framework of project management, however it's important to know how to really implement this and how to communicate well with stakeholders. I think is a key factor to be successful as a project manager.'</i> – PM body representative, male |
| | Problem solving | <ul style="list-style-type: none"> • <i>Problem solving overall is a strength of graduates in my view...They are more than capable of receiving a curve ball and making something of it.'</i> – PM body representative, male • <i>'Anyone can probably be a project manager 80% of time because if you have a good team, you'll have a good outcome. It's really when things go wrong where you have to deal with things, think of things outside the square – that 20% shines out for a real project manager, in your ability to be a good PM.'</i> – PM body representative, male |
| | Foundational PM knowledge | <ul style="list-style-type: none"> • <i>'From a hard skills perspective I think they do need a good foundation of project management tools and techniques and an understanding of how they're applied in a practical situation. Across the board, they need a well-rounded understanding of project management in terms of stakeholder management, cost management.'</i> – PM body representative, female • <i>'First of all, they need to have the base/framework of how manage budget, schedule, scope, risk and so on. That prepares them to face the real challenges.'</i> – PM body representative, male |

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Table 3. Stakeholder perspectives of stakeholder roles in facilitating ECPM Work Readiness in the AEC industry.

| <i>Stakeholders</i> | <i>PM educators' role</i> | <i>PM students and ECPMs' role</i> | <i>Construction employers' role</i> |
|--|--|--|--|
| <i>PM educators' perspective</i> | Instilling teamwork Bringing industry into the classroom Facilitating student-employer relationships Encouraging and accommodating work Practice what is preached Refresh curriculum Open dialogue with alumni | Prepare yourself mentally Find a company that fits | Training doesn't stop at university Converse with university Invest in graduates |
| <i>PM students' perspective</i> | Providing career education Facilitating work experience Reviewing subject content Linking theory to practice | Gaining work experience | Offer mentoring Offer induction Showing support |
| <i>ECPMs' perspective</i> | Career mapping and development Exposure to Industry Reflect industry practice Staff with industry experience | Handling bad behaviour Earning respect Construction knowledge Career progression Gaining work experience | Mentoring Giving time and feedback Understanding what is being taught at university Consider manageable workloads |
| <i>AEC Employers' perspective</i> | Embed practice Literacy lessons Career coaching | Obtain work experience Professional writing ability Basic construction knowledge | Mentoring Training initiatives |

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| | | | |
|--|--|--|--|
| | Industry engagement | Professional presentation and communication Application of technology Confidence to ask for help Responding to confrontational situations Familiarise yourself with industry | |
| <i>PM professional bodies' perspective</i> | Put theory into practice Provide career education | Get industry experience Get a mentor Join a PM community Expectation management | Engage in mentoring Focus on PM organisational maturity |

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A review of graduate work readiness literature:

Definitions, methodologies and theories

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A review of graduate work readiness literature: Definitions, methodologies and theories

ABSTRACT: *Graduate work readiness (GWR) encompasses individuals' competence in a range of attributes that enable them to successfully transition into work. While continuing to gain increasing interest worldwide, the concept of GWR remains one that literature has struggled to define. Through a review of extant literature, this conceptual paper addresses the issues with the nomenclature of GWR, identifying how scholars have defined the concept, to contribute to the theoretical advancement of GWR research. Next, the paper identifies the methods used to study GWR to date, illustrating the need for more qualitative studies to explore the construct. Recognising that many studies on GWR have been atheoretical to date, the study identifies theories with potential to advance the field. Finally, the paper makes recommendations to inform a research agenda to stimulate future studies for the continued theoretical and practical advancement of GWR research.*

Keywords: conceptual paper, literature review, graduate work readiness, work readiness theory

Making a successful transition from education to work has become increasingly challenging in this increasingly volatile era (Jung, 2022; Stremersch et al., 2021). In this study, the focus is on *graduate work readiness* (GWR) – a concept which encapsulates the skills necessary for individuals to thrive in their new workplace following their early career transition from higher education into the *world of work* (Jung, 2022). A work-ready graduate is one who through learning opportunities (Aprile & Knight, 2020) has gained appropriate skills and knowledge that allow them to meaningfully contribute to their workplace and profession (Edward et al., 2017; Jackson, 2019). It is expected that work-ready graduates are able to respond positively to workplace challenges, such as those posed by emerging technologies and innovative industry practices (Schwab, 2016). Since the 1980s, societies “have embraced the notion of graduates’ ‘work-readiness’ (i.e., graduate employability) as a means to promote national competitiveness in the global economy” (Azevedo al., 2012, p. 1). While the concept is at least forty years old, GWR is still considered to be hard to define and measure (Boden & Nedevea, 2010; Bridges, 1994; Cranmer, 2006). Scholars have identified a need for research that explores the transition of

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university graduates into the workforce (Holden & Hamblett, 2007) and this has led to multiple studies on GWR over the last two decades. GWR is an issue that transcends disciplines (Jackson, 2019), with studies spanning the literature in business, health and nursing, psychology, computer science and information technology, engineering and construction, project management, and education. In practice, the demand for work readiness (WR) is felt globally, with concerns about GWR observed in both developed and developing regions (Jackson, 2019). In countries with high population growth, the level of GWR is directly related to the rate of economic growth (Guo & van Heijden, 2008), highlighting that “an employable and skilled workforce is paramount to economic development” (Iyer & Dave, 2015, p. 151). However, since the early 2000s, research has revealed worldwide concern that university students are graduating without the skills necessary for their future careers (De La Harpe al., 2000). Recent studies continue to show misalignments between the competencies taught in university curricula and those required for work (Borg & Scott-Young, 2020a; Burga al., 2020). This highlights a continuing discrepancy between the understanding of the concept of GWR from the academic and industry perspective, placing early career graduates in a position where the skills taught at university are insufficient to meet the expectations of their employers.

Aims and research questions

This conceptual paper critically analyses the extant literature on WR. The aims of the paper are i) to define WR in accordance with existing scholarly literature, ii.) to identify the methods used to study WR, and iii.) to provide insight into the theoretical lenses through which WR has been explored to date. In line with this, this research addresses the following research questions.

- (1) How is the concept of WR defined in the current literature?
- (2) What methods have been used to study WR?
- (3) What theoretical lenses have been used to study WR?

LITERATURE REVIEW

Graduate work readiness

GWR is the primary reason why students complete higher education studies (Donald al., 2019; Jackson, 2014; Su, 2014). The role of higher education institutions is to produce graduates who demonstrate a

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set of achievements which encompass skills, understandings and personal attributes (Yorke, 2004) and who in turn will contribute positively to their employers' requirements throughout their working lives (Tomlinson, 2010). Despite a shift in the traditional purpose of universities to now recognizing their responsibility in producing WR graduates (Jackson, 2014; Su, 2014), there are still shortcomings in the work-readiness attributes being fostered in educational institutions (Bridgstock, 2009; Green, 2009; Holmes, 2013). The development of skills and competencies in higher education is "a complex area lacking definitive answers" (Cranmer, 2006, p. 174). Of late, employers are more prevalently calling for "pragmatic and practical skills development to be incorporated into academic courses and curricula or 'real life' learning so there is a closer alignment between graduate and desired employability skills" (Cavanagh et al., 2015, p. 281). Consistent with this position, providing students with industry-relevant skills for employment is now perceived as a central role of higher education institutions (Evans, 2008). Yet, there is growing concern that universities are producing graduates who do not possess the skills required in today's workplaces (Cavanagh et al., 2015; Molla & Cuthbert, 2015). The WR agenda "continues to present difficult policy and pedagogic challenges for HE [Higher Education] institutions" (Evans, 2008, p. 53). One key issue is the lack of a consistent definition of GWR.

Defining WR

WR, employability and graduate attributes

Some scholars (e.g., Cavanagh et al., 2015; Herbert et al., 2020; Natoli et al., 2018) use the terms WR and employability interchangeably. According to these researchers, both terms refer to the possession of the skills, knowledge and attitudes that enable graduates to make productive contributions to organisational objectives soon after commencing employment (Mason et al., 2009). While noting that some scholars use the terms interchangeably, Jackson (2019) makes a distinction between the two and asserts that WR is "more rooted in the discourse of skill mastery to prepare individuals to survive and thrive in contemporary workplaces" (p. 221), whereas employability may be influenced by factors outside the individuals' control such as the labour market and economic conditions. Several scholars (e.g., Daniels & Brooker, 2014; Harrison & Grant, 2016) view WR as determined by universities as a product of *pre-defined graduate attributes*. Daniels and Brooker (2014) define graduate attributes as

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sets of employability skills developed by universities and embedded within the university curricula. Graduate attributes are also referred to as generic learning outcomes (Harrison & Grant, 2016). The generic graduate attributes themselves are considered to be similar across disciplines, with the assumption that they can be applied to diverse contexts and careers (Barrie & Prosser, 2004; Walsh & Kotzee, 2010). For Daniels and Brooker (2014), WR entails flexibility by the individual in adopting different graduate attributes to address different requirements for various work roles and situations. Other researchers (e.g., Prikshat et al., 2018) acknowledge that GWR has been defined by various terms including graduate attributes. Therefore, they conceptualize GWR from a dual perspective, encompassing both the perceived needs of employers and the competencies possessed by graduates.

Prikshat et al. (2018) assert that WR is not merely a by-product of graduate attributes pre-determined by universities (Daniels & Brooker, 2014; Harrison & Grant, 2016); rather, that it also encompasses the competences desired by employers and the graduates themselves. Prikshat et al. (2018) define WR as an integrated dynamic competence requiring the reconfiguration, synthesis and integration of four resources (intellectual, personality, meta-skill and job-specific), all of which need to be channelled by graduates into a holistic, compelling and personal narrative that appeals to potential employers. Prikshat et al. (2018) argue that WR requires input by the graduates themselves but should also take into consideration the needs of employers. In a similar vein, research conducted by Spanjaard et al. (2018) also highlights the graduates' required input into acquiring WR. They define WR as graduates' preparation to enter the workplace post-graduation. Similarly, Edward et al. (2017) define WR as the extent to which new graduates possess the knowledge and skills that enable them to work autonomously following graduation, which is well-aligned with how Jackson (2019) defines WR.

Through this investigation of existing literature, it is apparent that WR is often associated with recent university graduates and is linked with their preparation in transitioning into the workplace post-graduation (e.g., Anderson & Tomlinson, 2021). Consistent with this, Jollands et al. (2012) view WR as a concept that can be useful to assess the success of a graduate's transition into the workforce. They view WR as a complex set of generic attributes that allows graduates to apply their technical knowledge for the purposes of identifying and solving work-related problems upon joining the workforce.

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Similarly, Walker et al. (2013) articulate that WR encompasses a wider range of skills and attributes than just technical knowledge. This aligns with Caballero and Walker's (2010) definition, which states that GWR is the extent to which graduates are perceived to possess the skills and attributes that render them prepared for being successful in the workplace. In reviewing the extant literature, we note that Caballero and Walker's (2010) definition of WR is the one most frequently adopted and cited in studies exploring the concept (e.g., Caballero et al., 2011; Jackson, 2019; Walker et al., 2013; Walker & Campbell, 2013; Prikshat et al., 2018; Borg & Scott-Young, 2019a).

Methods used to study WR

Prevalence of quantitative methods over qualitative methods

One of the major debates in WR research is whose perspective is relevant. Different stakeholder perspectives on the skills required by graduates have been sought for decades. Late last century, Floyd & Gordon (1998) identified several methods that had been used to assess perceptions of graduate skills until 1998. They noted that respondents were typically asked to do one or more of the following; i) list attributes they considered essential for the selection of potential job candidates, ii) rank a pre-determined list of graduate attributes or skills in order of importance and/or iii) rate the importance of a pre-determined list of attributes using a Likert-type scale (Floyd & Gordon, 1998). It is worth highlighting that where measuring stakeholder perspectives of graduate skills is concerned, we note that not much has changed, with research concerning WR more often adopting quantitative research methodologies as opposed to qualitative methodologies. Over the years, researchers (Suleman, 2018; Vaz-Serra & Mitcheltree, 2020) have continued to present stakeholders with a list of predetermined graduate attributes or skills, with the instruction to rank them in order of importance. While such a method provides for easy comparison measures, the richness of the data able to be gained from a predetermined list of skills is contestable (Suleman, 2018). Some scholars (e.g., Cavanagh et al., 2015; Prikshat et al., 2018) have begun to focus on comparing perceptions of WR across various stakeholder groups. Overall, though, we see the recent literature (e.g., Borg & Scott-Young 2020a; 2020b; Burga et al., 2020) echoing Floyd and Gordon's (1998) observations and pointing out that there needs to be a new focus on qualitative research into multiple stakeholders' perspectives to furnish a richer, more

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holistic understanding of GWR.

Theoretical explanations of WR

There is an observed discord in various theoretical frameworks being used to explain the concept of WR within the extant literature. This indicates that WR may not have been grounded well within theoretical frameworks to date. Theoretical underpinnings of WR, as used by recent researchers, have largely centred around:

- (i) matching skills possessed by graduates with those of their prospective employers (e.g., Mason et al., 2009; Borg & Scott-Young, 2020b);
- (ii) exploring the relationships between the student's identity and levels of self-efficacy with their WR (Daniels & Brooker, 2014; Spanjaard et al., 2018; Henderson et al., 2016);
- (iii) looking at WR through a human capital lens (Natoli et al., 2018); and more recently; and,
- (iv) considering WR as a function of stakeholder relationships (Borg & Scott-Young, 2020b; Prikshat et al., 2018).

Table 1 summarises the theoretical frameworks applied in recent work-readiness research, details scholars who adopted the theoretical frameworks and provides an overview of the application of each theory. The following section will elaborate further on the theoretical frameworks used by researchers of WR as depicted in Table 1.

Matching theory and WR

Some of the recent research (e.g., Borg & Scott-Young, 2020b; Mason et al., 2009) has adopted Matching Theory (Gale & Shapley, 1962) to explain GWR. Through the theoretical lens of Matching Theory, GWR is seen as a function of whether the skills possessed by graduates match the skills desired by the labour force (Mason et al., 2009). Matching Theory proposes that mismatches between jobseekers' skills and job-providers' expectations may arise due to inaccurate information and employers' poor communication of their expectations to job applicants (Borg & Scott-Young, 2020b). This suggests that employers would increase their potential to find WR graduates by investing the time and monetary resources needed to recruit graduates who possess the skills that they desire. Similarly, based on Coles and Smith's (1998) assertion, it can be suggested that graduates can improve their

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chances of being work ready by pursuing employment with organisations seeking the particular skills that they possess. This suggests that WR may be influenced by a mismatch in perception; graduates would be seen to be work ready if their skills match the needs of their employer, however, in the view of an employer who has different needs, those same graduates are regarded as not being work ready (Borg & Scott-Young 2020b). This evidences that WR may be subjective and may vary according to the needs of the particular employer or industry in question. Matching Theory also considers the role of universities in fostering WR. Mason et al. (2009) state that the quality of employer-graduate matches in the labour market should be improved for graduates who receive an education that specifically prepares them for the workplace. Such an education can include “exposure to different employment conditions during industrial placements and/or to course content that is explicitly related to practical applications of subject matter in employment” (Mason et al., 2009, p. 8). Furthermore, better-suited matches between graduate’s skills and employers’ desired skills are likely when a university has well-established relationships with employers (Mason et al., 2009). According to Matching Theory, universities with industry connections will be better positioned to provide students with information to assist in matching their skills with those of prospective employers. Similarly, employers with connections to universities are more likely to be well-informed about the knowledge that the universities impart to their students (Mason et al., 2009) and therefore, will be better informed about job applicants, increasing the likelihood of obtaining a match between their desired skills and those possessed by graduates. An observed key strength of investigating WR through the lens of Matching Theory is that the theory considers the relationships between multiple stakeholders (namely, students, universities, and employers) in relation to the skills taught at university and how well these skills match those possessed by graduates, which in turn need to reflect the skills desired by employers. In essence, Matching Theory proposes that GWR results from the ability of the graduates to successfully exercise their knowledge and attributes, which can only be realised if their possessed attributes match those required by their employers.

Identity theory and WR

Identity Theory is increasingly popular with GWR scholars (e.g., Daniels & Brooker, 2014; Laird et al.,

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2013; Tomlinson, 2010). Identity Theory, when used in the context of GWR, posits that students attend university with a desire to develop purpose and identity (Daniels & Brooker, 2014). Originating with Chickering and Reisser (1993), student identity is said to be a function of seven vectors encompassing: i) developing competence; ii) managing emotions; iii) moving through autonomy towards interdependence; iv) developing mature interpersonal relationships; v) establishing identity; vi) developing purpose; and vii) developing integrity. These vectors are expected to differ in the way they are developed between different individuals. Chickering and Reisser (1993) asserted that students can only acquire and develop the attributes required for their professional development through establishing their student identity. Building on this theory, recent WR research suggests the existence of a relationship between university profiles and graduate attributes (Lairio et al., 2013), noting that as students develop the attributes required to be WR, they will also develop their professional self-identity (Daniels & Brooker, 2014). Moreover, student identity is viewed as not only a critical component of successful learning (Lairio et al., 2013), but also an integral element of WR. Moreover, it is held that graduates who understand the role of identity will be better able to negotiate the dynamic contexts that are typical of today's changing work environments (Tomlinson, 2010; Holmes, 2013). In the context of GWR, Identity Theory suggests that in order to be work ready, students need to adopt an active, participatory role in their identity formation throughout their university studies (Daniels & Brooker, 2014). As such, Identity Theory posits that graduates' development of their sense of identity adds another dimension to the graduate attributes taught at university and enriches their overall work-readiness and ability to perform in the workplace.

Self-efficacy theory and WR

Some researchers have used Bandura's (2012) concept of self-efficacy to explain GWR. Self-efficacy is "concerned with people's beliefs in their capabilities to produce given attainments" (Bandura, 2012, p.15). Bandura (1997, p. 194) asserts that expectations of efficacy are "a major determinant of people's choice of activities, how much effort they will expend, and of how long they will sustain effort in dealing with stressful situations". Bandura (1977) identified four major sources of self-efficacy: i) past performance accomplishment; ii) vicarious experience; iii) verbal persuasion; and iv) emotional arousal.

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Performance accomplishment is considered influential as it is based on past personal mastery experiences: successful performance raises mastery expectations while repeated failures lower them (Bandura, 1977). In the context of underGWR, successful past performance of certain tasks in the classroom would be expected to increase student confidence, equipping them with the skills and knowledge to complete similar future work tasks. Self-efficacy Theory suggests that the vicarious experience of observing others successfully perform a task serves as an important source of information which can instil feelings of empowerment to an individual (Conger & Kanungo, 1988). Bandura (1997) argued that if individuals perceive that others can perform a specific task, this places them in a position whereby they can persuade themselves that they too have the capacity to achieve a similar goal. In the context of underGWR, vicarious experience can be gained through classroom simulations. This is currently being addressed by universities as indicated through their incorporation of Work Integrated Learning (WIL) and internships (Jackson, 2015). Positive verbal persuasion can also reinforce individuals' belief in their ability to successfully complete a particular task. Bandura (1997) contends that through others' suggestion, people can be led to believe that they can succeed in something they had struggled with in the past. Emotional arousal has the potential to influence an individual's expectations of their competence (Conger & Kanungo, 1988). Additionally, strategies that provide emotional support can be regarded as contributors to building self-efficacy, whilst stress, anxiety and negative experiences can contribute to lower self-efficacy (Henderson et al., 2016). In the context of WR, Self-efficacy Theory suggests that an individual's levels of self-efficacy can influence their perceptions of their own WR. Graduates who have a high level of self-efficacy are more likely to exhibit confidence in their ability to overcome obstacles they face in the workplace (Spanjaard et al., 2018). There have been concerns that graduates who work in pressure-laden business environments often experience shock, stress and disappointment, all of which have the potential to cloud their opinions of how well their universities have prepared them for the workplace (Stephens et al., 2010). This suggests that the workplace itself can impact on the graduates' self-efficacy levels and that in instances in which the workplace lowers the self-efficacy of individuals (i.e., high-pressure environments in which the employee is placed under stress and pressure), the graduate may be inclined to identify themselves as unable to perform in the workplace and therefore to perceive themselves as lacking WR.

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Human capital theory and WR

In the context of education, the Human Capital Theory (Becker, 1964) argues that individuals invest in education and that in return, education provides the individuals with sets of skills that may be rewarded through securing employment. Human Capital Theory is based on the premise that the higher the skill level of the individual, the greater their employability and productivity (Becker, 1975). Therefore, in the context of GWR, Human Capital Theory asserts that the role of education is essential in preparing the graduates for the workplace (Kalfa & Taksa, 2015). Adopting Human Capital Theory, recent WR scholars have asserted that “the knowledge, skills and capabilities embedded in graduates...are recognised to be key contributors to the competitiveness and success of nations” (Docherty & Fernandez, 2014, p. 3). At a macroeconomic level, Human Capital Theory emphasises the link between the general education levels of a country’s population and its economic growth (Hayward & James, 2004). On a microeconomic level, Human Capital Theory assumes that students are individuals who seek to optimise fiscal returns on their investments in all areas of their lives including their education (Hyslop-Marginson & Sears, 2006). From this perspective, Human Capital Theory suggests that through investing in their education, individuals can acquire skills and abilities (Schultz, 1971) which they can utilise in the labour market (Hayward & James, 2004). These skills and abilities have the potential to make them highly marketable, employable and work ready. Within the context of GWR, Human Capital Theory appears to place the responsibility of GWR in the hands of universities who are seen to have a key responsibility to serve society by providing graduates with skill sets that enable them to successfully conduct their work and thus positively contribute to society. Criticisms of the adoption of Human Capital Theory within an educational context centre around the risk of higher education focusing only on addressing and serving the needs of industries (Kalfa & Taksa, 2015). Hyslop-Marginson and Sears (2006) argued that looking at education through a Human Capital Theory lens may result in a devaluing of education in areas that are not implicitly vocational, such as teaching and research in the areas of philosophy and history. In this way, Human Capital Theory approaches are seen to lead to narrow teaching practices that encourage student conformity to the market economy (Hyslop-Marginson & Sears, 2006).

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Stakeholder theory and WR

More recently, Stakeholder Theory has been applied to the context of GWR (e.g., Borg et al., 2019; Prikshat et al., 2018). Stakeholder Theory suggests that all organisations, systems, or situations comprise of individuals or entities with diverse interests and that the interests of all stakeholders must be continuously balanced. Stakeholder Theory identifies any individual/group who can affect or is affected by the achievement of the objectives at stake, as a stakeholder. Stakeholders are therefore defined as “committed value chain partners to create outstanding performance and customer service” (Freeman, Wicks & Parmar, 2008, p.365). Stakeholder Theory focuses on creating value for each stakeholder (Hickman & Akdere, 2017). Hickman and Akdere (2017) have advocated for Stakeholder Theory to be applied to the context of higher education; it is understood that through gaining greater stakeholder voice and inclusion, education can provide real value for more stakeholders, including students, graduates, universities, industries, broader communities, and society at large (Hickman & Akdere, 2017). Within the GWR context, Stakeholder Theory has been adopted in recognition that multiple stakeholders contribute to the fostering and attainment of work-readiness attributes in students. Stakeholder Theory has been advocated for its ability to highlight WR as being reliant on collaborative strategies among various key stakeholders (Prikshat et al., 2018), thereby asserting that WR is not just one stakeholder’s responsibility, but rather considers that all stakeholders have a part to play in the attainment of graduates’ WR.

STUDY LIMITATIONS

This conceptual paper spanned the extant literature to define WR and identify the methods used to study the concept for the purposes of providing insight into the theoretical lenses through which WR has been explored to date. We recognise that WR is a dynamic concept and that WR attributes may continue to evolve as workplaces themselves change and research further develops. Therefore, while this study makes a contribution by reflecting on WR research to date, further research is needed to continue to explore the concept as it continues to evolve. The findings of the research are bound by the studies and literature included; we recognise there may be other works which have been omitted that make a contribution to WR theory.

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AGENDA FOR FUTURE RESEARCH

Need for more qualitative, exploratory, multi-vocal studies: Our findings revealed that quantitative methods are dominant in the study of WR. Few studies have adopted a qualitative, unsupervised approach. With calls in literature for research which explores WR from various stakeholder perspectives (e.g., Borg et al., 2019; Cavanagh et al., 2015), future research should consider conducting qualitative research (e.g., interviews, focus groups, case studies) to ascertain the views of under-researched stakeholders. In particular, we recommend that researchers explore WR from the perspective of graduates and early career practitioners, since there is scant research when compared to research on the views of employers and educators. Researchers may wish to consider undertaking multi-vocal studies to allow for comparative studies of different stakeholders' views and experiences in relation to WR.

Theoretical lenses: This research has extended knowledge on WR by identifying the theoretical lenses used in WR research to date. Our study explained the theories used to explore the concept to date; namely, Matching Theory, Identity Theory, Self-efficacy Theory, Human Capital Theory and Stakeholder Theory. In doing so, this study has shown that these theoretical lenses can be effectively used in WR research. Future research into the concept may wish to draw upon these theoretical lenses to continue to advance WR research, or to adopt new lenses.

CONCLUSION

This research has made three contributions to advancing our understanding of WR and guiding future research. First, to the authors' knowledge, there has been no recent comprehensive review of how GWR is defined in the literature, therefore this research contributes to clearing up the 'nomenclature' conundrum associated with the concept. Second, this paper reviewed the methods previously used to study WR, identifying the need for more qualitative research with multiple stakeholders to gain a richer, more holistic perspective of GWR. The third contribution this paper makes to the field of higher education is the explication of the theories used to explain graduate work-readiness. It is hoped that the appraisal of these theories in the context of GWR research, along with our definitional and methodological insights, will guide future research, creating opportunities for further theoretical and practical advancement of the concept of GWR in the higher education literature.

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Table 1

Theoretical underpinnings of WR 2000-2021

| Theoretical Frameworks | Scholars who adopted the Frameworks | Application in the Context of WR |
|-----------------------------|--|--|
| <i>Matching Theory</i> | Mason et al. (2009) Borg & Scott-Young (2020b) | GWR is seen as a function of whether the attributes/skills possessed by graduates match the skills desired by the labour force. |
| <i>Identity Theory</i> | Daniels & Brooker (2014) | Identity Theory suggests that in order for graduates to be work ready, they need to adopt an active role in their professional identity formation throughout university. |
| <i>Self-efficacy Theory</i> | Henderson et al. (2016) Spanjaard et al. (2018) | Self-efficacy Theory asserts that an individual's belief that they have the skills needed to succeed at work influences their perceptions of their WR. Graduates who have a high level of self-efficacy are expected to have greater confidence in their ability to respond to challenges at work. |
| <i>Human Capital Theory</i> | Hyslop-Marginson & Sears (2006) Kalfa & Taksa (2015) Natoli, Jackling & Jones (2018) Suleman (2018) | Human Capital Theory posits that universities have a role to impart marketable skills that increase students' future productivity, earnings and contributions to the work force. |
| <i>Stakeholder Theory</i> | Hickman & Akdere (2017) Prikshat et al. (2018) Borg et al. (2019) | Stakeholder Theory advocates that WR is reliant on collaboration between key stakeholders, with all players needing to have a voice and coordinate their roles to develop and enhance GWR. |

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Rally the troops first: Startup action on gender equality

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ABSTRACT: *Large established companies struggle to make sustainable progress toward gender equality; the traditional top-down approach initiated by formal policies and programs has had limited impact. Informed by the Three Spaces Framework for Sustainable Change, we conducted a longitudinal case study examining gender equality activities in a technology startup. Our results demonstrate an alternative to top-down action on gender equality: a bottom-up approach focused on building shared meaning and encouraging grassroots activity. We highlight the benefits of the bottom-up approach but caution startups to incorporate formal structures and programs as they scale up. Our findings provide managers with practical recommendations on successfully embedding gender equality in startup organisations.*

Keywords: Gender equality, Startups, Policies, HR Programs, Case study

Startups are viewed as an engine for economic growth in both developed and developing countries (Jurgens, 2022) and collectively contribute nearly 3 trillion USD to the global economy (Startup Genome, 2020). The external pressures on large established companies to conform to industry or professional norms are less likely to be experienced by small startups. Therefore, startups often have a unique opportunity to break the rules, and approach strategic issues from a fresh perspective. Startups may even bring new hope to ongoing social challenges like gender inequality. The importance of achieving gender equality is acknowledged globally, with United Nations (UN) including gender equality in the list of Sustainable Development Goals (SDGs) (UN, 2022a). Despite significant efforts by organisations over the last few decades, progress on gender equality has been slow and patchy and we are ‘not on track to achieve gender equality by 2030’ as envisioned in the SDGs (UN, 2022b).

‘Greenfield sites’ such as startups can bring novel insights (Guest & Bos-Nehles, 2013) to intractable issues. In fact, some argue that startups are best positioned to prompt ‘societal change’ while supporting economic growth (Jurgens, 2022). Diverse workforces in general, and gender-diverse workforces in particular, can increase innovation in organisations (Nielsen, Bloch, & Schiebinger, 2018; Page, 2008). Innovation is the life blood of startups and the need for innovation can motivate startups to recognise the value of gender equality. However, diversity and inclusion is still ‘a fundamental challenge’ for startups, particularly in the technology sector (Startup Genome, 2020).

Against this backdrop, some technology startups are explicitly committing to gender equality

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from early stages and are developing a reputation for taking bold action as they grow (e.g., Canva; Swan, 2018 and Bumble; O'Connor, 2017). However, most research on how organisations act on strategic issues like gender equality has been conducted in large organisations (Guest & Bos-Nehles, 2013), with less attention to new and emerging organisations (Dabić, Ortiz-De-Urbina-Criado, & Romero-Martínez, 2011). Diversity management approaches change as organisations mature (Ellis & Tsui, 2007). Organisational policies and programs that support gender equality in more established organisations are unlikely to align with the requirements of startups (Bamberger, Bacharach & Dyer, 1989). There is a pressing need to understand how startup organisations act on gender equality. In this study, we report findings from a longitudinal case study of a startup committed to gender equality.

LITERATURE REVIEW

Previous research portrays organisations as taking a top-down approach when they act on a strategic issue (e.g., supporting diversity and inclusion or acting on environmental sustainability; Arthur & Boyle, 2007; Guest & Bos-Nehles, 2013). This body of research describes an organisational process in which senior managers take the first step. Guest and Bos-Nehles (2013) map out a 4-stage process where an organisation identifies a strategic issue and then develops formal HR policies and programs to support the issue. In this process, subsequent steps are influenced by the 'effectiveness of the previous stages' and 'each stage is a necessary requirement for those that follow' (Guest & Bos-Nehles, 2013, p. 82).

This body of evidence positions human resource programs as key levers; the organisation needs to align their HR initiatives to achieve strategic goals (Huselid, 1995; Guest & Bos-Nehles, 2013). The organisation's policies and programs act as 'communications from employer to employee' and communicate 'organisational values' (Bowen & Ostroff, 2004). Employees observe these policies and programs, interpreting them and engaging in collective sensemaking leading to a shared perception of what the organisation values as strategically important (Bowen & Ostroff, 2004): 'gender equality is important to this organisation' or 'innovation is valued here'. This literature also emphasises the important role played by the organisation's HR function in designing formal policies and programs and guiding line managers to implement them (Guest & Bos-Nehles, 2013).

However, a top-down approach that initiates action with formal policies and programs, guided

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by dedicated HR staff, is ‘inconsistent’ and even ‘in conflict with’ the requirements of startups (Bamberger et al., 1989, p. 350). Organisations in the startup stage often do not have the luxury of an HR function (Dabić et al., 2011). With little formalisation, startups often do not adopt sophisticated HR policies and programs (Boxall & Purcell, 2011; Davila & Foster, 2007).

Kulik, Sandhu, Perera, and Jarvis (2022) present a way forward, suggesting that action on a strategic issue does not necessarily need to start with formal policies and programs. Their Three Spaces Framework for Sustainable Change presents organisations as operating across three distinct metaphorical spaces: physical, mental and social. **Physical space** describes an organisation’s formal structures (roles, policies and programs) that relate to a strategic issue. **Mental space** is the organisational members’ (e.g., managers and employees) shared understanding about the issue. **Social space** is the external stakeholders’ (e.g., customers and community members) shared perception of organisational action on the issue. These authors emphasise that action on a strategic issue can start outside the physical space (i.e., not necessarily begin with formal programs or roles) and encourage researchers to examine alternative spatial origins that can generate the sustainable progress toward gender equality. Informed by this theoretical framework, we investigate an organisation at the startup stage to learn how they initiated action to support gender equality.

METHODS

Few studies have investigated gender equality initiatives within startups. Therefore, we took an inductive longitudinal case study approach (Eisenhardt & Graebner, 2007). Yin (2018) suggests that an explanatory case study approach is particularly appropriate in addressing ‘how’ research questions. We identified the case study organisation, Startup¹, through professional contacts associated with a startup incubator. Startup had spun out of an applied technology research centre about 8 years earlier and had a growing reputation that highlighted its commitment to gender equality. At the time of our data collection, Startup had nearly 50 employees and was rapidly expanding their operations and recruiting new employees. However, it had no formal roles devoted to human resource management or diversity and inclusion. We collected data over a 2-year period from 2021 to 2022.

¹ Startup is a pseudonym used to provide anonymity to the firm and our participants.

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Our data collection included interviews and focus groups with 30 participants. Our interview questions asked managers about Startup's action on gender equality (e.g., policies, programs, structures). Our focus group questions asked employees about their experience with these actions. Ten managers (i.e., founders, executives and senior managers, referred to as managers to ensure anonymity) participated in interviews, and 10 employees (i.e., middle managers, non-managerial employees) participated in focus groups. We also interviewed Startup's suppliers and service partners (n=6). Startup experienced a few role changes during our data collection (e.g., change of executives) and we interviewed those new staff members. In addition, we reviewed documents made available by Startup (e.g., draft diversity and inclusion policy), information from its website and social media channels and observation notes from an all-staff meeting. These data sources were supplemented by interviews with industry experts (n=4) who commented on gender equality activities in the startup sector. Multiple sources of data increase confidence in our findings (Yin, 2018).

All interviews and focus groups were digitally recorded and professionally transcribed. We independently coded the transcripts and archival data. This process generated a list of codes related to Startup's initiatives and employee and external stakeholder reactions (Miles, & Huberman, 1994; Yin, 2018). We compared our coding at the end of each coding cycle and discussed coding discrepancies until we reached agreement. At this stage, we were able to move from a long list of open codes to a shorter list of higher order codes that aggregated the data (Miles, & Huberman, 1994) and consider the emerging themes within the Three Spaces Framework. We then adopted a constant comparison method (Glaser & Strauss, 1967), comparing data under each code to its label and then comparing each code to others. We used NVivo software as a data management tool to facilitate code recording and comparisons. Our analysis enabled us to consider how Startup was making progress on gender equality and evaluate its progress in embedding initiatives in the organisation.

FINDINGS

Startup's managers took a thoughtful and deliberate approach to gender equality. They resisted formal programs and roles and tried instead to foster an inclusive 'passion' culture.

Rallying the Troops First

Resistance to formal policies and roles. Managers at Startup did not want to start their action

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on gender equality in the physical space (i.e., formal policies, programs, roles). They were reluctant to develop a tight gender equality policy, implement a formal program of activities, or provide oversight and accountability by assigning responsibility to a jobholder. They were concerned that this rigid approach would constrain their organic initiatives. They feared that a diversity and inclusion role would constrain gender equality to a single jobholder, so that other organisational members would lose their focus on the issue.

... we can't let the policies dictate our behaviour in a way that they become this hard and fast rule book where they actually inhibit D&I [diversity and inclusion]. – Manager

... policies...can become ritualistic documents that have no operational meaning...I would rather have a company where those concepts are pervasive within people and have no document, than the other way around – Manager

...the first thing you need to have is people on board with it [diversity and inclusion]...So, we've...very explicitly...not had someone who's...in charge of D&I. – Manager

...the worst thing would be to take one person in the organisation and say, 'You're the D&I officer. And you write the D&I policy and we'll all do our jobs, you do that job' – Manager

A 'passion' culture. Startup's managers worked to foster an inclusive culture as the first step toward supporting gender equality. They made a clear decision to initiate action in the mental space (i.e., shared understanding), and *rally the troops first*.

... we want diversity and inclusion to incorporate all aspects of our business...It needs to be just an integrated part of our company and our culture not just something extra that is on top. – Manager

Our co-founders...it was a huge point for them to create their company from the ground up, that from the ground up our culture and expectations were around diversity and inclusion. – Manager

Our approach is to...promote a culture within the company where diversity and inclusion is important, and have people adopt that and be on board with that...it becomes very hard to promote those concepts...if you're only trying to do it through policy and procedure. – Manager

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Startup managers used several strategies to build an inclusive culture. They initiated frequent conversations about gender equality, ensuring it stayed ‘front of mind’ for employees. They anticipated an ‘osmosis effect’ in which Startup employees who were initially co-located at a single site would embrace the company’s commitment to gender equality. Managers role modelled inclusive behaviours and called out behaviour they viewed as undermining gender equality.

I think that ongoing discussion is the important thing. It [gender equality as a strategic initiative] cannot be something that you talk about once a year or when they’re hired. That’s just...lip service. – Manager

...a lot of times, it’s about making sure that people are aware. So, whether it’s written down or not, you know, don’t set up a hiring interview panel that’s all men. – Manager

So, for example if someone needs to write notes [from a meeting]...I reckon the men write notes more than the females...Especially the leaders are kind of conscious of those kind of behaviours. – Manager

Instead of a suite of formal programs developed and implemented by the top leadership team, Startup promoted the organic growth of gender equality, relying on employees to suggest and adopt initiatives. Employees eagerly shared resources and expertise and saw this approach as very effective.

...we’re trying to foster a sort of ground up approach, where everyone kind of is on the same page with encouraging diversity...that might be job ads, or it might be just day to day interactions. – Employee

...one thing that came from bottom up...it was on the internal messaging service, so people can identify their pronouns in their profile...to highlight that not everybody’s the same. – Manager

...this is where the interview machine learning [to audit gender bias in job advertisements] came about, that was a contribution in our [messaging] channel...we thought ‘Wow, that’s a cool idea’, so let’s kind of use that for all interviews going forward. – Manager

The frequent conversations, behavioural role-modelling, and organic initiatives converged to create a strong shared understanding of gender equality’s importance. Overall, employees saw gender equality and inclusion as ‘foundational’ to Startup’s culture, a value embedded in ‘the roots of the organisation’.

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...in bigger organisations...there's this break as you go up and down the chain. Management might have some idea about diversity. And then it just sort of gets a bit disconnected by the time it filters down...those types of disconnects I don't feel are here. – Employee

...it's [commitment to gender equality] kind of just part of ...what the culture is. And then it's set in – and it's engrained. So, we just kind of live and breathe it. – Employee

Informal champions. With a strong shared commitment to gender equality, a group of informal champions emerged at Startup. These champions were a gender balanced group of senior managers and junior employees (e.g., interns). They launched gender equality initiatives, kept the conversation on gender equality alive, held one other accountable, and encouraged Startup to take corrective action when they saw slippage. Their actions inspired other employees to advocate for gender equality.

...kind of making sure that it [commitment to gender equality] stays front of mind, that is the main role that we play, making sure that these policy drafts don't get forgotten about and they sit there for ages...I mean when I first started there wasn't making sure that two women were a part of the hiring panel but since then now it is part of just normal culture life. – Manager

... I think 'you see it, you say it'. That's what creates that space for people to talk about these things and think about these things, have it be front of mind. That's what your informal champions do. They find the opportunities to talk about things and raise them and encourage others to participate in the discussion. – Manager

...we won't have an interview panel that doesn't have at least one female on the interview panel. So, I end up doing a lot of interviews...you're not allowed to get lazy because everyone on the panel will hold each other to account. - Manager

First Name was the one who did my onboarding. And I feel like a lot of the confidence I have in my ability to call out stuff about gender diversity was from her doing that. From day zero I knew that I was in a position where I could do that. – Employee

Psychological safety and positive lived experience. Startup employees reported a high level of psychological safety and were empowered to call out issues that were inconsistent with its gender equality commitment. Employees (both men and women) compared Startup to other organisations in

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male-dominated sectors and most reported a positive difference in their lived experience.

...everyone around the table's opinion is valid. Everyone can question everyone in a safe space.

There's no malice...it's a very supportive, safe, learning environment. - Employee

I've worked in many boys' clubs...we're not like that at all...in many boys' clubs...women are just treated second rank. It doesn't matter what your role is. You're there to go grab coffees, you're there to go get the photocopying...I would call it out. But I don't need to call it out here, because everybody feels the same way. - Employee

It's come up for me with some old peers...we all came from a [name of industry] background which is still living in the dark ages with gender equality...it's definitely leaps and bounds ahead of where I'd experienced it previously. - Employee

Growing Pains

No policy to guide action. Startup's gender equality initiatives emerged from the ground up and were supported by informal champions. But without policy documents or a formal program of activities, managers and employees lacked the human resource expertise that could have informed their gender equality efforts.

So, some of this stuff is sort of done, to be quite honest, reactively...you'll have your first instance of someone needing to take time off because the birth of a baby. 'Okay, right now we need to think about what's our approach there?'...people do like to have a solid framework that they can rely on...your policies are the written expression of what the company cares about...So, if something's not written down, then you're relying on very informal communication mechanisms to say something that is important. - Manager

Managers and employees lacked a reference point to discourage behaviours that conflicted with Startup's diversity and inclusion values. One manager described how another manager was favouring certain employees, undermining Startup's diversity and inclusion efforts.

...individual who is a bit about nepotism. If we had those formal policies...this isn't even up for discussion...it would be 'Please refer to this policy which states this' - Manager

Inconsistent progress. Without formal programs or role responsibility, gender equality initiatives could fall by the wayside. Some activities fizzled out and others would have benefitted

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from closer monitoring.

...it's kind of fireworks, like for the most part everything is good...no one is really disrespected or anything...and there are bright flashes of like progress unlike a consistent sunrise of progress. - Employee

When we were a group of eleven it was really easy to ensure diversity and inclusion when it came to hiring...We were all sitting around each other...our formal policy and stuff it didn't matter...We are now a size of fifty and I wouldn't know if the last couple of hires [are] happening in conjunction with our hiring process. I wouldn't know whether they had females as part of their panel. - Manager

Startup was slow to adopt some progressive gender equality activities (e.g., a sponsorship program for high potential women, gender pay audits); it focused on the low hanging fruit.

...we've got a long way to go to ensure gender equal pay. Are the women in our organisation, although we're big on hiring them...have we been big on ensuring also that they're getting paid correctly and that there isn't a gap between male and female? - Manager

...often those technical roles are highly paid. So, if you don't have good genuine gender diversity across the areas of the business, what you're going to see is that the average pay for females is...significantly lower...That should be revealed. We should face that. So, I don't know if I'm going to get that one over the line. - Manager

Informal champion fatigue. In Startup's fast-paced environment, informal champions were only able to provide fragmented leadership and support for gender equality initiatives. At times they were overburdened and exhausted.

It is hard. It's a lot of extra work, trying to actively and genuinely build diversity into your company. It is not an accidental process...It's super hard work. - Manager

So, there is a lot of really energetic intelligent people wanting to do things...so many things that we could be doing and we don't, we can't do all of them all, all at once not whilst doing our jobs. - Employee

It's exhausting, and it also sometimes makes me worried when I go on...leave, what's it going to be like when I'm not there. - Manager

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Manager and employee frustration. The frequent conversations about gender equality created a groundswell of expectations among Startup's managers and employees who expected concrete action. Employees understood that gender equality was important to Startup, but they did not have a shared understanding of *how* Startup would support gender equality (e.g., the type of initiatives, timelines). At times, progress felt sluggish and frustrated managers and employees.

I guess I don't get the feeling that there is a genuine companywide (a) recognition of the fact that we have somewhere to go and then (b) a strategy for that. I guess there are individuals who care. – Employee

...we do road maps with our [product development] on how we are going...There is no reason why we can't do something similar with diversity whereas at least there is something there and there are timelines and people can commit to those timelines. – Employee

I think that filtering down into clear responsibilities and ownership of who is championing is lacking. And because it's lacking, we all sit there and go 'We need this, we need this, we need this', but no one is working on it until perhaps something blows up and we go 'Oh hang on I'll do it'. – Manager

...there were lots of interesting ideas raised...very few came to fruition...the road is paved with good intentions...I don't think we're given the capacity to make those things. – Employee

Not scalable. There was an emerging understanding among managers that, as Startup grew, role responsibility, stable programs, and formal policies would be needed to support gender equality. Without action in the physical space, progress toward gender equality was neither scalable nor sustainable. As we wrapped up our data collection, Startup took the first steps: they hired a dedicated HR consultant and engaged a consultancy to recruit more women into technical roles.

...having those formal policies would be super helpful...it's a real risk that culture won't be replicated remotely...[Name of function] is still a very, very male dominated...and in a bad way, in a very traditional, patriarchal way...I don't think necessarily our hires in [name of function] have been as successful in terms of getting cultural alignment. – Manager

I think of a plant and the plant is going to die if you don't water it and give it the right nutrition, and I feel like the right nutrition is what people and culture [HR function] can do...those

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fundamentals need to be in place...that is how I see the work in the gender space at Startup. –
Manager

DISCUSSION

Gender inequality is an intractable problem facing many organisations. Unshackled by industry norms, startups can develop innovative strategies to address this issue. Previous research has recommended that organisations adopt a top-down plan of action centred around formal policies and programs and appoint dedicated HR staff (Arthur & Boyle, 2007; Guest & Bos-Nehles, 2013). However, this approach is unlikely to be effective for organisations at the early startup stages (Bamberger et al., 1989; Boxall & Purcell, 2011; Dabić et al. 2011; Davila & Foster, 2007). Informed by Kulik et al.'s (2022) Three Spaces Framework for Sustainable Change, we investigated whether a technology startup might take an alternative approach.

Our findings indicate that Startup managers resisted the top-down approach. Instead of adopting formal policies and programs, they fostered a shared understanding of the importance of gender equality. Their communication and role-modelling strategies created a strong commitment to gender equality among employees. Employees felt empowered to suggest initiatives and call out for action. However, as Startup scaled up, progress was sluggish and frustrated both managers and employees. The managers recognised that Startup's lack of robust policies, programs and roles could undermine their progress toward gender equality. Our findings make clear theoretical contributions to the literatures on diversity management and human resource management of startups. We extend the work of Kulik et al. (2022) by providing an empirical examination of the framework's key principles and particularly highlight the role of employees in motivating organisations to act on strategic issues.

In a top-down action plan, formal policies and programs are the first step for organisations interested in supporting gender equality (Arthur & Boyle, 2007; Bowen & Ostroff, 2004; Guest & Bos-Nehles, 2013). Kulik et al. (2022) position these activities within the physical space and argue that strategic action can be launched from other spaces. Startups have multiple priorities and low formalisation (Bamberger et al., 1989; Davila & Foster, 2007). For these organisations, the mental space may enable greater traction toward gender equality. Bendickson, Muldoon, Liguori and Midgett (2017) found that startups with people-focused cultures were ideally positioned to adopt high

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performance work practices. Similarly, people-focused cultures may help startups to address social issues, including gender equality.

Kulik et al. (2022) argued that organisations can achieve *sustained* progress on gender equality only when their activities are simultaneously supported across all three spaces. If organisations focus their efforts in one space (e.g., formalising roles and policies in the physical space) independently of the other two spaces, it can lead to policy-practice decoupling (having formal policies but ineffective implementation). Our findings provide empirical evidence that exclusive concentration on the mental space is also problematic. As Startup grew, the lack of activity in the physical space threatened to derail progress. Formalising organisational initiatives ensures that ‘policies are implemented as intended’ (Elvira & Graham, 2002, p. 604) and adopting formal policies and programs becomes more critical as startups grow, to provide ‘the infrastructure they need for scale up’ (Davila & Foster, 2007, p. 908).

Previous research has highlighted the role senior managers and HR staff play in designing and leading HR policies and programs (Arthur & Boyle, 2007). Guest & Bos-Nehles (2013) draw attention to ‘change masters’ including senior managers, external consultants, and line managers. However, a dedicated HR function does not necessarily lead to innovative HR practices (Guest & Bryson, 2009). Our findings highlight the role played by informal champions and employees in shaping an organisation’s culture and practices.

Startups do not always have the resources to support dedicated HR roles or procure the services of external consultants. For these organisations, our findings provide encouraging recommendations. Organisations can leverage their unique startup characteristics (e.g., flat structure, small employee numbers, frequent interpersonal interactions; Davila & Foster, 2007) to rally the troops on strategic issues. As these firms scale up, they can devote their valuable resources to introduce activity in the physical space (e.g., dedicated roles, formalised recruitment) to build on that excellent foundation (The Economist, 2023).

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**Work Passion on Work-Family Outcomes of Entrepreneurs in India and
Germany: The Moderating Roles of Activity Orientation and Individualism-
Collectivism**

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**Work Passion on Work-Family Outcomes of Entrepreneurs in India and
Germany: The Moderating Roles of Activity Orientation and Individualism-
Collectivism**

ABSTRACT

This study examines the impact of work passion on work-family enrichment and conflict among entrepreneurs through the moderating roles of the cultural dimensions of activity orientation and individualism-collectivism. In particular, the authors integrate self-determination theory with the literature surrounding work passion to investigate the possible pathways through which harmonious and obsessive work passion might influence work-family outcomes, as well as the moderating effect of cultural dimensions on the relationships. Structural equation modelling of responses from 123 entrepreneurs from India and 108 entrepreneurs in Germany suggests that harmonious work passion is linked to work-family enrichment, whereas obsessive work passion is linked to work-family conflict and, furthermore, that activity orientation and individualism-collectivism are associated with work passion and work-family outcomes. This research provides a starting point for investigating the cultural influences that may impact the work passion- work-family interface relationship as well as the specific mechanisms through which work passion impacts work-family outcomes.

Keywords: Work passion; work-family enrichment; work-family conflict; role of culture; activity orientation; individualism-collectivism

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Even if it sounds cliché, the year 2020 did impact the globe for all time. Around the world, the coronavirus caused havoc in the personal as well as the professional realms. There was a significant deal of uncertainty in the labor market when COVID-19 was declared a global health crisis. Workers started quitting their employment at an unusual rate as the pandemic entered its second year and the economy started to seem more normal. This widespread exit from the workforce, driven by mid-career workers, has been termed "The Great Resignation" or "The Big Quit" (Chugh, 2021; Curtis, 2021; Whitaker, 2022) and has only become worse. The reasons why individuals are leaving their jobs at these historically high rates have been attributed to a number of different factors. Finding the work unfulfilling or having a job that is meaningless is one of the reasons individuals leave their jobs. A Joblist poll revealed that 20% of workers left their jobs to pursue their passions and a different career path entailing meaningful work (Davidson, 2022). According to Hardgrove (2019), meaningful work is a determinant of passion.

During the period of "The Great Resignation", the Global Entrepreneurship Monitor (GEM) National Report contained some intriguing discoveries. For instance, in the GEM India Report for 2021-2022, it was noted that India's total entrepreneurial activity rate was 14.45% in 2021. Compared to 2020 when the rate stood at 5.3%, there was a significant increase in total early-stage entrepreneurial activity (TEA) in India. Similarly, the TEA in Germany increased to 6.9% in 2021 compared to 4.8% in 2020, indicating a rise in entrepreneurial activity and a higher start-up rate. Indeed, the GEM reports have consistently shown an increase in entrepreneurial activity rates in many countries around the world. This global surge in entrepreneurship is a significant trend that highlights the growing importance of people opting for entrepreneurial pursuits. Organizations, including start-ups, don't just arise. They are developed by people with the drive, passion, and perseverance to achieve their goals as well as the entrepreneurial spirit that gives them the motivation to do so. Smilor (1997) refers to passion as "perhaps the most observed phenomenon of the entrepreneurial process" (p. 342).

For hundreds of years, passion has been explored as a connection between one's identity and their actions (Descartes, Haldane, & Ross, 1955). Vallerand et al. (2003) defined passion as "a strong

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inclination toward an activity that one likes, finds important, and in which one invests time and energy” (p. 757). At work, it is a psychological characteristic that allows people to stay committed and dedicated for prolonged time periods (Vallerand et al., 2008). Vallerand's (2015) definition of passion references the dualistic model of passion (Vallerand et al., 2003), which, supported by research carried out over the last decade (e.g., Landay, DeSimone, & Harms, 2022), presents passion as a duality, encompassing harmonious and obsessive work passion (Bouizegarene et al., 2018; Vallerand 2015). Harmonious work passion (HWP) is associated with autonomous internalization of work practices (Carpentier, Mageau, & Vallerand, 2012). It predominantly yields beneficial and adaptive outcomes, while also aligning with other elements of an individual's self, their life, and their various identities. On the other hand, obsessive work passion (OWP) is associated with a controlled internalization of work into one's identity, leading to an insatiable desire to work (Mageau et al., 2009). This form of passion primarily leads to outcomes that are less adaptive, and sometimes even counterproductive, and may clash with aspects of the individual's self, their life, and their various identities.

In the quest to understand distinct entrepreneurial behaviors (Cardon, Wincent, Singh, & Drnovsek, 2009), work passion, which plays a significant role in entrepreneurship, has recently garnered a considerable deal of research interest (Pollack, Ho, O'Boyle, & Kirkman, 2020). Despite the fact that management scholars are becoming more interested in the area of work passion, minimal research has been done to examine how it affects the work-family interface (Chummar, Singh, & Ezzedeen, 2019). Over the past few decades, as the dynamics of work and families have altered, more focus has been placed on how these two entities interact (Ilies, Wilson, & Wagner, 2009). This increased interest has been stoked by a number of developments that are profoundly altering the workforce's demographic make-up. Moreover, today's people are expected to perform more tasks and duties and play more roles than they have time for, which can make it difficult for them to maintain a healthy balance between their personal and professional lives (Greenhaus & Foley, 2007; Maertz & Boyar, 2011). These trends particularly impact entrepreneurs because they have limited personal resources like time, energy, and attention (Van Steenbergen, Ellemers, & Mooijaart, 2007). Understanding how an entrepreneur's work passion can positively or negatively (Gorgievski & Bakker, 2010) affect their family life is crucial, as it can also impact their work-related achievements,

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performance, and overall professional success. (Chummar et al., 2019) Two distinct conceptualizations of work-family interface have stemmed from the interaction between the work and family domains (Frone, 2003; Rothbard, 2001). The first, conceptualized as work-family enrichment (WFE; Greenhaus & Powell, 2006) refers to “the extent to which experiences in one role improve the quality of life in the other role” (Greenhaus & Powell, 2006, p. 73). The second, conceptualized as work-family conflict (WFC; Greenhaus & Beutell, 1985), refers to “a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family (work) role” (Greenhaus & Beutell, 1985, p. 77).

The type and quality of an individual’s work-family relationship is determined by the norms and values connected with the cultural connotation and portrayal of work and family in the given culture (Ashforth, Kreiner, & Fugate, 2000). Moreover, individual’s values and visible physical behaviour are influenced by their nationality, which affects their linguistic tendencies and cognitive schema, implying that culture has a role in the facilitation or inhibition of certain behaviours and attitudes (Rego & Cunha, 2009). Therefore, it is critical to comprehend both individual cultural distinctions and societal cultural values, as the prevailing ideals in a society reflect the culture of its organizations. Expanding on this field of inquiry, this study highlights the significance of taking in to account the moderating effects of cultural dimensions under which these relationships are affected. Numerous models have been put forth to evaluate and examine cultural values and dimensions (e.g., Schwartz, 1992; Trompenaars & Hampden-Turner, 1998). However, our study focuses on two cultural dimensions that appear to be particularly significant to work passion and the work-family interface relationship, because they have either been formerly utilized to understand phenomena linked to the constructs under study (e.g., individualism-collectivism) or because we can present a reasoning that they would explain such occurrences (e.g., activity orientation).

Our study makes several important contributions. The study’s primary contribution lies in advancing the understanding of the dualistic model of passion by establishing work passion as a precursor of work-family outcomes, particularly crucial in light of the Covid-19 pandemic and its impact on blurred work-family boundaries (Allen & French, 2022). Furthermore, this research brings

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valuable insights on the significance of activity orientation and individualism-collectivism, particularly in the context of entrepreneurs, highlighting the need for a better understanding of how culture influences various work-family outcomes, contributing to a more comprehensive understanding of the role of work passion beyond the workplace through the influence of culture within the cohesive nomological network. Finally, our study employs the self-determination theory (SDT; Deci & Ryan, 1985) to clarify the connections within the theoretical model, thereby expanding and practically applying these theories in various ways, while also integrating insights from diverse disciplines facilitating the exploration of novel perspectives and advancements in existing theories.

Work Passion on Work-Family Outcomes

According to Vallerand et al.'s (2003) study, autonomous internalization as per SDT results in harmonious work passion while controlled internalization results in obsessive work passion. According to this characterization, while both harmoniously and obsessively passionate individuals experience a powerful urge to undertake entrepreneurship, only harmoniously passionate individuals can regulate their urge to actively indulge in entrepreneurship when they decide (Ho and Pollack, 2014). Entrepreneurs who experience harmonious passion in their work derive positive emotional experiences and outcomes, allowing them to fully engage in their non-work life without depleting personal resources to cope with stress and worry, thus minimizing conflicts and fostering enrichment across different areas of life (Chummar et al., 2019; Thorgren, Wincent, & Sirén, 2013). In contrast, individuals with obsessive work passion struggle to regulate their entrepreneurial drive and feel compelled to continue until their passion exhausts itself, leading to negative effects on their emotional state and energy resources (Sonnentag, Mojza, Binnewies, & Scholl, 2008). Consequently, such entrepreneurs find it challenging to fully engage in family experiences as they struggle to psychologically detach from work and fail to engage in positive experiences at home, resulting in conflicts with other aspects of their identity and roles in life (Vallerand & Houliort, 2003). As a result of the preceding, we offer the following hypotheses:

Hypothesis 1a. Harmonious work passion is positively related to work-family enrichment.

Hypothesis 1b. Obsessive work passion is negatively related to work-family enrichment.

Hypothesis 2a. Harmonious work passion is negatively related to work-family conflict.

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Hypothesis 2b. Obsessive work passion is positively related to work-family conflict.

The Moderating Role of Culture: The Lens of Activity Orientation

Activity orientation looks at the modality of human activity and beliefs about appropriate goals (Kluckhohn, 2019), and comprises three orientations: being, becoming, and doing. The being orientation emphasizes spontaneous self-expression in the present moment, the becoming orientation focuses on personal growth and internal actions not necessarily measured by external standards, while the doing orientation prioritizes goal achievement through rational planning and externally appraisable accomplishments (Kluckhohn & Strodtbeck, 1961). Literature indicates that one's dominant activity orientation shapes preferred work styles (Aycan, Al-Hamadi, Davis, & Budhwar, 2007), with the doing and becoming orientations emphasizing measurable achievement and goal pursuit, while the being orientation prioritizes quality of life outside professional achievement (Rudman & Dennhardt, 2008). Because it is acceptable to take things easy in cultures with a being orientation, and individuals are content to just be a being, individuals who come from a being cultural ideal will derive satisfaction from simple pleasures and will feel gratified in living in the moment. Such individuals will engage in tranquil behaviour and will not rush to complete tasks since they believe that everything will be completed in due time. Unlike societies characterised with a becoming orientation, which discourages the pursuit of economic objectives and involvement with the material world, societies with a doing orientation, value success, achievement, material wealth acquisition and economic activity (Cavanagh, 1990). As a result of the foregoing, we advance the following proposition:

Hypothesis 3. Being activity orientation will positively moderate the relationship between (a) harmonious work passion and WFE and (b) obsessive work passion and WFE, such that the positive relationship between work passion and WFE is stronger among individuals with a being orientation.

Hypothesis 4. Becoming activity orientation will positively moderate the relationship between (a) harmonious work passion and WFE and (b) obsessive work passion and WFE, such that the positive relationship between work passion and WFE is stronger among individuals with a becoming orientation.

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Hypothesis 5. Doing activity orientation will negatively moderate the relationship between (a) harmonious work passion and WFE and (b) obsessive work passion and WFE, such that the positive relationship between work passion and WFE is weaker among individuals with a doing orientation.

The Moderating Role of Culture: The Lens of Individualism-Collectivism

The concept of individualism-collectivism examines the nature of human relationships and linkages (Hofstede, 1980), where individualists prioritize personal goals and have looser connections, while collectivists prioritize common objectives and strong group ties (Beugelsdijk & Welzel, 2018). This combination gives rise to four cultural orientations: vertical individualists (VI) value independence and differentiation, horizontal individualists (HI) emphasize equality, vertical collectivists (VC) emphasize interdependence with status differentiation, and horizontal collectivists (HC) emphasize cooperation and equality, though they are relatively rare (Triandis & Gelfand, 1998; Triandis, 2001). Individuals from individualistic cultures tend to prioritize passion at work over other commitments, viewing it as highly inspiring and fulfilling (Vallerand et al., 2003), while collectivist cultures perceive work as a means to sustain the family (e.g., Redding, 1990), leading to a stronger recognition of good links between work and family domains (Spector et al., 2004). Collectivist individuals, driven by a sense of belongingness, are more attentive to the quality of their work-family interface and are more likely to integrate their work and family roles, resulting in reduced conflict between these roles compared to individualistic cultures (Powell, Francesco, & Ling, 2009). Drawing from the ongoing discussion we advance the following hypothesis:

Hypothesis 6. Vertical individualism will positively moderate the relationship between (a) harmonious work passion and WFC and (b) obsessive work passion and WFC, such that the positive relationship between work passion and WFC is stronger among individuals with a vertical individualistic orientation.

Hypothesis 7. Horizontal individualism will positively moderate the relationship between (a) harmonious work passion and WFC and (b) obsessive work passion and WFC, such that the positive relationship between work passion and WFC is stronger among individuals with a horizontal individualistic orientation.

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Hypothesis 8. Vertical collectivism will negatively moderate the relationship between (a) harmonious work passion and WFC and (b) obsessive work passion and WFC, such that the positive relationship between work passion and WFC is weaker among individuals with a vertical collectivistic orientation.

Hypothesis 9. Horizontal collectivism will negatively moderate the relationship between (a) harmonious work passion and WFC and (b) obsessive work passion and WFC, such that the positive relationship between work passion and WFC is weaker among individuals with a horizontal collectivistic orientation.

METHOD

Procedure and Sample

Using a two-wave study design, data from entrepreneurs in Germany and India were collected at two different points in time, where entrepreneurs from various industries were approached through social media platforms like LinkedIn and Xing. A link to the initial phase of an online survey was sent to those who agreed to participate (Time 1), gathering responses on work passion, activity orientation, individualism-collectivism, and demographic information. Subsequently, participants who completed the first phase were sent a second survey after two weeks (Time 2), obtaining responses on work-family enrichment and conflict. To mitigate common method biases, several measures were implemented based on the recommended procedural remedies by Podsakoff, MacKenzie, Lee and Podsakoff (2003). In India, we received 123 completed questionnaires, yielding a response rate of 42.96%. Among these participants, there were 26 females, the average age was 44.23 years ($SD = 12.89$), and worked 68.46 hours per week ($SD = 16.06$). The majority of participants held at least a bachelor's degree (51%), were married (87.5%), and resided with at least one other member (98.61%). In Germany, we obtained 108 completed questionnaires with a response rate of 54.44%. Among these participants, there were 27 females, the average age was 39.26 years ($SD = 10.58$), and worked 47.26 hours per week ($SD = 13.95$). A majority of participants held at least a bachelor's degree (82.43%), were married or in a partnership (71.62%), and resided with at least one other member (75.67%).

Measures

McGorry's (2000) process was utilized to translate the original English scales into German and Malayalam, with most items measured on a seven-point Likert-type scale (1 = strongly disagree, 7 = strongly

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agree). Harmonious and obsessive work passion were assessed with a 17-item scale from Vallerand et al. (2003). A sample item is “My work reflects the qualities I like about myself” ($\alpha = .82$). Activity orientation was captured with a nine-item scale from Ibrahim and Kahn (1987). A sample item is “I prefer to relax and enjoy life as it comes” ($\alpha = .98$). Individualism-collectivism were measured using a 16-item scale from Triandis and Gelfand (1998). A sample item is “Competition is the law of nature” ($\alpha = .79$). WFC was captured with a nine-item scale from Carlson, Kacmar and Williams (2000). A sample item is “My work keeps me from my family activities more than I would like” ($\alpha = .91$). WFE was assessed with a nine-item scale from Carlson, Kacmar, Wayne and Grzywacz (2006). A sample item is “My involvement in my work puts me in a good mood and this helps me be a better family member” ($\alpha = .92$).

RESULTS

The data was analysed using SmartPLS 4. Table 1 displays construct reliability and convergent validity for both the overall sample and the country-specific samples.

Insert Table 1 about here

Four hypotheses on the direct effects were supported in the overall sample, according to the findings (Table 2). The results for each country-specific sample are broadly consistent with those for the entire sample, with a few deviations: H1a: HP→WFE ($\beta = 0.101$, $t = 0.80$, $p = 0.21$; $\beta = 0.2$, $t = 1.404$, $p = 0.08$) were discovered to be insignificant in the samples from India and Germany. Similarly, H1b: OP→WFE ($\beta = 0.03$, $t = 0.3$, $p = 0.38$; $\beta = 0.19$, $t = 1.43$, $p = 0.07$) were identified to be insignificant in the samples from India and Germany. The study incorporated age and gender as control variables, revealing a significant impact of age and gender on WFE in the overall ($\beta = 0.106$, $t = 1.69$, $p = 0.04$; $\beta = 0.31$, $t = 2.43$, $p = 0.007$) and German samples ($\beta = 0.17$, $t = 2.105$, $p = 0.01$; $\beta = 0.43$, $t = 2.11$, $p = 0.01$), but not in the Indian sample. However, age and gender did not exhibit a significant effect on WFC in any of the samples. In the study, the R-Sq values for the dependent variables ranged from 0.37 to 0.49 for the samples from India, Germany, and the complete population. The dependent variables' Q-sq values ranged from 0.05 to 0.23.

Insert Table 2 about here

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Moderation Analysis

Hypotheses testing results for the overall and country-specific samples are presented in Table 3. The results demonstrated that the overall sample, as well as the sample from India, hypothesis H3a, which stated that being orientation had a significant moderating effect on WFE, was supported ($\beta = -0.13$, $t = 1.43$, $p = 0.05$; $\beta = -0.13$, $t = 1.43$, $p = 0.05$), whereas the moderating effect from the German sample was not found to be significant. However, hypothesis H3b was not supported in any of the samples. Hypothesis H4a, which suggested that becoming orientation had a significant moderating effect on WFE, was supported in the samples from India and Germany ($\beta = -0.21$, $t = 3.29$, $p = 0.001$; $\beta = -0.14$, $t = 1.47$, $p = 0.05$). Nonetheless, the moderating effects from the overall sample was not found to be significant. Similarly, hypothesis H4b was not supported in any of the samples, as the results were found to be not significant. Hypothesis H5a, which stated that doing orientation had a significant moderating effect on WFE, was supported in the overall sample ($\beta = -0.12$, $t = 2.083$, $p = 0.01$), whereas the moderating effects from the country-specific samples were not found to be significant. Hypothesis H5b, was supported in the sample from India ($\beta = -0.13$, $t = 1.79$, $p = 0.03$). Nonetheless, the moderating effects from the overall and German samples were found to be insignificant.

The results demonstrated that in the sample from India, hypothesis H6a, which stated that vertical individualism had a significant moderating effect on WFC, was supported ($\beta = -0.16$, $t = 1.61$, $p = 0.05$), whereas the moderating effect from the overall and the German samples were not found to be significant. However, hypothesis H6b was not supported in any of the samples. Similarly hypotheses H7a and H7b, as well as H8a and H8b, which stated horizontal individualism and vertical collectivism had moderating effects on WFC were not supported in any of the samples, indicating insignificant moderating effects. Hypothesis H9a, which suggested that horizontal collectivism had a significant moderating effect on WFC, was supported in the overall sample ($\beta = -0.08$, $t = 1.36$, $p = 0.05$). Nonetheless, the moderating effects from the country-specific samples were not significant. Similarly, hypothesis H9b was not supported in any of the samples, as the results were found to be not significant.

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Insert Table 3 about here

Multi-Group Analysis

In the concluding phase of the analysis, we examined the significant distinctions between India and Germany concerning the effects of harmonious and obsessive work passion, activity orientation, and individualism-collectivism on WFE and WFC. The findings revealed that most of the differences were insignificant, except for the impact of obsessive work passion on WFC, which was found to be statistically significant. The variations in path coefficients demonstrated that the influence of work passion on WFE was stronger in Germany compared to India, while the impact of work passion on WFC was stronger in India compared to Germany. The results of the multi-group analysis are summarized in table 4.

Insert Table 4 about here

DISCUSSION

The study contributes to cross-cultural management research by establishing connections between work passion, cultural dimensions, and work-family outcomes. Consistent with the existing literature the study's overall results indicated that harmonious work passion positively and significantly influenced WFE, while obsessive work passion was associated with WFC. Additionally, a multigroup analysis was conducted to examine potential differences in the influence of work passion and cultural dimensions on work-family outcomes between the two countries. Although no significant differences were found overall, the impact of obsessive work passion on WFC was observed to be more pronounced in India. The study further revealed that increasing age is associated with more favorable work-family outcomes, and that female entrepreneurs experienced greater WFE compared to their male counterparts.

The findings from the overall sample indicated that an increase in being orientation had a weakening effect on the relationship between harmonious work passion and WFE, particularly in India, a culture known for its high being orientation, possibly due to the emphasis on the belief that things happen naturally rather than through human agency (Okabe, 1983). Additionally, in both India

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and Germany, an increase in becoming orientation weakened the association between harmonious work passion and WFE, possibly because becoming orientation prioritizes meeting family needs and desires (Kanungo, 1983), while devaluing economic goals and engagement with material aspects of life. Furthermore, the results revealed that an increase in doing orientation strengthened the connection between harmonious work passion and WFE in the overall sample, but in India, the doing orientation weakened the link between obsessive work passion and WFE, potentially due to the perception of work as a lifelong, intrinsic, and divine calling (Kanungo, 1983), where success, achievement, material wealth acquisition, and economic activity hold significant value (Cavanagh, 1990).

The overall findings revealed that an increase in horizontal collectivism orientation strengthened the negative relationship between harmonious work passion and WFC, which may be attributed to individuals with horizontal collectivism orientation perceiving themselves and their group as a unified entity with shared goals, emphasizing empathy, sociability, and cooperation (Triandis & Gelfand, 1998). The results also revealed that in India, an increase in vertical individualism orientation weakened the negative association between harmonious work passion and WFC, possibly because individuals with vertical individualism orientation prioritize independence and differentiation from others, striving for personal excellence, prestige, and higher social status (Chen & Li, 2005).

Practical Implications

The study provides practical guidance for entrepreneurs to enhance their well-being and positive work-family exchanges. With the potential to uncover one's specific type of passion, entrepreneurs have the opportunity to proactively assess their passion's intensity and its influence on their work-family interactions. Work passion can serve as a strategic tool for entrepreneurs to mold various outcomes related to their work and family. Therefore, entrepreneurs can focus on enhancing harmonious work passion through training programs and interventions, while actively reducing obsessive work passion through cognitive and behavioral adjustments, resulting in positive exchanges between work and family domains. The study emphasises that entrepreneurs have a greater chance of achieving enhanced work-family outcomes if they possess an understanding of the values and

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behavioral patterns of different countries. Furthermore, entrepreneurs with multinational firms should exhibit cultural intelligence (Earley & Mosakowski, 2004) to comprehend the essential factors that contribute to the success of programs in various locations. Childcare assistance and flexible work schedules, for example, could be beneficial in minimizing WFC in Western countries, however, this is not the situation in certain other parts of the world (Spector et al., 2004). As a result, instead of replicating work-family programs in different cultures, it is imperative to customize these programs to address the specific needs and conditions of each situation, promoting the cultivation of a healthy and supportive work-family culture in all contexts. Entrepreneurs may also undergo cross cultural training to gain insights into their coworkers from diverse backgrounds and acquire culturally sensitive strategies to effectively navigate interactions within their own culture and organization.

Limitations and Future Research Directions

The study has several limitations. Firstly, it focused only on work passion and its effects on entrepreneurs in a small sample of two countries, namely India and Germany. Future research should aim to include larger sample sizes and expand the study to include additional countries. Secondly, the study only examined the influence of two cultural dimensions on the relationship between work passion and work-family interface, while there are many more cultural dimensions documented in the literature that could play a role. For example, power distance (Hofstede, 1980), universalism-particularism (Hampden-Turner & Trompenaars, 2000), and performance orientation (House et al., 2004) could all impact the relationship. Future studies could also investigate how cultural differences affect the work-family interface for other individuals in an entrepreneur's work and family domains, such as business partners, subordinates, spouses, or offspring. Additionally, there are other factors that could influence the proposed links, such as co-worker's type of passion, resource importance to the family domain, resource congruence with family needs, multi-cultural personality, and cultural intelligence, which were not examined in this study. More broadly, future research could explore the impact of various life roles beyond work, including recreation, society, and self. Lastly, the study only assessed the impact of two control variables on the criterion variable, and future research should examine how factors like work schedule, marital status differences, and the number of dependents affect the study's outcomes.

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TABLE 1: Reliability and Convergent Validity

| Variables | India | | German | | Complete | |
|-----------|-------|------|--------|------|----------|------|
| | CR | AVE | CR | AVE | CR | AVE |
| AOB | 0.65 | 0.45 | 0.69 | 0.49 | 0.6 | 0.48 |
| AOBB | 0.68 | 0.42 | 0.68 | 0.43 | 0.69 | 0.44 |
| AOD | 0.7 | 0.43 | 0.67 | 0.43 | 0.63 | 0.43 |
| HC | 0.73 | 0.47 | 0.79 | 0.49 | 0.76 | 0.46 |
| HI | 0.64 | 0.46 | 0.72 | 0.41 | 0.6 | 0.43 |
| HP | 0.84 | 0.47 | 0.82 | 0.44 | 0.83 | 0.45 |
| OP | 0.83 | 0.46 | 0.82 | 0.44 | 0.82 | 0.45 |
| VC | 0.74 | 0.45 | 0.64 | 0.48 | 0.6 | 0.45 |
| VI | 0.66 | 0.41 | 0.65 | 0.45 | 0.67 | 0.44 |
| WFC | 0.81 | 0.45 | 0.9 | 0.51 | 0.86 | 0.42 |
| WFE | 0.93 | 0.63 | 0.92 | 0.56 | 0.92 | 0.59 |

Notes. AOB: Being Activity Orientation, AOBB: Becoming Activity Orientation, AOD: Doing Activity Orientation, HC: Horizontal Collectivism, HI: Horizontal Individualism, HP: Harmonious Passion, OP: Obsessive Passion, VC: Vertical Collectivism, VI: Vertical Individualism, WFC: Work-Family Conflict, WFE: Work-Family Enrichment, CR: Composite Reliability, AVE: Average Variance Extracted.

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TABLE 2: Direct Relationships

| | India | | | | Germany | | | | Complete | | | |
|----------------|-------------|-------------|------|---------------|-------------|-------------|------|---------------|-------------|-------------|------|------------|
| Hypotheses | B | T | P | Results | B | T | P | Results | B | T | P | Results |
| H1a: HP -> WFE | 0.1 | 0.8 | 0.21 | Not Supported | 0.2 | 1.4 | 0.08 | Not Supported | 0.14 | 1.81 | 0.03 | Supported* |
| H1b: OP -> WFE | 0.03 | 0.3 | 0.38 | Not Supported | 0.19 | 1.43 | 0.07 | Not Supported | 0.12 | 1.75 | 0 | Supported* |
| H2a: HP -> WFC | -0.24 | 1.66 | 0.04 | Supported* | -0.27 | 2.17 | 0.01 | Supported* | -0.3 | 4.11 | 0 | Supported* |
| H2b: OP -> WFC | 0.58 | 3.97 | 0 | Supported* | 0.34 | 2.83 | 0 | Supported* | 0.4 | 5.95 | 0 | Supported* |
| | R-Sq | Q-Sq | | | R-Sq | Q-Sq | | | R-Sq | Q-Sq | | |
| WFC | 0.44 | 0.06 | | | 0.48 | 0.23 | | | 0.37 | 0.18 | | |
| WFE | 0.49 | 0.18 | | | 0.47 | 0.05 | | | 0.37 | 0.15 | | |

Note. *Relationships are significant at $P < 0.05$, B = Beta Coefficient, T = t – Statistics, P = Probability (P) value

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TABLE 3: Moderation Analysis

| Hypotheses | India | | | | Germany | | | | Complete | | | |
|----------------------|-------|------|------|------------|---------|------|------|---------------|----------|------|------|------------|
| | B | T | P | Results | B | T | P | Results | B | T | P | Results |
| H3a: AOB x HP -> WFE | -0.12 | 1.37 | 0.05 | Supported* | -0.16 | 1.18 | 0.11 | Not Supported | -0.13 | 1.43 | 0.05 | Supported* |
| H3b: AOB x OP -> WFE | -0.12 | 0.96 | 0.16 | Supported | -0.16 | 0.85 | 0.19 | Not Supported | -0.08 | 0.87 | 0.19 | Supported |
| H4a: AOB x HP -> WFE | -0.21 | 3.29 | 0 | Supported* | -0.14 | 1.47 | 0.05 | Not Supported | -0.16 | 2.74 | 0 | Supported |
| H4b: AOB x OP -> WFE | 0.04 | 0.42 | 0.33 | Supported | -0.13 | 1.01 | 0.15 | Not Supported | -0.01 | 0.2 | 0.41 | Supported |
| H5a: AOD x HP -> WFE | -0.08 | 1.26 | 0.1 | Supported | -0.01 | 0.12 | 0.45 | Not Supported | -0.12 | 2.08 | 0.01 | Supported* |
| H5b: AOD x OP -> WFE | -0.13 | 1.79 | 0.03 | Supported* | -0.1 | 0.9 | 0.18 | Not Supported | -0.03 | 0.49 | 0.3 | Supported |
| H6a: VI x HP -> WFC | -0.16 | 1.61 | 0.05 | Supported* | 0.04 | 0.43 | 0.33 | Not Supported | -0.05 | 0.76 | 0.22 | Supported |
| H6b: VI x OP -> WFC | 0.06 | 0.61 | 0.2 | Supported | -0.01 | 0.17 | 0.42 | Not Supported | -0.01 | 0.15 | 0.43 | Supported |
| H7a: HI x HP -> WFC | -0.02 | 0.24 | 0.4 | Supported | -0.05 | 0.55 | 0.2 | Not Supported | -0.01 | 0.19 | 0.42 | Supported |
| H7b: HI x OP -> WFC | -0.09 | 1.86 | 0.19 | Supported | -0.02 | 0.22 | 0.41 | Not Supported | 0.01 | 0.19 | 0.42 | Supported |
| H8a: VC x HP -> WFC | 0.07 | 0.81 | 0.2 | Supported | 0.06 | 0.55 | 0.29 | Not Supported | -0.02 | 0.34 | 0.36 | Supported |
| H8b: VC x OP -> WFC | 0 | 0.06 | 0.47 | Supported | 0 | 0.08 | 0.46 | Not Supported | 0.08 | 1.06 | 0.14 | Supported |
| H9a: HC x HP -> WFC | -0.09 | 1.28 | 0.1 | Supported | 0 | 0.4 | 0.49 | Not Supported | -0.08 | 1.36 | 0.05 | Supported* |
| H9b: HC x OP -> WFC | -0.03 | 0.51 | 0.3 | Supported | -0.11 | 0.02 | 0.49 | Not Supported | -0.03 | 0.56 | 0.28 | Supported |

*Relationships are significant at $P < 0.05$

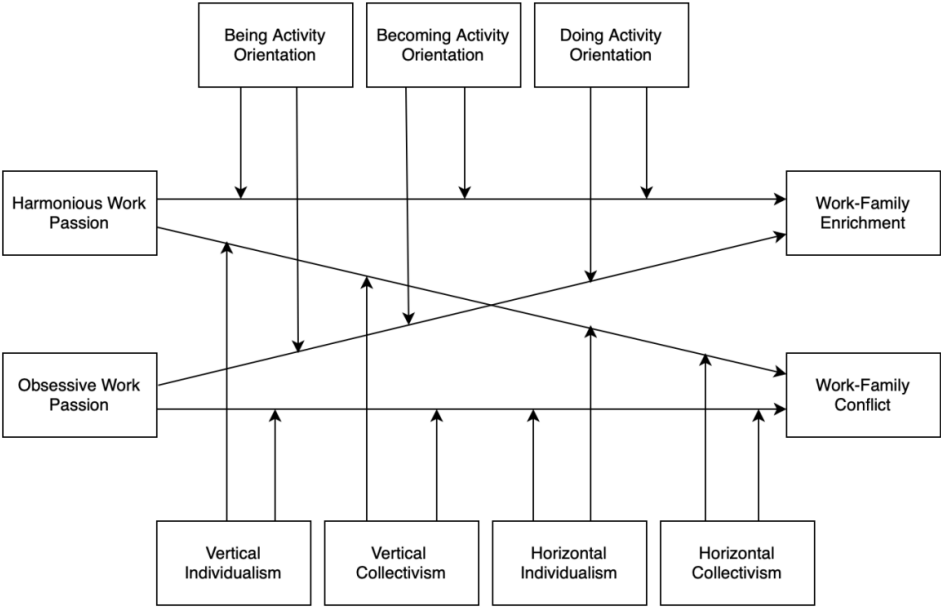
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TABLE 4: Multi-Group Analysis

| Relationships | Difference (India - Germany) | P-value |
|------------------|------------------------------|---------|
| HP -> WFE | -0.09 | 0.29 |
| OP -> WFE | -0.16 | 0.11 |
| HP -> WFC | 0.03 | 0.44 |
| OP -> WFC | 0.23 | 0.03* |
| AOB x HP -> WFE | -0.02 | 0.87 |
| AOB x OP -> WFE | -0.09 | 0.4 |
| AOBB x HP -> WFE | 0.15 | 0.25 |
| AOBB x OP -> WFE | 0.2 | 0.2 |
| AOD x HP -> WFE | -0.04 | 0.74 |
| AOD x OP -> WFE | -0.19 | 0.16 |
| HI x HP -> WFC | -0.07 | 0.56 |
| HI x OP -> WFC | -0.18 | 0.26 |
| VI x HP -> WFC | 0.04 | 0.7 |
| VI x OP -> WFC | 0.01 | 0.87 |
| HC x HP -> WFC | -0.13 | 0.3 |
| HC x OP -> WFC | 0 | 0.67 |
| VC x HP -> WFC | -0.08 | 0.58 |
| VC x OP -> WFC | 0.05 | 0.71 |
| Age -> WFE | -0.04 | 0.37 |
| Age -> WFC | 0.08 | 0.25 |
| Gender -> WFE | -0.23 | 0.21 |
| Gender -> WFC | -0.32 | 0.16 |

Note: *The differences are significant in the relationships between the two countries ($P < 0.05$)

FIGURE 1: Proposed Model



Yoorrook and self-determination: a focus on truth-telling

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Yoorrook and self-determination: a focus on truth-telling

ABSTRACT

The British invasion and the violent process of colonisation in the land now known as Australia, led to the decimation of First Peoples and denial of our self-determination and sovereignty. The voices of First Peoples' Elders, organisations and communities have been mostly excluded from policy making and the history of colonisation where massacres, slavery, and assimilation is hidden or ignored. In 2016 the State Government and First Peoples Traditional Owners in Victoria commenced a Treaty process, including the establishment of the Yoorrook Justice Commission. Yoorrook commenced its truth-telling journey in 2021. In this paper we draw on secondary data and key informant interviews and ask how can truth-telling contribute to First Peoples self-determination in Australia?

Keywords

Structured Submission

Overview

Australia's First Peoples comprise over 650 sovereign nations and occupied this land for over 65,000 years, representing the world's longest continuous living cultures (Broome, 2010). British invasion and the process of colonisation led to the decimation of First Peoples through genocidal policies of disease, marginalisation, exclusion and assimilation (Grewcock, 2018; Tatz, 2017; Wolfe, 2006). The history of colonisation in Australia has been whitewashed and massacres, slavery, and assimilation have been hidden or ignored (Allam & Evershed, 2019; Tatz, 2017). In 1969, Stanner criticized the omission of these truths by historians, academics and politicians and labelling this as "the Great Australian Silence" (Stanner, 1969 24-25). He argued that a 'cult of forgetfulness' was created by the

promotion of ‘a [particular] view from a [particular] window which has been carefully placed to exclude a whole quadrant of the landscape’ (Stanner, 1969). However, First Peoples have not forgotten this history. First Peoples’ activists and our allies have continued to fight for recognition of the long-term impact of the violence of the colonial project (Grewcock, 2018; Wolfe, 2006). This recognition has largely been framed in a struggle for sovereignty and self-determination and the establishment of a Treaty or Treaties (Cronin, 2017; Grewcock, 2018).

Australia does not have a Treaty or Treaties with its First Peoples (Butcher-Cornet, 2020; Hobbs & Williams, 2019; Hobbs & Williams, 2018; Mansell, 2016). The colonisation of Australia was settled in waves and the southeast of the country was quickly brought under British control through both the denial of sovereignty of the TOs in the doctrine of Terra Nullius and territorial dispossession (Balint et al., 2014). Colonisation led to the imposition of newly created state borders on a map without regard for existing First Peoples sovereign territories (Mansell, 2016). The Victorian Government acknowledges that the Victorian colony was formed without respectful consultation, acknowledgement, or participation of Victorian’s First Peoples (Mansell, 2016). However, no legal effect or rights and obligations are acknowledged in the Victorian Constitution pertaining to First Peoples (*Constitutional Act 1975 - Sect 1A, 1975*).

In 2016, the Victorian State Government was one of the first Australian states to commence a dialogue with its First Peoples and legislated Treaty enactments with recognised Traditional Owners (TO’s) residing within its colonial boundaries (Victoria Treaty Advancement Commission, 2019). An Aboriginal Treaty Working Group composed of TOs was established to consult with First Peoples residing in Victoria and give advice to the Victorian Minister for Aboriginal Affairs on the process for developing a Treaty between the Government of Victoria and the TOs (First Peoples’ State Relations, 2018). This led to the establishment of the First Peoples’ Assembly of Victoria (Assembly) in 2019 made up of Victorian Traditional Owners. The Treaty process recognises Sovereignty has never been ceded and acknowledges the importance of accompanying voice and truth-telling (First Peoples’ Assembly of Victoria, 2019). State-wide Victorian consultations with First Peoples communities in the formation of the Assembly identified the necessity in establishing a truth-telling commission as a

key priority (First Peoples' Assembly of Victoria, 2021; Yoorrook Justice Commission, 2022a). In the extensive consultation carried out by the Aboriginal Treaty Working Group, the First Peoples community declared strong views on the importance of acknowledging past wrongs (Aboriginal Treaty Working Group, 2018). Truth-telling was one of the most desired outcomes from community consultations, leading the First People's Assembly to state:

“In order to know where you're going you must know where you've come from. Even if it's in your face and hard to swallow, people need to know the true history in order to move forward”

(First Peoples' Assembly of Victoria, 2021 p. 4)

In 2021, the First Peoples led Yoorrook Justice Commission was formally established, the first of its kind for truth-telling in Australia (First Peoples' Assembly of Victoria, 2021; Yoorrook Justice Commission, 2022a). Yoorrook, which means “truth” in the Wemba Wemba language, has the full powers of a Royal Commission including the ability to hold public hearings, call witnesses under oath, collect evidence and make recommendations (First Peoples' Assembly of Victoria, 2021; Yoorrook Justice Commission, 2022a). However, unlike other Royal Commissions, due to the sensitive and traumatic nature of truth-telling, individuals who tell their stories can elect for full or partial confidentiality (First Peoples' Assembly of Victoria, 2021; Yoorrook Justice Commission, 2022a).

A key role of Yoorrook is to examine ‘instances of systemic injustices against Mob in Victoria’ including both historical and contemporary injustice’ (Yoorrook Justice Commission, 2022a p.15). The aim of Yoorrook is to establish an official documented record of the impact of colonisation on First Peoples living in what is today known as the State of Victoria, informed by First Peoples lived experiences (First Peoples' Assembly of Victoria, 2021; Yoorrook Justice Commission, 2022a). However, Yoorrook also has a wider purpose which is to raise awareness for non-Indigenous Australians of First Peoples cultures and extensive histories. In this way Yoorrook provides an opportunity to recast the Australian nation's identity (Victoria Treaty Advancement

Commission, 2019). This paper explores the complexity and challenges of Yoorrook in the Treaty process from a First Peoples perspective.

Yoorrook presented an interim report on its findings to the Treaty Assembly in June 2022 (Yoorrook Justice Commission, 2022a), with a final report due in June 2024. This report draws on a wide range of feedback from community members, Elders and TO's across Victoria. These voices identified many instances of ongoing institutional racism and highlights the importance of self-determination if change is to take place (Yoorrook Justice Commission, 2022a). Accordingly, the report calls for institutional change through Treaty and structural reform and recommends extending the deadline for the final report for two years due to the enormity of Yoorrook's mandate with the necessary resources. Importantly, while Yoorrook currently protects the confidentiality of those who tell their stories, concern is expressed that this confidentiality needs to be protected in the future and recommends legislative changes to protect First Peoples evidence (Yoorrook Justice Commission, 2022a p.73).

Current Understanding

Academics and commentators have identified a variety of views on success and failure based on over 30 years of global Truth and Justice Commissions (Clark & Palmer, 2012). A Truth and Justice Commission's core business is to, 'investigate a past history of violations of human rights in a particular country' (Wolman, 2012 p.37). Key elements of these commissions include a focus on transitional and/or restorative justice and as such need to have a backward and a forward-looking element to their findings (Andrieu, 2010). More generally, the purpose for a Truth and Justice Commission is to develop a collective history and a nationwide memory, commissions can also interpret data pertaining to forensic and personal truths (Wakamatsu, 2019). Clark and Palmer (2012) criticise the use of 'tool kits' that can be transferred from one jurisdiction to another (Clark & Palmer, 2012 p. 24). Instead, they identify the importance of 'contextually appropriate objectives, the balance between individual and collective needs and interests, and securing the legitimacy of transitional processes among those affected by past violations'. Furthermore, Balint et al. (2014) argue that

transitional justice processes need to be widened from a focus on individuals and sponsored by the state to identify broader structural and enduring injustices.

Countries colonised by the British, specifically Canada, Australia, New Zealand, and the United States (CANZUS) share a common colonial history, of genocide, massacres, assimilation policies and settler denials (Cook, 2018; Findling et al., 2019; Ka'ai, 2019). Indigenous peoples in these countries continue to experience racism, under-employment, high mortality rates, high levels of incarceration and educational deprivation compared with their non-Indigenous counterparts (Czyzewski, 2011; Findling et al., 2019; MacDonald & Steenbeek, 2015). Truth-telling has been identified as a major part of the healing process in CANZUS settler colonial states (Anderson & Tilton, 2017; Czyzewski, 2011; MacDonald, 2007; Williams, 2019). Truth-telling processes unearth both historical transgenerational traumas as well as contemporary injustices (Gone, 2009; MacDonald & Steenbeek, 2015; Wilk et al., 2017).

In this paper we also draw on the institutional racism literature in particular literature that explores the innocence of the coloniser.

Research question

How can truth-telling contribute to First Peoples self-determination in Australia?

Research approach

This paper employs an Indigenous lens to explore the Yoorrook truth-telling process. We examine relevant secondary literature from official documents and media reports. We also draw on yarns with 24 First Peoples key informants from across and within the colonial borders of the State of Victoria.

Findings

We identify three challenges facing Yoorrook. First, the resistance of influential sections of the Australian community to accept responsibility for the violence of the colonial project. Second, the trauma facing those who speak out and remember and the danger of expectations dashed. Third, the continuance of underlying and invisible racism that infects and poisons the hearts and minds of non-Indigenous Australia. Despite these challenges we also found that the ability of Yoorrook to capture the lived experience of First Peoples in Victoria and the ability to hold key government officials to account presents a unique opportunity to advance the self determination of all First Peoples in Australia.

Contribution and Limitations

The Yoorrook Justice Commission has demonstrated that Traditional Owners can take ownership and control of the process of truth telling and both look backwards and forwards in a manner that demands the responsibility and accountability of the coloniser. The truth telling process adopted, in particular holding senior government officials to account, challenges the innocence of the coloniser and demands structural and policy reform. In this way Yoorrook contributes to self-determination of all First Peoples in Australia. The Treaty process in Victoria and the establishment of Yoorrook is also significant in that currently there is a national Referendum process for constitutional change occurring. This national process while driven by First Peoples, asks the non-Indigenous community to vote for change. The Yoorrook process demands change. Moreover, Australia as a whole can learn from the Victorian process as other state jurisdictions commence their own processes.

There are also research implications from this process. The Interim report captures the Indigenous research methods carried out in the consultation process. These include the underlying values and guidelines for research that is by, for and with First Peoples. This approach and the commitment to Indigenous data sovereignty, governance and research approaches has much to offer other First Peoples scholars.

There are limitations in this paper. First, we are in the middle of the process which still has a long way to go and the outcomes while hopeful are uncertain. Second, we have chosen not to engage with those who would oppose First Peoples self- determination.

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3. Sustainability and Social Issues

Corporate Boards at the Interface of Corporate Governance and Corporate Social Responsibility: A Field in Flux

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3.Sustainability and Social Issues

Corporate Boards at the Interface of Corporate Governance and Corporate Social Responsibility: A Field in Flux

Using a qualitative analysis of deliberative forums, the following study explores the beliefs and practices at the interface of corporate governance and corporate social responsibility, with a focus on boards as the ultimate decision-makers of the corporation. An institutional logics lens is applied to map the multiple and conflicting logics. The findings reveal a complex interplay of inherent tensions and multiple institutional demands. A dominant market logic is being disrupted by changing societal expectations. Board members navigate this complexity, giving rise to multiple logics and a range of legitimacy approaches. We propose an integrative framework charting the interplay of beliefs and practices of board members at the corporate governance and corporate social responsibility interface and make recommendations for further research.

Key words: corporate governance; corporate social responsibility; institutional logics; corporate legitimacy; corporate boards.

“Until recently there have been two separate worlds. There are experts in the fields of corporate governance, those who focus on compensation and other boardroom issues - and there has been the sustainability universe, which includes investors. Now we are beginning to see a convergence” (Eccles, in Medland, 2014). The field of corporate governance (CG) is converging with that of corporate social responsibility (CSR)¹ towards a re-assessment of the purpose of the corporation or, more broadly, the role of business in society. This has opened new perspectives in theorising on CG and CSR with “interconnected institutional, procedural, and philosophical themes emerging on the CSR research agenda” (Scherer & Palazzo 2011, p. 903), and a growing recognition of the interdependence at the CG-CSR interface (Zaman, Jain, Samara, & Jamali, 2022). Interestingly the interdependence between CG and CSR has become increasingly mainstream with the emergence of integrated reporting frameworks with greater “interoperability” across corporate and investor settings (Zaman et al., 2022). The following paper aims to contribute to the growing research stream at the CG-CSR interface, as the first stage of a multi-methods investigation.

The convergence of CG and CSR calls for engagement at the most senior levels of a business: the corporate board of directors. Proponents of CSR initiatives have identified a lack of engagement at the board level and their CG systems (Escudero, Power, Waddock, Beamish, & Cruse, 2010), with real implications for their objectives (Kiron et al., 2017). Similarly, academics have identified a dominant market logic and the ‘co-opting’ of an ethical concept by economic interests (Baden & Harwood, 2013; Moog, Spicer & Böhm, 2015). The purpose of CSR is seen to benefit the firm primarily and, in the worst case, at the expense of society (Mazutis & Slawinski, 2015).

Zaman et al. (2022) have recently completed a systematic review of literature at the CG-CSR interface reviewing publications over a 27-year period, covering 218 research articles. The majority of the research is based on liberal market economies (such as the US, UK, Australia), where agency theory

¹ A proliferation of related definitions, terminologies, and perspectives regarding corporate sustainability and CSR exist in the literature. For this study, CSR is used as an umbrella term (Matten and Moon, 2008;). Similarly, Zaman et al. (2022): “conceptualize CSR as an umbrella term that encompasses policies, processes, and practices (including disclosures) that firms put in place to improve the social state and well-being of their stakeholders and society (including the environment) whether undertaken voluntarily or mandated by rules, norms, and/or customs” (p 692)

and shareholder primacy dominate, and in which this current study is situated. Only 8% of studies are qualitative – echoing the earlier review by McNulty, Zattoni, & Douglas, 2013 which found that less than 1% of research on corporate boards is qualitative, owing to the difficulties in accessing the ‘black box’ of the board and “business elites” (Ma, Seidl & McNulty, 2021; Leblanc & Schwartz 2007; McNulty et al., 2013; Pettigrew, 1992). The majority of the studies take an internal focus – to concentrate on how board characteristics affect CSR with the bulk of studies supporting both agency and stakeholder theories (Zaman et al., 2022). The authors call for greater theoretical pluralism though warn against theoretical confusion in consideration of journal editors. They suggest broadening and combining perspectives to consider the micro, meso and macro levels - for example, respectively; social psychology, stewardship theory and institutional theory (Zaman et al., 2022).

Therefore, in answering the call to broaden the research at the CG-CSR interface, and addressing the methodological and theoretical biases (Pettigrew, 1992; Ryan, Buchholtz, & Kolb, 2010; Yar Hamidi & Gabrielsson, 2012), the following study, representing the first stage of a multi-methods research project, embarks on a grounded qualitative exploration, with a primary focus on boards as the ultimate decision-makers of the corporation. These dynamics will be investigated using institutional logics as the theoretical frame (Friedland & Alford 1991; Thornton, Lounsbury & Ocasio, 2012). Institutional logics provides a critical lens on a field in flux (Hirsch & Lounsbury, 2015) through the beliefs and practices of key actors. Therefore the central research question asks: what are the beliefs and practices of corporate board members at the CG-CSR interface?

The paper is structured as follows. First, we theoretically frame the CG-CSR interface based on institutional logics and a converging CG-CSR institutional infrastructure (Waddock, 2008). Second, we discuss the methodological approach and methods used in this research. Deliberative forums are central to the research design: through “collective conversations” (Kamberelis & Dimitriadis, 2011, p. 547) with key stakeholder groups we identify the dynamics at play. Third, the findings reveal inherent tensions and multiple institutional demands. An integrative framework is then proposed to map the types of logic multiplicity at the CG-CSR interface. The framework defines, analyses, and explains the heterogeneity of how multiple logics become instantiated across the ‘board ecosystem’: a

continued dominant market logic, a contested environment of market versus shareholder logics, and efforts towards an alignment of market and stakeholder logics. These logics reveal the interplay of legitimacy strategies that ultimately demonstrate that multiple institutional demands call for multiple legitimacy strategies (Scherer et al., 2013).

The research, as the first stage of a multi-methods investigation, aims to make two key contributions to the literature at the CG-CSR interface. First, a qualitative analysis to provide a grounded understanding of the beliefs and practices of corporate board members at a rapidly evolving CG-CSR interface, and second, the development of an integrative framework that captures the complex and evolving dynamics at the CG-CSR interface through the use of institutional logics.

THE CG-CSR INTERFACE

CG-CSR Institutional Setting

CG and CSR are embedded in a shared institutional setting of broader economic, social, and political institutions (Brammer, Jackson & Matten, 2012) hence offering an appropriate theoretical starting point from which to explore the CG-CSR interface (Jain & Jamali, 2016). Waddock's seminal "CR institutional infrastructure" (2008) mapped the institutional landscape for CSR initiatives classified broadly into three categories: market/business-based initiatives, civil society institutions and state/government-sector initiatives – and primarily located at the interface with CG. Waddock described the identified initiatives as "collectively framing a different kind of logic"—a broader, multi-stakeholder position using "peer pressure, moral suasion, reputational leverage, market-based dynamics, and state-based legislative and regulatory approaches" (2008, p. 89). These reflect the mimetic, normative and coercive isomorphic pressures described by institutional theorists (DiMaggio & Powell, 1983; Matten & Moon, 2008). A growing presence at the CG-CSR interface is the investor community, with an instrumental focus on "ESG" issues - environmental, social, and governance (Friede, Busch, and Bassen, 2015). The investor community seeks to drive greater integration of ESG issues in CG via board engagement, broadening interpretations of directors' fiduciary duties and stakeholder engagement, and a longer-term approach to value creation—financially, socially, and environmentally (Principles for Responsible Investment Initiative (PRI, 2018)

Corporate Legitimacy

Legitimacy theory (Suchman, 1995) extends the coercive, normative, and mimetic mechanisms of institutional theory, with a focus on gaining a “social license” to operate and engaging with internal and external stakeholders of the organisation (Zaman et al., 2022, p. 721). Organisations maintain their legitimacy via three possible legitimacy strategies: pragmatic legitimacy based on audience self-interest; moral legitimacy based on normative approval, and cognitive legitimacy, meaning taken-for-grantedness and comprehensibility (Suchman, 1995). Building on this, Scherer et al. (2013) believed that multiple and sometimes competing legitimacy strategies may be required for corporations to retain their legitimacy. Corporate legitimacy, therefore, becomes an essential area of concern for boards at the CG-CSR interface.

Institutional Logics

Recent developments in institutional theory, e.g. institutional logics, have shifted focus from isomorphic stabilisation and homogeneity (Meyer & Rowan, 1977; DiMaggio & Powell, 1983) to “a meta-theoretical framework for analysing the interrelationships among institutions, individuals, and organisations” (Thornton et al., 2012: 2). A small but growing number of studies hold promise for a critical institutional perspective at the CG-CSR interface, where an incumbent market logic is represented by shareholder primacy (Bondy, Moon & Matten, 2012; Thornton et al., 2012; Joseph, Ocasio & McDonnell, 2014). Concurrently, Ioannou and Serafeim (2015) have identified the emergence of a stakeholder logic that is weakening the dominant market logic in financial markets, as the influence of international collaborative efforts at the CG-CSR interface continues. By analysing how “different systems of domination can be reconfigured and change,” institutional logics “foreground issues of contestation and struggle” (Hirsch & Lounsbury, 2015, p. 97). Therefore, institutional logics is well placed as the theoretical frame, augmented by institutional complexity (Greenwood et al. 2011) and corporate legitimacy (Scherer, Palazzo, & Seidl 2013) with which to analyse the CG-CSR interface.

Ultimately, “institutional logics shape organisational action through their roles in conferring legitimacy and controlling critical resources” (Bertels & Lawrence 2016, 339). Organisational governance provides an important context from which to examine these dynamics (Greenwood et al.

2011), where governance “constitutes a critical mechanism to balance institutional logics and to foster and protect internal and external legitimacy” (Mair, Mayer & Lutz. 2015, p.732). This, in turn, gives rise to a diverse set of individual and organisational responses and a diversity of logics (Greenwood et al., 2011; Bertels & Lawrence, 2016).

Thornton et al. (2012) proposed a co-existence and interplay of different logics within organisations and individuals at an interinstitutional level. To do this, the authors de-coupled logics from ‘institutional orders’ to define an interinstitutional system of ‘ideal types’ or cornerstone institutions: community, profession, family, religion, market, state, and corporation (Thornton et al., 2012). Each is composed of a central logic and a list of categorical elements, “that guide its organising principles and provides social actors with vocabularies of motive and a sense of identity” (Thornton & Ocasio, 2008, p.101). Such a framework allows for the exploration of the beliefs and practices of those actors that sit at the CG-CSR interface, i.e., members of corporate boards and the interinstitutional logics that may influence them. Three cornerstone logics are anticipated in the data, as set out in Table 1 and described below.

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- *market logic* – beliefs and practices associated with shareholder primacy and short-term returns.
- *corporation logic* – beliefs and practices associated with the corporation as both a legal institution and governance system, and an enabler of social and economic transformation; the board’s duty is to act in the best interests of the company. As notions of ‘purpose’ and ‘stakeholder capitalism’ grow (Business Roundtable, 2019), definitions of this logic are broadening.
- *emergent stakeholder logic* – identified more recently by theorists, representing beliefs and practices associated with broadening social and environmental responsibilities of business practice (Pache and Santos 2012; Ioannou and Serafeim 2015).

The rise of a stakeholder logic in the research of LMEs indicates that “scholarship has embraced that CG is not only about shareholder value maximization but also about the relationships among multiple stakeholders such as investors, employees, and society” (Zaman et al., 2022, p. 712). To map this complexity, the study develops a framework encompassing institutional logic multiplicity from which to chart the interplay of beliefs and practices of board members at the CG-CSR interface; from the

dominance, fragmentation or cooperative alignment of multiple logics, to conflicting, blended or aligned, assimilated or subsumed logics (Besharov & Smith, 2014; Thornton et al., 2012).

METHODOLOGY

In their review of research at the CG-CSR interface, Zaman et al. (2022) note the dominance of quantitative methodologies, a positivist approach and an “inflexibility in unpacking complex upper echelon decision-making processes that are key to understanding firm-level practices related to society and the environment” (2022, p.733). The authors encourage experimental research designs for a deeper understanding of directors personal values and decision making processes that lead to firm-level actions. An instrumental approach has dominated the literature, driven by an economic logic. This has led to a gap in understanding the interplay of contradictory yet interrelated CSR elements, particularly at the level of corporate boards (Zattoni et al., 2013). It is this area that this research seeks to address, by exploring tensions and examining the institutional logics that underpin them: “The time is ripe to delve deeper into the complexities of sustainability” (Van der Byl & Slawinski 2015, 71).

Design

Deliberative forums, billed as ‘directors’ conversations’ provide an experimental method to address the research aims and answer calls for richer more qualitative data that provides a deeper understanding of directors beliefs and practices at the CG-CSR interface (Morgan, 1998). Derived from focus group and forum methods, they provide a unique and authentic setting for collective conversations. Such methods exist at the intersection of pedagogy, activism and research (Kamberelis & Dimitriadis, 2011). Researchers are “typically strategic in configuring these intersections” (Kamberelis & Dimitriadis 2011, p. 545). In addition to being multi-functional, such methods are performative. They allow a view into the world in motion, where ideas may be challenged and contested and where sensemaking may occur, thereby offering “unique insights into the possibilities of critical inquiry as deliberative, dialogic, democratic practice” (Kamberelis and Dimitriadis 2011, 547; Mair & Hehenberger, 2014).

Sample

Based in Australia and linked to an international context, research participants were drawn from key stakeholder groups as identified in the literature at the CG-CSR interface: CSR/sustainability, corporate governance and regulators, investor community, and corporate boards (Grayson & Nelson, 2017). This answered calls from the field of CG to broaden empirical research to “a wider array of actors and institutions involved in governance” (Ryan et al., 2010), as set out in Figure 1.

Insert Figure 1 about here

The challenge of accessing board members for qualitative research was addressed using “political bricolage” (Denzin & Lincoln, 2011) and “access via prior access” (Leblanc & Schwartz 2007, p. 848), i.e. engaging prominent board members and influential business leaders to participate in the forums led to peer endorsement of the research and the leveraging of “interlocking directorates and networks” (Pettigrew 1992, p.169) to access further board members.

Data Collection

The multi-stakeholder mix in each forum drove a high level of interaction and important flashpoints among participants, generating rich insights for data analysis. Two forums were held in Sydney and Melbourne, the largest business centres in Australia, with invitations entitled: “Engaging Boards in Corporate Responsibility: Towards New Models of Corporate Governance.” A panel of conversation leaders (senior board members, investor executives and regulatory executives) was convened for both events, together with a larger multi-stakeholder group as participants. Tables 2 and 3 provide participants details.

Insert Tables 2 & 3 about here -

The Sydney event (38 participants) helped to build momentum for the second deliberative forum in Melbourne (54 participants). On agreeing to participate, the conversation leaders for both forums were briefed before the event on the research aims. Their own perspectives on board beliefs and practices at the CG-CSR interface were discussed, and this provided contextualised material with which to frame open-ended questions and prompts for the forums. As the conversations gained momentum, the conversation leaders were encouraged to ask each other questions and the wider group of attendees were invited to contribute to the discussion, broadening the insights and interactions. Moderation

became more flexible, encouraging dynamic, interactive dialogue to let tensions emerge (Morgan, 1998). All participants signed an ethics consent and agreed to Chatham House rules of non-attribution to encourage a frank discussion.

Data Analysis

A qualitative data analysis using NVivo was undertaken. The social constructivist position of grounded theory (Charmaz, 2014) seeks to understand emergent multiple realities and is well suited to the study of institutional logics (Bertels & Lawrence 2016). Patterns associated with institutional logics emerged inductively from the data through quotes, observations, and thick description (Reay & Jones, 2015). Using grounded techniques including constant comparison and saturation (Charmaz, 2014), raw data were then grouped into meaningful categories that constituted patterns or sets of behaviours associated with one or more logics (Reay & Jones, 2015). The dataset underwent three iterative phases of analysis: initial coding, focussed coding to categories, and analytic categories to theoretical concepts (Charmaz, 2014). Institutional logics were gradually introduced during data analysis through theoretical coding, moving to and from data and theory, as the complexity of embedded agency and institutional emergence and change was analysed (Thornton et al., 2012).

FINDINGS

From Initial Coding to Focussed Coding and Categories

As data analysis proceeded from initial coding to focussed coding, patterns emerged across the data, revealing inherent tensions. Patterns pointed to a range of beliefs and practices, which either maintained or sought to change the status quo from a traditional, instrumental, business case approach to varying degrees of conflict, dissonance, and contestation, through to efforts to align CG and CSR. To represent these patterns, certain focussed codes were raised into categories (and, later, concepts) as set out on Table 4, using the principles of centrality and theoretical reach, to make core phenomena in the data explicit (Charmaz 2014), e.g. self-reinforcing systems, contested space, and navigating complexity. Two other prominent themes that emerged during the analysis include the importance of language in framing engagement in CSR issues and the perceived importance of agency and leadership with which to drive change. These were also raised to categories and applied to focussed codes as data analysis proceeded.

The Sydney forum revealed a field in flux at the CG-CSR interface, where self-reinforcing systems of CG and board level practices face disruption and change. The Melbourne forum drilled down on these themes, with board members at times revealing deep misgivings in trying to navigate both the moral and instrumental dimensions of board decision-making. Table 4 provides a summary of the emergent analytic categories, with supporting quotations and brief descriptions, with further detail below.

Self-reinforcing systems: Dominate board composition, characterised as a club, “and like any club the people who are invited are being invited by those who are already in the club” (Non-Executive Director). The perpetuation of shareholder primacy was emphasised through the continued narrow framing of CG definitions and guidelines by regulatory and investor perspectives. These define the CSR agenda as an economic risk to investors. “It’s not trying to achieve a social purpose...it is about the investment risk” (Regulator). A dominant risk paradigm at the CG-CSR interface has the effect of maintaining the status quo, and stymieing innovation. At the Melbourne forum, reputational risk loomed large for directors: “As a board member, you’re faced with these moral dilemmas. The board’s responsibility is to put in place the protocols that will be necessary but you know deep down in your heart that they’re never going to be 100%” (Director).

Table 4: Summary Table: Analytic Categories

| Analytic Category | Description | Illustrative Quote |
|--|---|---|
| Beliefs and Practices (Logics) at the CG-CSR Interface Amongst the Relevant Institutional Actors, With Focus on Board Level. | | |
| Self-Reinforcing Systems | Focussed codes reveal the maintenance of the status quo at the interface of CG-CSR. This may include conservative systems of CG, a lack of board access and engagement by CSR managers, investor pressures for returns and shareholder primacy, the influence of peer networks, or the dominance of risk and compliance in board decision-making. | <p>“Ultimately, we are fiduciaries and we are entrusted with the economic assets the corporation has that have been built up through the contribution of stakeholders which is equity providers and debt providers and we have to deal with those assets in a prudent manner. There is no morality or ethics underpinning compliance” (Non-Executive Director).</p> <p>“There’s a whole, there’s an ecosystem around all of this that selection of boards is all—it’s a big club, I mean they play this game of going out to—head-hunters—but the head-hunters are all part of the ecosystem” (Chairman).</p> |
| Contested Space | Focussed codes point to inherent and unresolved tensions at the CG-CSR interface, e.g. investor pressure to maximise short-term | “I was flabbergasted by the number of very bright people playing in the ESG space and I was puzzled by why collectively they were achieving very little. I concluded ... that came down to the language that |

| | | |
|--|--|--|
| | shareholder returns versus broader corporate or stakeholder concerns and a disconnect between board responsibilities and CSR/ESG agenda and initiatives. | community often uses that doesn't resonate with people that have got a fiduciary responsibility under law, that can be held accountable for that" (Non-Executive Director). |
| Navigating Complexity | Focussed codes reflect efforts to align or balance financial, social and/or environmental issues at the CG-CSR interface, e.g. the business case and moral case. Alignment is often sought by taking a long-term approach to returns and business sustainability or by acknowledging interdependencies with multiple stakeholders. | <p>"So, the goal is not to maximise returns to shareholders. It's to produce satisfactory returns. That then gets you away from defining the period and you don't have to maximise in and indeed you can only maximise something for one group of stakeholders usually to the detriment of other stakeholders" (Non- Executive Director).</p> <p>"So, whilst directors are there representing the shareholders' interests, they can only represent their interests by having regard to all the various stakeholder groups or else you don't have customers, employees, a license to operate" (Non-Executive Director).</p> |
| Drivers of Beliefs and Practices (Logics) at the CG-CSR Interface | | |
| Agency and Leadership | Focussed codes relate to the importance of agency in driving change at the CG-CSR interface, whether this is investor stewardship or passionate CSR champions from the board or management. | "It's his personal passion which has been able to ... embed into the organisation at the executive level and then has used his role as the Chairman to really solidify that position and then getting some likeminded board members who are already familiar with the issues to really make it part of their, part of the way they do business" (CSR Manager). |
| Language Frames Engagement | Language is critical in framing the CSR agenda. It can enable or prevent change at the CG-CSR interface and has emerged as a key issue for access and engagement with the board, e.g. framing CSR issues as 'risk' to gain access to the board. | <p>"Given that your [CSR] community is trying to influence corporations then you're not going to influence anybody unless you speak the same language" (Non-Executive Director).</p> <p>"When we articulate sustainability issues as risks then they do get on the board agenda? When does it move from compliance or meeting regulatory requirements to acting because it's the right thing to do?" (CSR Civil Society).</p> |

Contested space: Key flashpoints of the deliberative forum revolved around language usage and a disconnect between perceived board responsibilities in CG versus the CSR agenda framed as "agitation by the narrowly focussed groups" (Director). In an at-times hostile discussion, conflictual beliefs and practices were exposed. CSR/ESG initiatives were considered by board members to be "paying lip service" and putting form over substance, rather than providing "education and a deep embedded understanding of what you should be doing" (Non-Executive Director). A key dynamic to emerge in the Melbourne forum was the desire to address the tensions between broader stakeholder interests and maximising shareholder profit: "Unless we really understand the market that we're in, we haven't really got a hope of doing what we're required by the corporations' law to do—to maximise

profit... we are increasingly disengaged from the sorts of issues that are effecting the community” (Chairman). The language and framing of the CSR/ESG agenda from a regulatory or investor perspectives was considered too narrow and not cognisant enough of the breadth of responsibilities across boards.

Navigating the complexity: Different actors sought to align the long-term value of the company with the long-term interests of shareholders (corporate, investor, and CSR) at the CG-CSR interface. Quarterly reporting and media pressure were identified as contributing to a short-term focus. In the Melbourne forum an important shift at the CG-CSR interface was explored, i.e. large asset owners (such as pension funds) have begun taking back asset management functions from external agents to exercise ownership rights to engage directly with companies on ESG issues: “It’s about making this journey that we’re on together as valuable as possible for both parties” (Institutional Investor Body). At the close of the forum, there was a broad consensus on the benefits of a longer-term approach to value creation but there were concerns on how this could be realised: “I think in the long-term everybody agrees the direction that we want to have, it’s how do you deal with this very short time frame, those decisions that affect your quarterly, half yearly, annual cycles ... and the decisions that are longer-term in nature” (CSR Manager).

ANALYSIS AND DISCUSSION

Conceptual Analysis

The three analytic categories were raised to concepts (Charmaz, 2014) by building an analysis matrix and mapping the dimensions of the second-order, focussed codes to the categories to determine the conceptual linkages across the data. The analysis matrix is presented in Table 5. For constructivist grounded theorists, concepts are relational, ontological, theoretical constructions, defining fundamental generic processes (Bazeley, 2013; Charmaz, 2014). In theorising the concepts, the dimensions (or sub-codes) of the second order, focussed coding, become the structural components of the concepts. Co-related dimensions, i.e., those dimensions that regularly appear together, assist in defining and differentiating the concepts as presented in Table 5. Thus, co-related dimensions of *corporate legitimacy, interdependencies and interconnections, time frames, and ways of thinking* assist in both structuring and distinguishing the concepts of self-reinforcing systems, contested space and

navigating complexity. The use of theoretical codes, for example, corporate legitimacy (Scherer et al., 2013) and tensions and trade-offs (Van der Byl & Slawinski 2015) hones the analysis “with a sharp analytic edge” (Charmaz 2014, 150).

Insert Table 5 about here

Integrative Framework – Logic Multiplicity at the CG-CSR Interface

In the final stage of analysis, the theoretical lens of institutional logics is applied to the three conceptual systems, culminating in an integrative framework of 3 types of logic multiplicity at the CG-CSR interface – as set out in Table 6. These are based on the interplay of market, corporation, and stakeholder logics as identified in the data. Hence self-reinforcing systems are characterised by the dominance of a single market logic with other logics such as corporation or stakeholder logics being peripheral or subsumed; contested space sees the fragmentation of multiple logics - market, corporation and stakeholder, which may remain contested; and navigating complexity sees the cooperative alignment of multiple logics – market, corporation and stakeholder (Besharov & Smith, 2014; Thornton et al., 2012). Table 7 (Appendix) provides narrative detail for each of the three types of logic multiplicity.

Table 6: Integrative Framework: Logic Multiplicity at the CG-CSR Interface

| | Types of Logic Multiplicity at the CG-CSR Interface | | |
|--|---|--------------------------------------|--|
| | Dominant | Contested | Aligned |
| Logics | Core: Market Subsumed: Corporation, Stakeholder | Corporation vs Market vs Stakeholder | Corporation and Market and Stakeholder |
| Conceptual Systems of Board Level Beliefs and Practices | Self-Reinforcing Systems | Contested Space | Navigating Complexity |
| Structural Components | | | |
| Corporate legitimacy | Pragmatic | Moral vs pragmatic | Moral and pragmatic |
| Interdependencies and interconnections | Shareholder primacy | Stakeholder vs shareholder | Stakeholder and shareholder |
| Time frames | Short-term incentives | Short vs long-term interests | Aligning long-term interests |
| Ways of thinking | Risk averse | Conflicted | Strategic, integrative, transformative |

Thus, board level beliefs and practices at the CG-CSR interface are complex and dynamic, reflecting an institutional field in a state of flux. The research has revealed the multiple, contradictory yet interrelated elements encountered by board members. The application of logic multiplicity based on Thornton et al.'s (2012) interinstitutional system has provided the theoretical scaffolding for an integrative framework.

A growing pool of research is now investigating the phenomenon of “mutually beneficial coexistence” of plural logics and the potentially positive aspects (Mair & Hehenberger, 2014). Corporate boards capable of engaging in and strategically managing plural logics are more likely to adapt, innovate, and sustain their firms over the long-term in the face of emerging challenges (Kraatz & Block, 2008). Similarly, the theoretical code ‘corporate legitimacy’ introduced early in the coding process has provided an analytic edge to the analysis. Scherer et al. (2013) argue that, in the face of conflicting demands, the use of a single legitimacy strategy is not enough “as corporations navigate an increasingly fragmented and dynamic global environment” (Scherer et al., 2013, p. 278). Instead, multiple legitimacy strategies, spanning cognitive, pragmatic, and moral are proposed.

CONCLUSION

As the first stage of a multi-methods investigation, the research findings and analysis aim to make two key contributions to the literature at the CG-CSR interface. First, using a qualitative analysis we provide a grounded understanding of the beliefs and practices of corporate board members at a rapidly evolving CG-CSR interface, and second, we develop an integrative framework that captures the complex and evolving dynamics at the CG-CSR interface through the use of institutional logics. The framework also provides a basis for incorporating other, synergistic theoretical traditions concerned with theoretical pluralism (Zaman et al., 2022).

We acknowledge the limitations of qualitative research of sample size and generalisability in an LME setting. Further research is planned as part of a multi-methods approach in order to triangulate the data, with a series of semi-structured interviews to delve more deeply into the ‘black box’ and further explore the research aim of investigating the beliefs and practices of corporate board members at the CG-CSR interface.

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APPENDIX

Figure 1: Key Stakeholder Groups at the CG-CSR Interface

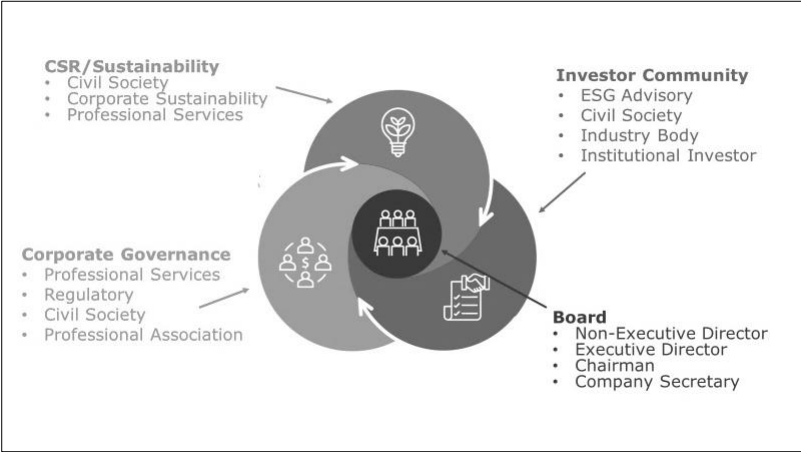


Table 1 Interinstitutional System of Ideal Types at the CG-CSR Interface

(adapted from Thornton et al., 2012)

| Categorical Elements | Market | Corporation | Stakeholder |
|-----------------------|--|---|--|
| Sources of legitimacy | Share price | Market position of firm. | Multi-stakeholder dialogue |
| Basis of norms | Self-interest | Employment/ board membership | Interdependencies and interconnections |
| Basis of Strategy | Increase efficiency, profit | Increase size and diversification of firm | Increase long-term, sustainable value creation |
| Related terms | Shareholder value logic, economic logic, agency logic | Business logic, commercial logic | Social logic, social welfare logic |
| Literature | Bondy et al. (2012); Ioannou and Serafeim (2015); Joseph et al. (2014); Hirsch and Lounsbury (2015); Smith and Rönnegard (2016): | Fligstein (1993); Kang and Moon (2012); Pache and Santos (2013b); Thornton (2004); Thornton et al. (2012) | Ioannou and Serafeim (2015); Pache and Santos (2013b), Thornton et al. (2012); Zaman et al., 2022) |

Table 2: Sydney Directors Conversation Participant Summary

| Classification | Position | Sector |
|---|--|---------------------------------------|
| Conversation Leaders: | | |
| Board - Non-Executive Director | Non-Executive Director (ASX 10) | Conglomerate |
| Investor Community - Institutional Investor (ESG) | Head, Asia Pacific Corporate Governance and Responsible Investment | Financial Services |
| Regulator | Executive Officer | Government |
| Conversation Contributors: | | |
| CSR - Civil Society | Chair | NGO |
| Regulator | Semi- Retired | Statutory Authority |
| CSR - Professional Services | CEO | Professional Services - Environmental |
| Academic | Manager | Higher Education |
| Academic | Professor | Higher Education |
| CSR - Civil Society | Manager | NGO |

| | | |
|---|---|---------------------------------------|
| CSR - Corporate | Manager | Financial Services |
| CSR - Professional Services | Partner | Professional Services |
| Attendees: | | |
| Academic | Senior Lecturer | Higher Education |
| Academic | Professor | Higher Education |
| Academic | Lecturer | Higher Education |
| Academic | Senior Lecturer | Higher Education |
| Board - Company Secretary | Group Company Secretary | Agriculture |
| Board - Company Secretary | Company Secretary | Energy |
| Board - Executive Director | CEO (Australia & New Zealand) | Financial Services |
| Board - General Counsel | Deputy General Counsel | Property and Retail |
| Board - Non-Executive Director | Director | Professional Services |
| Board- Executive Director | CEO | Financial Services |
| Board- Chairman | Director and Chair of the Investment Committee | Local Government |
| CG - Professional Association | National Director, Policy & Publishing | Professional Association - Governance |
| CG - Professional Association | National Director, Operations | Professional Association - Governance |
| CG - Professional Association | Senior Policy Advisor | Professional Association - Directors |
| CSR - Corporate | Group Manager Corporate Sustainability (and Director, UNGC Network Australia) | Oil and Gas |
| CSR - Professional Services | Senior Sustainability Consultant | Professional Services |
| CSR- Civil Society | Coordinator | International Civil Society |
| CSR- Civil Society | Executive Manager | UN Multi-lateral |
| CSR- Civil Society | Chair | UN Multi-lateral |
| CSR- Corporate | Head of Corporate Responsibility Strategy | Financial Services |
| CSR- Professional Services | Partner | Professional Services |
| CSR- Professional Services | Executive Assistant | Professional Services |
| CSR- Professional Services | CEO | Environmental Services |
| Investor Community - Institutional Investor | Head of Environmental, Social and Governance (ESG) Research | Financial Services |
| Investor Community - Institutional Investor | Managing Director | Financial Services |
| Investor Community - Institutional Investor (ESG) | ESG Associate | Financial Services |
| Regulatory | Former Deputy Chairwoman | Government |
| Regulatory | Senior Policy Advisor & Legal Counsel | Government |
| Regulatory | Senior Executive Leader, Corporations | Government |
| Student | Business Ethics | Higher Education |

Table 3: Melbourne Directors Conversation Participant Summary

| Classification | Position | Sector |
|---|--|---------------------------------------|
| Conversation Leaders | | |
| Board - Non-Executive Director | Non-Executive Director (ASX 50) | Manufacturing |
| Board - Non-Executive Director | Non-Executive Director (ASX 30) | Chemical and Mining |
| Board - Chairman and Non-Executive Director | Chairman and Non-Executive Director (ASX 20) | Financial Services |
| Board - Non-Executive Director | Non-Executive Director (ASX 200) | Integrated Services |
| Investor Community - Industry Body | Executive Director | Investor Industry Body |
| Conversation Contributors | | |
| Board - Non-Executive Director | Non-Executive Director | Property |
| Board - Non-Executive Director | Non-Executive Director | Oil and Gas |
| CSR - Civil Society | Technical Manager | NGO |
| CG - Professional Services | Associate | Legal |
| CSR - Corporate | Sustainability Manager | Financial Services |
| Regulator | Commissioner | Government |
| Attendees | | |
| Academic | School of Law | Higher Education |
| Academic | Professor | Higher Education |
| Board - Company Secretary | Company Secretary | Telecommunication |
| Board - Company Secretary | Company Secretary | Mining |
| Board - Non-Executive Director | Non-Executive Director | Building and Construction |
| Board - Non-Executive Director | Director (and Non-Executive Director of Impact Investing Start-up) | Start-up |
| Board - Non-Executive Director | Non-Executive Director | SME |
| Board - Chairman | Chair | Agriculture |
| CG - Professional Association | President | Professional Association - Financial |
| CG - Professional Association | National Director, Policy & Publishing | Professional Association - Governance |
| CG - Professional Services | Partner | Legal |
| CG - Professional Services | Senior Associate | Legal |
| CG - Professional Services | Manager | Governance |
| CG - Professional Services | Partner | Accounting |
| CG - Professional Services | Partner | Accounting |
| CG - Professional Services | Associate | Legal |
| CSR - Civil Society | Founder | Not-for-Profit |
| CSR - Civil Society | Co-Founder and CEO | NGO |

| | | |
|---|--|-----------------------|
| CSR- Corporate | Manager | Pharmaceutical |
| CSR- Corporate | GM, Overseas Operations / Director, CSR | Telecommunication |
| CSR- Corporate | General Manager, Governance, Integration and Reporting | Mining |
| CSR- Corporate | Head of Corporate Responsibility Strategy | Chemical and Mining |
| CSR- Professional Services | Senior Consultant | Consultancy |
| CSR- Professional Services | Director, Climate Change and Sustainability | Professional Services |
| CSR- Professional Services | Executive Director | Professional Services |
| CSR- Professional Services | Chair | Professional Services |
| CSR- Professional Services | Director | Professional Services |
| Investor Community - Civil Society | CEO | NGO |
| Investor Community - ESG Advisory | Managing Director | Financial Services |
| Investor Community - Industry Body | CEO | Financial Services |
| Investor Community - Institutional Investor | Managing Director Asia Pacific | Financial Services |
| Investor Community - Institutional Investor | Senior Institutional Business Executive | Financial Services |
| Investor Community - Institutional Investor | Chairman | Financial Services |
| Investor Community - Institutional Investor | Director | Superannuation |
| Investor Community - Institutional Investor | Head of ESG | Superannuation |
| Investor Community - Institutional Investor | Head of Public Affairs | Superannuation |
| Investor Community - Institutional Investor | Manager Corporate Sustainability | Superannuation |
| Investor Community - Institutional Investor | Responsible Investment Manager | Superannuation |
| Investor Community - Institutional Investor | Executive Officer Risk | Superannuation |
| Investor Community - Institutional Investor | Executive Manager - Investments and Governance | Superannuation |
| Investor Community - Institutional Investor | CEO | Superannuation |
| Investor Community - Institutional Investor | Manager, Governance and Sustainable Investment | Superannuation |
| Media | Publisher | Media |

Table 5: Analysis Matrix: Conceptual Systems of Beliefs and Practices at the CG-CSR Interface

| | Self-Reinforcing Systems | Contested Space | Navigating Complexity |
|-------------------------------------|---|--|--|
| Focussed, Second-Order Codes | Dimensions of components of the concepts. | second-order codes | become structural |
| CO-RELATED DIMENSIONS | Corporate Legitimacy | Pragmatic and instrumental—business case. | Moral vs pragmatic contest. Moral and pragmatic—good business sense. |
| | Interdependencies and Interconnections | The win-win business case; shareholder primacy. | Tensions, trade-offs and investor pressures; shareholders vs stakeholders. Balancing CG and CSR; stakeholders AND shareholders; inherent tensions. |
| | Time Frames | Short-termism: incentives and executive remuneration; quarterly reporting and the media cycle. | Long-term vs short-term tensions. Aligning long-term interests in board ecosystem e.g. aligning long-term value of the company with long-term interests of the shareholders. |
| | Ways of Thinking | Circular and self-reinforcing; compliance and risk focus. | Conflicted thinking. Integrated, strategic, interconnected, transformational thinking. |

Table 7: Logic Multiplicity at the CG-CSR Interface

| Types of Logic Multiplicity | Description |
|-----------------------------|--|
| Single Core Logic | <p>Board members' beliefs and practices are associated with a single core logic, in this case, a dominant market logic at the CG-CSR interface. Other logics may be peripheral or subsumed depending on their level of compatibility.</p> <p>Dominant: findings reveal the maintenance of the status quo at the interface of CG/CSR, where 'self-reinforcing systems' are dominated by market logic, with subsumed corporate and stakeholder logics. Beliefs and practices associated with neo-liberal ideologies dominate all other logics (Hirsch and Lounsbury 2015). Here, corporate legitimacy lies in the pragmatic, instrumental 'business case' where the CG/CSR interface is understood in terms of win-win opportunities (Van der Byl and Slawinski 2015), in favour of the shareholder. Where CSR issues are engaged, an instrumental trade-off approach in favour of financial outcomes is used to deal with any contradictory tensions. Short-term time frames are reinforced by reporting cycles, incentives, and investor pressure for returns. There is a lack of understanding and engagement in CSR initiatives and actors. A risk and compliance mindset prevails in board decision-making on CSR/ESG issues, framed in terms of economic risk. Hiring and socialisation practices maintain the recursive logics at play, where board composition and CEO selection is dominated by a 'club' of self-referencing peers and networks and extensive interlocking directorates (Pettigrew 1992). These serve to maintain the culture and status quo in terms of beliefs and practices at the board level.</p> |
| Multiple Logics | <p>The second two typologies portray board members' beliefs and practices associated with multiple logics as being core to organisational functioning. Disruption of a dominant market logic is reflected in efforts to align with an increasingly complex operating environment of financial, social, and environmental issues at the CG-CSR interface, and an increasingly active institutional field. Board members must contend with the inherent tensions of contradictory and interrelated logics and resist the centrifugal pull of self-reinforcing systems and a dominant market logic. Contradictory legitimacy demands are navigated by employing paradoxically conflicting strategies in parallel, which implies a "both/and perspective" instead of an "either/or choice" (Scherer et al., 2013) as board members seek to balance the pragmatic and moral dimensions of their responsibilities.</p> <p>Contested: Despite efforts to align competing interests in the board ecosystem, a 'contested space' exists between market, corporation, and stakeholder logics undergoing disruption and change, where multiple logics are equally valid and relevant to organisational functioning, but are highly contradictory. Corporate legitimacy is contested between pragmatic and moral orientations. For example, tensions and trade-offs between shareholders versus stakeholders; short-term versus long-term thinking; and risk and compliance versus strategy, opportunity, and innovation. Inherent and unresolved tensions at the CG-CSR interface may seemingly pitch one group of interests over another, such as sacrificing broader stakeholder interests for the survival of the corporation by yielding to market pressures. An instrumental trade-off is a likely resolution to resolve CSR dilemmas. Board members resent the seeming lack of understanding by CSR and investor communities of the complexities they must manage. For these board members, organisational survival must be the primary meaning of sustainability.</p> <p>Aligned: Board members navigate complexity to align market, corporation, and stakeholder logics. Corporate legitimacy is pursued in both moral <i>and</i> pragmatic terms, as board members seek to understand the interests and interdependencies of multiple stakeholders (shareholders and stakeholders). The board's role is to</p> |

| | |
|--|--|
| | <p>steer a strategic course through multiple institutional demands and find points of alignment. There is a recognition of the benefits of diversity in board composition, where CSR is supported and led by a strong chairman. Board members go beyond a legal understanding of fiduciary duty to one of moral responsibility. Risk can be interpreted as an opportunity for innovation. Alignment is sought through shared long-term interests across the board ecosystem, for example, between the corporation, investors, and other stakeholders, through integrated and strategic thinking. This is increasingly framed in terms of 'long-term value creation' for business sustainability and may involve processes akin to a deliberative democracy—an open discourse with key stakeholder groups to find a consensual solution or an “informed compromise” (Scherer et al., 2013, p. 264).</p> |
|--|--|

4

Using Creativity and Digital Nativity to Predict General and IT Innovativeness

Adijana Bunjak, Matej Černe, Jestine Philip and Peter Trkman

In today's technology-led business world, employees are not only required to use information technology (IT) to perform various job tasks, but they must also be able to use IT in innovative ways. Employees with digital fluency are desired, and possessing digital proficiency and skillsets qualify them for 'digital nativity'. A question remains of whether digital nativity holds an advantage over creativity in generating innovative outputs both generally, and for a distinct element of innovativeness – personal innovativeness using IT (PIIT). To address this gap, we conducted two studies and results consistently revealed that creativity influenced innovative performance more than digital nativity. However, digital nativity was a stronger predictor of PIIT as an outcome, above and beyond the non-significant effects of creativity. Our study holds important implications for creativity and employee innovation literatures by juxtaposing general innovativeness and PIIT as outcomes and using digital nativity and creativity as predicting factors.

6

Team circadian asynchrony and the misalignment of creative temporal spaces in creative teamwork

Stefan Volk, Yan Pan, Yufan Shang and Christopher Barnes

This study integrates research on chronobiological and team temporal processes to examine how team circadian asynchrony – asynchrony of team members' biological clocks – affects team creativity. We theorize that team circadian asynchrony negatively affects team creativity by creating misalignment of the temporal spaces during which team members can best access their creative potential. We further propose that strong team temporal leadership, transmitted through shared temporal cognition, can mitigate the negative effects of team circadian asynchrony on team creativity. Results from 68 R&D teams consisting of 323 members and their team leaders reveal that team circadian asynchrony affected team creativity negatively under conditions of weak team temporal leadership. In contrast to our expectations, rather than simply mitigating the harmful effects of team circadian asynchrony, high temporal leadership actually reversed the effect, such that team circadian asynchrony facilitated team creativity. In both cases the effect of team temporal leadership was transmitted through shared temporal cognition in teams. Our results therefore suggest that team circadian asynchrony, when effectively managed, can turn from a liability into an advantage for team creativity. We discuss the theoretical and practical implications of these findings for team creativity research.

8

Working for Others or Self? The Effects of Perceived Overqualification on Entrepreneurial Outcomes

Chao Ma and Xue Zhang

¹Australian National University, ²Shanghai Normal University

Drawing from the theory of planned behaviour and self-efficacy literature, we propose that perceived overqualification is positively related to an employee's entrepreneurial self-efficacy, which further predicts their entrepreneurial intentions and entrepreneurial goal-enacting behaviour. We also suggest that peers' entrepreneurial experience may serve as a moderator strengthening the positive relationship between perceived overqualification and entrepreneurial self-efficacy. The results of a three-wave online survey of 397 employees supported our proposed relationships among perceived overqualification, entrepreneurial self-efficacy, entrepreneurial intention, and entrepreneurial goal-enacting behaviour, as well as the boundary condition of peer entrepreneurial experience. The theoretical and practical implications of our study are discussed.

14

Is more really better? A social indispensability account of female independent director turnover

Anran Li and Yaping Gong

Research suggests that female directors bring unique perspectives to the board, assuming they are motivated to stay on the board. We challenge this assumption by proposing a social indispensability perspective of female director turnover. An analysis of 5,472 firm-year observations of corporate boards in China showed that when the number of female directors increases but females remain the minority on the board, the increasing representation increases the turnover of such directors at the focal board level. Such increased turnover is augmented when female directors collectively have stronger political connections but reduced when they have longer tenure of working together on the focal board. An experimental study supported reduced social indispensability associated with increasing female representation as an individual-level motivational force and hence provided the micro foundation of the board-level relationship.

16

Job crafting strategies to retain a whole workforce during a pandemic.

Hannah Meacham, Justine Ferrer and Peter Holland

Through a case study design, this research explores how once organisation was able to utilise job crafting to ensure workforce sustainability during and after the COVID-19 pandemic. A significant aspect of the organisation's success was the focus on maintaining the workforce in full employment, underpinned by quality work design through job crafting strategies to create a high involvement work environment. The result for this organisation was the ability to maintain all employees leading to sustained competitive advantage for the organisation and new product lines.

18

Work Social Support and Women's Careers: A Review of Popular Measures

Farzana Ashraf, Denise Jepsen and Raymond Trau

Work social support (WSS) impacts women's careers both in Western and non-Western contexts. Compared to Western societies, women in patriarchal societies are more prone to feel this impact since they perform multiple domestic duties as daughters, daughters-in-law, wives and mothers. In this conceptual paper, we review 21 popular social support measures. We identify the absence of a WSS measure that can accurately capture the work related support women receive from their non-work domain. Developing a new WSS measure that is contextually separate from the available measures will help close this gap in the literature. This paper demonstrates an association between WSS from private domain and women's careers. Knowledge of this association can contribute to practical implications at micro, meso and macro levels.

21

The influence of leaders' passion at work on employees: A methodology and analysis plan

Velina Serafimova and Denise Jepsen

The work environment is seen as a significant factor influencing work passion, while leaders are key influencers in shaping that environment. Through their work attitudes and behaviours, leaders can affect employees' well-being, motivation, performance, job satisfaction and job embeddedness. Studying the impact of leaders' own harmonious and obsessive work passion would deepen our understanding of the processes by which leadership attitudes and behaviours impact employees. Extending knowledge on individual work passion would help in attaining passion's desirable benefits. This research contributes to work passion and leadership literature by investigating the mechanisms through which leader passion transmits to employees and affects their work-related outcomes. The paper provides research motivation, literature review, research methodology and analysis plan.

25

"Casting a Global Net": Contemporary Approaches to Global Staffing

Stefan Jooss, David Collings and Michael Dickmann

The COVID-19 pandemic has fundamentally challenged how multinational enterprises (MNEs) approach global staffing. Adopting a qualitative research design encompassing interviews with 34 senior HR leaders in 15 MNEs, this paper examines the shifting drivers of global staffing. Drawing on insights from location theory and the resource-based view, we find that global staffing has evolved beyond employment issues in a fixed location towards location choices. Further, we reveal that MNEs adopt two underpinning HR perspectives, i.e., a position-people nexus. We propose a typology of emerging global staffing approaches and contextualise this typology by discussing the value of each approach.

28

Why do key decision-makers fail to foresee extreme 'black swan' events? A case study of the Pike River mine disaster, New Zealand

Richard Logan, Bob Cavana, Bronwyn Howell and Ian Yeoman

In 2010 there was a methane explosion at the Pike River Coal Ltd's mine in Aotearoa New Zealand, that killed 29 miners and caused the loss of all funds invested. The subsequent Inquiry identified many problems. Taking a Knightian uncertainty focus with an uncertainty aversion lens, this research asks the question, why were Pike's management wilfully blind to potential extreme 'black swan' events? A conceptual framework was developed and tested using a case study approach, with qualitative analysis of secondary data. The research identified two types of organisational blindness caused by oversimplification of uncertainty, being unquestioned - inductive biases and reference narrative. This research provides theoretical and practical contributions to the analysis of business and public policy decision-making under uncertainty.

36

Not just a "nice to have": Team compassionate care behaviours and patient safety outcomes

Helena Nguyen, Karyn Wang, William de Montemas, Shanta Dey and Anya Johnson

This paper seeks to understand team compassionate care behaviours, its antecedents, outcomes, and boundary conditions using a mixed-methods approach in acute healthcare settings. Using data from 2,437 nurses and midwives working across 188 healthcare teams, Study 1 finds that team compassionate care behaviours are associated with fewer healthcare-acquired infections (HAIs) – an objective indicator of patient safety. Further, team psychological safety predicted higher team compassionate care behaviours, and team work demand moderated this relationship. In Study 2, we interviewed 25 nurses on their experience of team psychological safety, work demands, compassionate care, and patient outcomes. Together, our findings highlights that compassion is a critical force in shaping team effectiveness and in enhancing an organisation's ability to meet its purpose and objectives.

38

A Link Between Gender Equality and Performance in Project Organisations

Marzena Baker, Muhammad Ali and Erica French

Project organisations, characterized by male-dominated work environments, are not capitalizing on the benefits of gender diversity. Little is known about how leadership gender diversity drives equality initiatives and gender diversity, leading to superior financial performance. Our study used time-lagged archival data from 219 engineering and construction organisations. The findings suggest board gender diversity drives work-life initiatives, which enhance gender diversity across hierarchical levels. Gender diversity in the professional roles drives financial performance.

39

Organizational Resilience as a Strategic Sustainability Approach: A Case Study of An Indigenous Agricultural Company in New Zealand

Gerson Francis Tuazon, Jordan Clark and Daniel Tisch

Whilst global consumption and production of goods have proliferated, major inter-governmental bodies (such as the UN and World Bank) have expressed concern as well as the need to implement sustainability and resiliency-oriented policies, especially in a “new normal” post-COVID world. This qualitative study proposes a novel Indigenous theoretical framework of organizational resilience and sustainability designed to address issues related to economic recovery aligned with both fiscal and ecological sustainability objectives via a polycentric stakeholder lens. Qualitative evidence from a multinational Māori organization in the New Zealand agricultural sector is examined illustrating the three major sustainability themes of innovative learning (wānanga), kaitiakitanga (guardianship of resources) and well-being (hauora) embedded within the Māori organization's overall strategic vision in supporting, facilitating, and implementing New Zealand's clean energy initiatives. More specifically, we find evidence relating to how these themes are translated into organizational policies and management control systems. Applied nationally, these themes resonate with New Zealand's growing commitment to investments in renewable energy and storage.

42

Exploring the impact of employee engagement and patient safety

Grace Scott, Anne Hogden and Robyn Taylor

Health services are continually investigating new ways to improve the safety and quality of health services. A positive relationship between employee engagement and patient safety has been suggested. A review of peer-reviewed literature relating to the impact of employee engagement on patient safety within health services between January 2015 and May 2021 was conducted. 3,693 relevant articles were identified, of which 15 studies were included in this review. Ten articles measured employee engagement using validated tools, whereas patient safety was most frequently assessed through staff surveys. There appeared to be a positive correlation between employee engagement and patient safety, but the relationship strength varied. Health service managers should consider this when directing resources to support safe and high-quality care.

43

Does Peers' Unethical behavior influence knowledge hiding: Mediating and moderating mechanism

Bindu Gupta, Manjari Srivastava and Sumi Jha

The study examined the effect of peers' unethical behavior (PUB) on employees' knowledge hiding (KH) and the perceived cost of knowledge sharing (CKS) as a mediating mechanism. It also investigated the role of responsible leadership (RL) and personal resilience (PR) to mitigate the negative effect of PUB on KH. To test the model, we collected survey data in three waves from employees of the service sector in India. The results demonstrated that PUB positively influences KH and CKS mediates this relationship. The results indicate that RL does not alleviate the effect of PUB on KH. Results for the direct impact of PR on KH and moderating effect of PR on CKS and KH relationship were significant.

50

Enhancing impact potential of a diversity and inclusion capability maturity model through empirical testing and validity confirmation

Judy Lundy and Uma Jogulu

This paper demonstrates the value of reviewing the design process and testing a diversity and inclusion (D&I) capability maturity model (CMM) to maximise its ability to contribute to sustainable change. Escalating societal expectations for organisations to transition towards a sustainable and inclusive future requires enhanced maturity of their D&I practices. CMMs are accepted tools to gauge D&I organisational maturity and inform change. Often, however, design problems and a lack of testing undermine their applied value. This paper unpacks the design process undertaken to create a D&I CMM and assesses its robustness using an organisational dataset. The paper concludes that following a design-led approach and empirical testing affords more robust and applicable tools which support changes needed for sustained public benefit.

56

Toward the Sustainable Development Goals: The Effects of Digital Leadership and Knowledge-Sharing Behavior on the Higher Education Institutional Change

Ruihui Pu, Rebecca Dong, Thitinan Chankoson, Songyu Jiang and Changjiang Tang

Utilizing the Institutional Theory of Leadership as a theoretical lens, this study investigates the relationship between digital leadership, knowledge-sharing behavior and institutional change in the realm of higher education, with the aim of achieving education for sustainable development (ESD). Our research objectives are twofold: first, we theoretically explore and assess the mediating effect of knowledge-sharing behavior in the relationship between digital leadership and institutional change within higher education for SDGs; second, we aim to provide managerial recommendations for higher education executives. We employed a quantitative survey approach, the data were collected from 607 valid respondents who are employed at Chinese higher education institutions. Structural equation modelling (SEM) was used to analyze the data. Our study illuminates the effects of digital leadership and knowledge sharing on institutional change in higher education for SDGs. The results emphasize the significance of digital leadership not only for educational professionals as a form of career capital but also for fostering knowledge sharing through innovative digitization. The findings demonstrate a direct correlation between digital leadership and institutional change, with knowledge-sharing behavior serving as a mediator. Additionally, the study suggests that digital leaders should actively advocate for reforms in higher education systems and promote knowledge-sharing. Higher education institutions can effectively adapt to the rapidly changing landscape of digitalization and future challenges for educational leaders.

59

The use of AI in Selection Interviews

Steven Lui, John Lai, Zhijing Zhu and Carolyn Ngowi

This study examines the role of trust in AI and augmentation in moderating the effect of fairness on applicant satisfaction in a novel selection context of Artificial intelligence (AI) interview. Field survey data were collected at two time points separated by three to five weeks from a sample of 125 university applicants who were assessed by AI interviews for their industry internships. Moderated regressions were conducted to test the hypotheses. Results verified the positive relationship of fairness and applicant satisfaction for AI interviews, but not the compensatory effect between fairness and outcome favorability. Results also reveal that procedural fairness is most effective when trust is low and augmentation present. By contrast, interactional fairness is most effective either when trust is high and augmentation absent, or when trust is low and augmentation present. This study extends the research on fairness to the novel context of AI interviews. Drawing on uncertainty management theory of fairness and findings from a field survey, this study sheds light on how procedural and interactional fairness in AI interviews are differentially bounded by applicants' trust in AI and augmentation.

62

Mitigating the Impact of COVID-19 Restrictions on Supply Chains: Resilience Strategies and Countermeasures

Muhammad Umar and Robert Radics

This study offers to use Haddon Matrix to assess intervention and coping strategies adopted by various organisations for the preparation, response and recovery phases of the Covid-19 related supply chain disruptions. Evidence is gathered from available qualitative information sources concerning the current COVID-19 pandemic. Overall, the findings showed that effective communication along the supply chain, pre-event risk management, strong relationships and higher coordination within the wider network community all play key roles in enhancing the resilience of supply chains against pandemics

63

Reducing Clinician's Administrative Workload by Means of Speech Recognition – A Longitudinal Study

Annika Mertens, Josephine Tognela, Francesco DeToni, Peter McEvoy and Mark Griffin

This study investigates the role of a speech recognition tool in reducing the administrative workload of clinicians over time and its effect on clinicians' well-being and their perceived interaction with their patients. To measure the effects of the speech recognition tool, we administered a survey at four time points over the course of six months. Preliminary results indicate that speech recognition software is a useful tool to reduce administrative workload for clinicians and to ultimately improve their well-being and interaction with patients. The study has practical implications for health care systems using electronic health records and is relevant for management research and practice.

65

Customer-centric perspectives in the hospitality sector using service blueprinting and force field analysis approach

Ram Roy

This paper is based on the study of a hotel's operations including its housekeeping practices, customer service, process analysis from an efficiency perspective, and analysis of the customers' feedback collected from social media. The paper used relevant techniques including service blueprinting, time study, Pareto chart, and sentiment analysis (SA) using the Force Field Analysis (FFA) model. The paper has identified some potential failure points in the service blueprinting and other areas with the scope for improvement including on-the-job training procedures, motivation factors, and sequencing of routine tasks during the service delivery to the customers. The Pareto chart indicates that most of the negative sentiments are related to just three areas including room facilities, restaurants, and the perceived value of rooms. The sentiment analysis indicates that most of the positive sentiments from guests about XYZ hotel are related to the 'quality of the rooms or property', 'hotel location', 'room perceived value', 'staff attitude' and 'restaurant service'. However, most of the negative sentiments from the guests are also linked to 'room facility and room service', 'restaurant service', 'perceived room value', and 'bathroom amenities'. Some guests have negative sentiments about the rooms because the rooms are located in the proximity of laundry and the noise of the machines.

67

The Role of Blockchain as a Trust Signal in emerging relationships: A Case of Organic Food Supply Chains

Kongmanas Yavaprabhas, Sherah Kurnia, Zahra Seyedghorban and Daniel Samson

By leveraging blockchain technology, scholars have expected an enhancement of inter-organizational trust among supply chain partners. As opposed to previous research which mostly focused on how blockchain impacts inter-organizational trust on established relationships, this study aims to empirically examine how the use of blockchain impacts trust in emerging relationships through a case study of organic food supply chains. The findings indicate that suppliers can utilize blockchain to signal their trustworthiness to potential and new buyers. Three signals facilitated by blockchain are identified: the supplier's brand credibility, the credibility of third-party verified information, and willingness to share information openly. This study contributes to the understanding of the relationships of blockchain on inter-organizational trust in supply chains.

69

Driving Digital Inclusion Action Utilizing Equity and Equality Objectives to Create More Opportunities for Teaching and Learning in Higher Education

Geraldine Hardie, Mario Fernando and Jan Turbill

The COVID-19 pandemic highlighted digital exclusion at a point in time when the world was thrown into lockdowns. Higher education was forced into an emergency mode of online teaching and learning. Students had to make the most of their resources if they were to continue their learning. Using equity and equality perspectives, we examine how digital inclusion policies have improved students' access to digital technologies and promoted digital inclusion in an Australian regional university. Grounded in Adams' Equity Theory and Espinoza's Equity and Equality Conceptual Model, we share our findings from a mixed-method study of 284 undergraduate students and interviews with 15 staff members and 9 students.

71

The role of leadership gender diversity and pay equity practices in enhancing employee productivity: The context of industry gender pay gap

Muhammad Ali, Marzena Baker, Mirit Grabarski and Alison Konrad

Gender pay gaps create inequalities that have organisational implications. Drawing on the gender difference perspective and social exchange theory, we proposed a positive relationship between leadership gender diversity and pay equity practices and a positive relationship between pay equity practices and employee productivity, respectively. We also proposed that these effects would be stronger in industries with a high gender pay gap than their counterparts. A six-year panel dataset of 4943 organisations in Australia with 24408 observations was created from archival data collected from multiple sources. The results support most of the proposed relationships. The findings refine the gender difference perspective and social exchange theory, addressing important knowledge gaps pertaining to the dynamics and effects of gender pay gaps.

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Psychological Strain & Burnout in Today's Multitasking Work Environment: What Organisations and Managers Can Do!

Wangxi Xu and Andrew Yu

Employee polychronicity and its effects on reinforcing employees' multitasking inclination have been considered desirable in today's dynamic business world. Building upon polychronicity's innate and general nature, we propose that its reinforcing effects on employees' multitasking inclination can go beyond work domain and work content, thereby leading employees to address work and family tasks simultaneously in both work and family domains. Such a multitasking inclination is hypothesized to associated with increased inter-role conflicts between work and family, which further result in employee burnout. We further propose that this undesirable side of polychronicity can be weakened by a supportive work environment characterized by high levels of organizational support for work-family boundaries and creative family supportive supervisor behaviors.

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The dynamics between managerial success and employees' motivation to improve: a multi-level model

Wangxi Xu, Gerard Beenen, Shaun Pichler and Andrew Yu

Based on conservation of resources (COR) theory, we propose that managerial success constitutes a personal resource that managers can sustain and extend by facilitating a work unit environment that encourages employee feedback seeking, which then predicts employees' motivation to improve. We further posit procedural justice climate as a cross-level moderator of the relationship between feedback seeking environment and employee motivation to improve. We test and find support for our model with a multi-level sample and analysis of 654 employees nested within 85 work units in a large healthcare organization.

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Interactive Imprinting: The Influence of Great Leap Forward and Great Famine on CEO Innovation Orientation

Quinn Ye, Helen Hu, Dean Xu and Kwanghui Lim

Prior studies focused on individuals' discrete imprinting process while overlooking the interactive process. We examine this process by investigating how CEOs' earlier life experiences of the Great Leap Forward (GLF) and the Great Famine (GF) influence firm innovation orientation. Based on data from 1038 CEOs of 911 Chinese listed firms, we find that firms with CEOs experiencing stronger GLF tend to support more innovation input but exhibit lower innovation efficiency; firms with CEOs experiencing stronger GF tend to support lower innovation input but exhibit higher innovation efficiency. Additionally, we found an "immune" phase in the interactive imprinting process during which the freshly required GLF imprints remain intact and became moderators when they were continuously brought into the GF imprinting process.

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Want More Leaders? Think Work Design: Uncovering the Relationship between Enriched Work Design and Leader Emergence

Eyup Ilker Camgoz, Florian Klonek and Sharon Parker

Using two independent longitudinal datasets (i.e., HILDA and Raine), this study investigated whether there is a relationship between enriched work design and leader emergence, and whether this relationship is moderated by affective/identity motivation to lead. The results showed that enriched work design predicts employees' likelihood to emerge as leaders two years later. Moreover, employees who were high on enriched work design and affective/identity motivation to lead were more likely to emerge as leaders compared to those who were low on enriched work design and affective/identity motivation to lead. These results provide more insights into the growing leadership talent shortage and have implications in terms of maintaining leader candidate pools.

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Time well served in developing reflective practitioners? A scholarship of teaching and learning based enquiry into the delivery of personal development teaching for Senior Leader Apprentices

Elizabeth Houldsworth and Emma Watton

This paper focuses on the delivery of personal development teaching on a Senior Leader Apprenticeship (SLA) programme in the UK. Personal development is a 10-credit module focusing on the development of the self-reflection and sense-making skills that are required for future leadership roles, as well as for a balanced, fulfilled and healthy life. Students produce 2 formative and 1 summative reflective assignment. The final assignments from a sample of 23 apprentices have been analysed based on a framework derived from Bloom's taxonomy. Across the 23 participating students it has been possible to identify 3 different groups of learner. One group focus on applying insights, another group spot linkages and see connections and a third group show evidence of critical reflection.

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A Scientometric Analysis of Literature on Workplace Psychosocial Hazards

Subas Dhakad and Muhammad Mahmood

The Workplace Psychosocial Hazards (WPH) agenda has gained currency as an industrial relations challenge in the context of the United Nation's 17 Sustainable Development Goals (SDGs) context. For instance, SDG#8 specifically aims to protect labour rights and promote safe and secure working environments for all workers under the umbrella term of decent work. And yet, the comprehensive analysis of WPH literature remains underexplored. This article responds to this gap and conducts a scientometric analysis of the literature between 1993 and 2022 available in the Scopus database (n=521). The analysis examines scientific knowledge production and dissemination dynamics and identifies trends, patterns, emerging research areas, research trends, key authors, and institutions. The article's findings should interest WPH-related researchers as well as policymakers.

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Second-generation Asian Australian Leaders' Perspective on The Bamboo Ceiling in Australian Workplaces

Cynthia Tang, Sen Sendjaya and Diana Rajendran

This paper presents the perspectives on the bamboo ceiling phenomenon in Australian workplaces. It is part of a qualitative research study that examines the lived experiences of second-generation Asian Australian leaders, grouped as SGAA leaders. Our findings highlight the mindset of these Asian Australian leaders on the bamboo ceiling phenomenon, shedding light on how they exercise their agentic capabilities to manoeuvre their leadership trajectory.

Keywords: Bamboo ceiling, second-generation leaders, homosocial reproduction, attraction, selection and attrition theory

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Ally or Enemy? Power Dynamics in the Impact Investor Social Enterprise Dyad

Niko Gerlach and Lena Schätzlein

Research on the power relationship between impact investors (IIs) and social enterprises (SEs) has predominantly focused on the overt exercise of power from the investor's perspective, thereby neglecting subtle forms of power inherent in this dyad and the perspective of SEs. We inductively analyzed 54 semi-structured interviews with SEs and IIs to identify the motives of these actors to exercise power in an investment relationship. The study also seeks to identify the forms of power employed by these actors and the phases in which such power dynamics unfold to provide a holistic view of the power relationship in an II-SE dyad. Our findings reveal, for example, that preconceived notions about one another affect power utilization practices during the entire relationship.

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Navigating Leadership Styles in Sustainable Construction Projects: A Systematic Literature Review

Fatima Af zal and Roksana Tumpa

Sustainability has received enormous attention in the construction sector in the last few decades in order to respond to the world's pressing crises such as climate change, poverty, and human well-being. While the construction sector has taken stringent measures to deal with these challenges, an effective leadership style is a must to embed sustainable practices in construction projects.

Based on a systematic literature review (SLR), this research aims to identify an appropriate leadership style for implementing sustainable practices in construction projects. The SLR identified 31 articles that primarily discussed leadership in sustainable construction projects. The SLR revealed that there is no 'one size fits all' leadership style suitable for all contexts. However, transformational leadership provides numerous benefits over other styles. This research potentially helps construction project managers to adopt the required leadership styles to get desired outcomes.

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Exploring the Relationship between Perceived Opportunities for Competency Development, Subjective Career Success, and Organizational Citizenship Behaviours: A Social Exchange Perspective

Teow Hui Hui, Wee Chan Au and Pervaiz Ahmed

Building upon the Social Exchange Theory, this study aims to examine the mediating role of subjective career success (SCS) in the relationship between perceived opportunities for competency development and organizational citizenship behaviours (OCBs). Data was collected from 353 employees working in organizations in Malaysia through a three-wave questionnaire survey. The results reveal a significant full mediation effect of SCS on the relationship between perceived opportunities for competency development and OCBs. This study contributes to the career literature by demonstrating that without a sense of SCS, even with competency development opportunities, employees are less likely to engage in OCBs. This study highlights the importance of SCS in fostering mutual benefits for both the employee and the organization.

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How do social movements use ‘insiders’ to influence corporate governance?

Alice Klettner and Martijn Boersma

Global social movements advocating for issues such as gender equality, climate action or human rights are increasingly targeting business directly as well as through governments. This paper explores the influence of social movements on corporate leaders with the aim of informing emerging theories of stakeholder-oriented corporate governance. It focuses on social movements that operate through ‘insider’ mechanisms whereby they work with or through specific stakeholders of the firm, such as managers or shareholders, to create change. Using a qualitative, case study methodology, the research explores the processes and relationships through which these social movements can influence corporate governance.

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Hybrid work design profiles: Antecedents and wellbeing outcomes

Caroline Knight, Doina Olaru, Julie Lee and Sharon Parker

This paper explores the nature of hybrid work design profiles, their antecedents and wellbeing outcomes, including whether levels of scheduling autonomy, social support, workload, and close monitoring are similar between home and the workplace (convergent) or different (divergent). Latent profile analysis revealed four profiles (n=386): 1) active, low monitoring, convergent; 2) high strain, high monitoring, divergent; 3) low strain, low monitoring, divergent; and 4) passive, high monitoring, convergent. Males, older, more skilled workers, and those with influence over their work location or greater organisational support, were most likely in the active, low monitoring, convergent profile. Employees in this profile had the highest flourishing and strongest mental health; those in the passive, high monitoring, convergent profile had the poorest wellbeing.

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Abusive supervision: Building on existing knowledge to chart new research directions.

Cathrine Frost, Andrei Lux and Peter Galvin

The field of abusive supervision, both intricate and evolving, continues to command increasing scholarly attention as shifts in workplace dynamics and societal norms progress. This paper sets out on a comprehensive investigation of this essential topic, using an extensive review of the existing literature to broaden the scope of analysis. It encompasses individual and organisational antecedents, coping mechanisms, and the far-reaching societal and technological impacts, which are notably pronounced in the era of remote work and post-pandemic workplace norms. Through this thorough review, we propose eleven central research questions, encapsulating facets such as dark triad traits, personal stressors, organisational culture, power dynamics, job insecurity, support networks, resilience, and organisational justice. As a result of this endeavour, we provide a deeper understanding of abusive supervision and a comprehensive roadmap for future research. This will significantly contribute to the existing body of knowledge and inform the development of contextually relevant and forward-thinking interventions in this compelling field.

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Technological crowding and exploratory innovation: The effects of a firm’s technological superiority

Chia-chi Chang and Phuong Dung Thi Nguyen

Firms need exploratory innovation for growth and profitability. However, many hesitate due to risks and uncertainties. Thus, further research is needed to understand reasons for exploratory innovation. This study investigates if firms are more willing to pursue it when faced with higher technological crowding. It also examines whether a firm’s relative advantages impede its intent to escape crowding through exploratory innovation. Analyzing Taiwanese high-tech firms, we find that technological crowding drives investment in exploratory innovation. However, this relationship is limited when a firm has superior combinatorial capacity and technological prestige.

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Recovery and recidivism: The aftermath of unethical pro-organizational behavior

Hongmin Yan, Tyler Okimoto and David Solnet

Research on unethical pro-organizational behavior (UPB) has mainly concentrated on why employees engage in such behaviors, but with relatively limited attention to how employees respond following their own UPB. Integrating moral self-regulation and moral disengagement theories, we hypothesize that UPB will elicit mixed moral-based cognitive responses, with diverging behavioral outcomes. Findings from a time-lagged study with frontline employees confirm our hypotheses. Engaging in UPB harmed perpetrators' moral self-concept, captured by a perceived loss of moral credits; this prompted them to engage in customer-directed helping behaviors to restore their moral self-concept. Additionally, UPB triggered a cognitive justification process linked to an increase in future UPB. This nuanced reaction helps explain why individuals' moral self-regulation does not necessarily remedy for moral failings.

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Entrepreneurial Marketing Activities and Firm Performance Among US Wine Producers: The Moderating Role of Competitive Intensity

David Crick, Ali Mahdi, James Crick, Wadid Lamine and Martine Spence

The relationship between entrepreneurial marketing activities and firm performance remains under-researched. Underpinned by resource-based theory, this study unpacks this relationship by evaluating the moderating role of competitive intensity. Following 20 field interviews, survey responses from 306 small wine producers in the United States, revealed that at an aggregate-level, entrepreneurial marketing activities positively and significantly influenced firm performance, while competitive intensity yielded a non-significant moderating effect. A post-hoc test revealed that various dimensions of the multi-faceted entrepreneurial marketing construct were associated with firm performance, whereby, competitive intensity played different moderating roles. Collectively, unique insights emerged to unpack the entrepreneurial marketing-performance relationship.

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Business Leaders' signalling prosocial behaviours related to work health and safety: An exploratory study

Leigh-ann Onnis, Tim Bentley, Pieter-Jan Bezemer, Esme Franken, Nicola Green, Sharron O'Neill and Lee Huuskes

Sustainable, socially responsible business practices are increasingly important for businesses to remain profitable. This increased attention on prosocial behaviours has generally been associated with environmental sustainability and ethical labour practices with little attention directed towards work health and safety (WHS) as a prosocial behaviour, despite safety being a critical element of sustainability. Through analysis of ASX200 company reports, this study sought evidence of WHS as a prosocial behaviour for WHS commitment, and to identify internal and external drivers of such commitments. The study found that despite some evidence of leaders signalling WHS as a priority in company reports (the 'talk'), there exists relatively little evidence (the 'walk') about the commercial drivers and prosocial behaviours related to WHS commitment.

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Are different-source belongingness resources complementary?: Investigating interactive effects on new employee adjustment

Helena Cooper-Thomas, Jenny Chen and Linda Trenberth

New employees seek to build relationships to enable a sense of belonging, which contribute to positive newcomer adjustment. However, it remains unclear whether other workplace factors augment or counter newcomers' efforts. We combine belongingness theory with conservation of resources theory to test newcomers' views of personal, social, and structural resources, respectively newcomer general socialising, serial socialisation tactics, and task interdependence. Outcomes reflect positive newcomer wellbeing: emotional engagement, emotional exhaustion, and cognitive engagement. Study 1 uses data from 532 newcomers to a large China-based food manufacturer; Study 2 uses data from 155 newcomers to an Australian university. Our theorising is partially supported, with an augmenting effect of complementary resources contributing to better newcomer adjustment for emotional exhaustion only.

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Job search barriers perceived by people who care for an elderly or disabled family member

Hugh Bainbridge, Lukas Hofstätter and Sarah Judd-Lam

Despite job search being challenging for caregivers, little consideration has been given to the re-employment process. We address this gap by examining the extent that job seeker beliefs about societal recognition of a role that is central to their identity (caregiving) affect perceived barriers to employment. We then explore how this effect occurs, and when this occurs. In a survey of job seekers with caregiving responsibilities, greater societal recognition of caregiving was associated with lower perceived job search barriers. This effect was mediated by social connectedness and moderated by support in the form of coaching and planned breaks away from caregiving. Job seekers who reported lower societal recognition of caregiving benefited most from coaching and planned breaks away from caregiving.

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Conflicting Institutional Logics and Innovation: CEO's Private Firm Experience in State-Owned Enterprises

Mengyuan Zhu, Wen Li, Yaowen Shan and Krithika Randhawa

We examine how CEO's private firm experience affects SOE's innovation performance. Building on institutional logics perspective, we conceptualize CEO as a "carrier" of a market logic through previous professional life in private firms, which competes with the state logic complied by SOEs. Under market-state logic conflicts, we expect CEO to experience cognitive complexity that impedes SOE's innovation performance. Additionally, we propose that CEO's foreign experience can mitigate such negative impact, while firm's level of stateness intensifies the logic conflicts. By using a sample of publicly listed Chinese SOEs from 2008 to 2016, we find empirical evidence for these hypotheses. Overall, we contribute to institutional logics perspective and SOE innovation literature by shedding new light on the role of important individuals.

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How Does Environmentally Advanced Level of Collaboration Portfolio Influence Eco-innovation Outcomes of Small and Medium-sized Enterprises?

Wein-hong Chen

This study investigates how the environmentally advanced level of collaboration portfolio affects eco-innovation outcomes of small and medium-sized enterprises (SMEs) and how the organizational climate for creativity and the scope of internationalization moderate this relationship. Drawing on a sample of 517 electronics SMEs from the Technological Innovation Survey in Taiwan, this study recognizes the critical role of collaboration portfolios in influencing SMEs' eco-innovation outcomes. This study contributes to the theoretical development of the connectionist perspective of the network paradigm and the empirical development of eco-innovation research. This study also provides unique insights into the non-institutional driver of global technological diffusion in the eco-innovation sphere.

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Too Drained to “Smile and Serve”! An Ego Depletion Perspective to Displaced Aggression

Neha Bellamkonda and Rahul Sheel

Frontline employees frequently face mistreatment from customers, leading to adverse outcomes. We examine how customer mistreatment in the prior service encounter affects the employees' displaced aggression towards the next customer, which is a current gap in the literature. Drawing from the ego depletion theory, we hypothesize that ego depletion mediates the association between customer mistreatment and displaced aggression. We also hypothesize that perspective-taking and self-monitoring moderate the positive relationship between customer mistreatment and displaced aggression. Using data from an experimental vignette study with post-graduation students from a large public university, we found that ego depletion mediated the relationship between customer mistreatment and displaced aggression. In addition, perspective-taking and self-monitoring moderated the positive relationship between customer mistreatment and displaced aggression. This study contributes to our understanding of the mechanisms of post-mistreatment encounters. The findings have implications for organizations in developing strategies to prevent customer mistreatment and to help employees cope with its negative effects.

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Interfirm Networks, Knowledge Transfer, and Firm Performance: The Role of Organizational Unlearning

Carolyn Ngowi, Steven Lui and Salih Zeki Ozdemir

Interfirm networks are important conduits through which firms can obtain valuable knowledge beyond their boundaries. Nonetheless, prior literature offers inconclusive evidence on how the structural (i.e., centrality) and relational (i.e., tie strength) aspects of social networks affect knowledge transfer. Additionally, the conditions accounting for the variations of when knowledge transfer improves versus hinders firm performance, remain under-studied. Adopting an ability-opportunity-motivation framework, we propose a research model that depicts the moderating role of unlearning on the antecedents and outcomes of knowledge transfer. To verify the model, we surveyed the whole network of 44 petroleum wholesalers in Tanzania. The results are consistent with our predictions: unlearning weakens the effect of tie strength, while strengthening the effect of centrality on knowledge transfer. Unlearning also strengthens the effect of knowledge transfer on firm performance. Based on these findings, firms are advised to align their unlearning ability with their network characteristics to reap more knowledge benefits from their networks, which has implications on their financial performance.

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Uncovering the phenomenon of paired legitimacy threat and repair during a large-scale change

Rahul Chandra Sheel and Shivin Tikoo

During a large-scale and intricate organizational change, it is common for organizations to enlist the assistance of consultants to navigate the complexities of the change process. In light of an empirical investigation conducted within a prominent automotive company undergoing a complex change initiative, we contend that the legitimacy of the change endeavor is contingent upon paired legitimacy, specifically, the combined legitimacy of the top management team (acting as the client) and the consultant. This duo assumes instrumental roles in conceptualizing and designing the change initiative. Our study reveals that the legitimacy of this collaborative entity faces multiple threats throughout the change process. The ability of the client and consultant to collaborate cohesively and effectively address these challenges becomes pivotal in determining the success of the change project. Furthermore, we discuss the theoretical underpinnings and practical implications stemming from our study, elucidating its significance within the scholarly and practical realms.

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Bridging Worlds: Examining the Interplay between Offline Interactions and the Online Social Capital of Female Entrepreneurs

Hina Fatima, Uma Jogulu, Jalleh Sharafiza and Tom Barratt

This paper examines the interplay between female entrepreneurship, social media usage, and the generation of online social capital. Female entrepreneurship has witnessed significant growth on a global scale, and this expansion has been closely intertwined with the increasing utilisation of social media platforms. Social media offers significant support to female entrepreneurs as an online social capital platform and help address their disadvantaged position. Online social capital, distinct from offline social capital, is shaped by unique social media capabilities or advantages. This study investigates the impact of in-person interactions on the generation of online social capital through 35 qualitative semi-structured, in-depth interviews. The findings contribute to the theoretical understanding of social capital theory by exploring the connectedness between offline and online realms.

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Doing Good While Saving Money? The Formation of Initial Reputation of a New Social Venture

Carolyn Waldner, Antoaneta Petkova and Jurgen Willems

This paper addresses recent calls for in-depth research of the basis of reputation, as well as the processes through which new venture reputations form and change over time. Following a new social venture through its first year of operation, we analyze how its initial reputation with customers evolved. Using inductive theory building and extension methods, we identify components of customer evaluations that comprise the rational, emotional, and moral basis of the social venture's reputation. Our findings offer new insights into the formation of reputational perceptions about social ventures, revealing that customer expectations influence the perception and evaluation the venture. This can create discrepancies between the desired reputation of venture founders and the reputational perceptions that customers form.

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Exploring psychological capital in remote work: A qualitative approach

Vineet Arora and Amit Shukla

Remote work has become widespread in services-based organizations employing knowledge workers. Extant research in traditional workplaces suggests that employees' psychological capital (PsyCap) positively influences their outcomes, such as performance and well-being. However, in remote work, there is a dearth of research exploring individual's psychological resources that may make up their PsyCap and facilitate their outcomes. Therefore, this paper explores the composition of PsyCap in remote work through a grounded theory approach. Based on semi-structured interviews with 22 remote workers, we find support for the existing conceptualization of PsyCap and identify new psychological resources that can be potential components of PsyCap. This work contributes to the literature on positive organizational behaviour and provides practical implications for human resource practitioners.

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Multinationals and Community Development. Assessing the Construction of Just Relationships

Eduardo Ordonez-Ponce

Building just relationships between industrial projects and local communities is key to project success and community development. The literature highlights variables as crucial to achieving just relationships. However, more than theoretical variables are needed to accomplish justice and sustainable projects and communities. Based on the literature, citizens from the Huasco Valley in northern Chile were surveyed and interviewed, a remote region affected by multinationals for years but which still struggles to achieve just relationships with corporations. Results show how the assessed variables impact just relationships, their weight and relative contribution. However, they are not enough and other variables, the projects' and companies' characteristics, as well as the features of the affected communities, must also be considered to build just relationships.

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Disaster management in SMEs: What do we know from the literature?

Tui McKeown, Miria Lazaris, Sean Way and Marjorie Jerrard

Small to medium enterprises (SMEs) typically account for around 95% of all business and between 50-70% of employment in most countries yet they face greater vulnerability and uncertainty when disaster strikes. They are often left vulnerable and disadvantaged as the available sources and tools of aid and support tend to be designed around the needs of large businesses. As a result, they are often either unsuitable, too hard to use, or simply too expensive for SMEs. With this broad context in mind, we set out to review the literature in this area guided by the specific research questions of:

RQ1. How has DM literature focussed on SMEs evolved?

RQ2. What is current 'best practice' as identified in this literature?

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Exploration of Business Academics Identity within SoTL-focused Communities through Peer Review Practices

Uma Jogulu and Martina Costello

This paper reports on experiences and learnings from peer review process as a mechanism for developing reflective practices in Business academics. Peer review practice supports academics to engage in the Scholarship of Teaching and Learning (SoTL) and recognise ways to sustain scholarly identity in the context of varied scholarly agendas and shifting academic roles within Business Schools internationally. Challenges and barriers to engaging with peer review process at an individual level are explored to show the influence on identity formation as a SoTL practitioner in a Business School.

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Vanua research methodology: Revitalising research in Fiji

Jekope Maiono, Diane Ruwhiu and Telesia Kalavite

Indigenous perspectives in the field of sustainability have much to offer our understanding of sustainable development. This paper is based on doctoral research conducted by an indigenous Fijian researcher, which investigated indigenous perspectives on sustainable land development (SLD) during the first fifty years of independence. The paper details Fijian Vanua Research Methodology as a culturally appropriate approach to researching with indigenous Fijian communities. Vakumuni vuku ni vanua involves the process of gathering and sharing knowledge and wisdom of the land. In this research it involved veivosaki (meaningful and worthwhile discussion) and Butu Vanua (Transcendent Walk) as primary methods. The insights shared in this paper offer not only a revitalised approach to research in Fiji but also a transformative framework conducive to knowledge co-production and research practice in the Pacific region, and theory for sustainability in general.

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Employee e-voice on social media: A Glassdoor case study

Jewel Tai, Sunghoon Kim and Helena Nguy

Digital tools such as social media are important but severely under-researched channels through which employee voice is expressed. In this study we seek to understand employees' engagement with digital voice channels and the nature of electronic voice (e-voice). With the theoretical lens of promotive and prohibitive voice, we investigate the voice content when employees speak up on online external social media platforms. Using written content data from current employees' online reviews on Glassdoor.com, we find emergent themes relating to prohibitive and promotive e-voice expressions. Our findings highlight that anonymous, lower-risk digital platforms are important channels for organisations to uncover key issues and constructive ideas that may otherwise be missed.

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Cognitive Hardiness in the Workplace: A Systematic Review and Call for Future Research

Sherrica Senewiratne, Sen Sendjaya, Asanka Gunasekara and Alexander Newman

Cognitive hardiness refers to an individual ability to engage in a mental appraisal process to acknowledge and effectively overcome a stressor. The proliferation of studies on cognitive hardiness in the workplace over the past three decades provides the impetus for the current systematic review. We review 107 articles published from 1992 to 2022 to examine how cognitive hardiness has been defined, theorized, and measured in the workplace. We also map the nomological network of cognitive hardiness and provide recommendations for future research in terms of theoretical and empirical advancement as well as implications for practice.

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Thriving in Turmoil: Leadership Approaches to Foster Logistics Innovation Amidst Geopolitical Disruption

Imran Ali

Geopolitical tensions have made supply chains and logistics more vulnerable, requiring effective leadership to survive and thrive in logistics innovation amid rising uncertainties. Existing research lacks a theory-driven model exploring the complex relationship between geopolitical disruptions, logistics innovation, and leadership. Our study fills this gap by combining logistics management and leadership literature. Using strategic contingency theory and analysing responses from 247 firms, this study uncovers compelling findings. Geopolitical disruptions significantly undermine logistics innovation, but crises, participative, and transformational leadership styles mitigate the impact. Surprisingly, directive leadership does not alleviate the adverse consequences. These insights deepen understanding and provide valuable guidance for organisations navigating challenges posed by geopolitical disruptions in pursuing logistics innovation.

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Are Workaholics Efficient? Examining a Moderated Mediation Model of Psychosocial Safety Climate and Psychological Capital

Candice Wray, Yu-Hsuan Wang and Chien-Chung Kao

This study investigates the dual mediating mechanism of workaholism on job performance and how the relationships are affected by organizational (psychosocial safety climate) and personal (psychological capital) resources. Drawing on the flow and conservation of resources theories, we propose that workaholism influences job performance through psychological distress and flow. We administered a two-wave questionnaire study involving 193 participants and employed SEM to test our hypotheses. The results showed a negative direct effect of workaholism on psychological distress. When psychological safety climate was low, non-workaholics were likely to experience feelings of distress. Furthermore, psychological capital emerged as a significant personal resource that amplifies the positive effects of distress and flow.

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Chameleons and Job Satisfaction: The Mediating Influence of Ingratiation and Leader Member Exchange

Preeti Rawat, Shiji Lyndon, Ajinkya Navare, Stuti Bhatt and Vaishali Modakl

The study attempts to understand the relationship between self-monitoring and job satisfaction and the mediating role of ingratiation and leader-member exchange (LMX). Self-monitors are chameleon-like in adjusting the public expression of their attitudes and behaviour to fit with the expectations of others. The results show that LMX mediated the relationship between self-monitoring and job satisfaction. Though ingratiation independently does not mediate the relationship between self-monitoring and job satisfaction, it did serially mediate the relationship with LMX. The study has strong theoretical and managerial implications in defining workplace behaviour.

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Relationship Creation in Navigating Political Environments: The Role of Job Crafting

Amy Yamei Wang and Eko Yi Liao

Perceptions of politics in organizations have been consistently linked to negative outcomes which may affect both individual and organizational performance. However, research has also identified certain behaviors that individuals may enact to function adequately in political climates. We suggest that job crafting enables individuals structurally, socially and cognitively (re)designing their job boundaries as a constructive strategy coping with the unpredictability at work that threatens the creation and maintenance of employee exchange relationships. Specifically, we investigate how employees deal with perceptions of organizations by proactively crafting their jobs, so they are still able to create meaningful relationships and maintain performance. Findings from 165 employee-supervisor dyads generally supported our research model and hypotheses. Theoretical implications were discussed based on data analyses results.

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The Fallacy of Transparency in Supply Chain Management

Hossein Tahernejad, Zahra Seyedghorban and Matthew Mount

This paper investigates and tries to address the question of ‘How would a responsibility violation in direct (low distance) v. indirect (high distance) suppliers influence the managers’ responsible decision-making?’ Two experiments were designed and executed in this study to address this question. Findings provide strong support for the negative influence of the violation distance on managers’ responsible decision-making. Further, the firms’ responsibility orientation was found to exert some influence on responsible decision-making.

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Searching and experiencing calling: an empirical investigation

Eko Yi Liao and Chui Shan Kong

Employees’ calling experiences involve the time element (presence vs. search) or the purpose element (transcendent summon; prosocial goals; and self-fulfillment). How employees may differ in their experiences of calling with both time and purpose (i.e., existence of subgroups in calling experience) needs further investigation. Adopting a latent profile approach, this study is driven by two research questions: (1) what are different profiles of calling? (2) is calling designated or cultivated? Based on social identification theory, we investigate how one’s occupational identification influences their calling experiences are influenced by. We collected data from 691 employees at two time points with four-week intervals. We identified three distinct profiles, showing different relationships with occupational identification. We discussed the theoretical and practical implications.

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Exploring Rural Entrepreneurship in Developed and Developing Economies: A Systematic Literature Review

Janvi Patel and Anubha Sinha

Entrepreneurship has garnered wide attention in the past few decades. However, its subdomain field of “rural entrepreneurship” has largely lagged behind. Studies on rural entrepreneurship have been mainly conducted in developed economies. Thus, it has become essential to synthesize the literature of both developed and developing economies to provide a holistic view of rural entrepreneurship and promote its use. This study explores the antecedents and outcomes of rural entrepreneurship in developing and developed economies. It includes 131 studies published in top management and entrepreneurship journals from 1991 to 2021. Rural entrepreneurs in developing economies take up entrepreneurship to overcome unemployment, poverty, and begging, whereas, in developed economies, entrepreneurship is undertaken for additional income, utilizing spare resources and reducing isolation.

Keywords: Rural entrepreneurship, developed economies, developing economies, systematic literature review, antecedents, outcomes

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What do team routines in creative teams look like?

Cassandra Liang, Linh Bui and Guihyun Park

Habitual routines in teams, defined as the repetitive set of functionally similar behavioural patterns during teamwork, are viewed as relatively stable. This study extends the current understanding of habitual routines in creative teams and reveals the specific time-sequenced behaviours. By observing 32 ad-hoc teams working on a creative task, we found that creative teams start their discussion by first sharing individual ideas. They then turn to idea evaluation where previously shared ideas are repeated, coalesced, evaluated and refined. Team members ask questions to seek clarification, add more novelty to the ideas, and consensus is achieved at the end of this stage. Lastly, teams either rehearse and practise their creative product, or discuss task-irrelevant topics. Theoretical and practical implications are discussed.

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Internal and external networking behaviours of middle managers: Insights into the roles of gender, education, political skills and mentoring

Saroja Wanigasekara, Muhammad Ali and Erica French

Employee networking behaviours may impact employee and organisational outcomes. Little is known about the determinants of networking behaviours. Using social role theory, social capital theory, and personal initiative theory, this study examines the impact of employee gender, education, political skills, and mentoring on internal and external networking behaviours. We utilised a mixed-method research design. Study 1 survey data from middle managers indicate higher external networking behaviours of men, higher internal and external networking behaviours of managers with a master’s degree, a positive relationship between political skills and internal and external networking behaviours, and a positive relationship between mentoring and internal networking behaviours. Study 2’s interview data from a sample of middle managers extend and explain the results of Study 1.

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Within-Person Relationships Between Servant Leadership and Employee Innovative Performance: The Cross-level Moderating Role of Employee Accountability

Linh Bui and Guihyun Park

Although the literature has acknowledged servant leadership as an important antecedent exerting influence on employee innovative performance, most research has overlooked potential negative effects inherent in this relationship. Drawing on the servant leadership literature and a process perspective on innovation, we examined the negative within-person effect of servant leadership on employee innovative performance. Using longitudinal data collected throughout three-month innovative projects of 87 dyads in 47 organizations, we found that a monthly increase in servant leadership was linked to a decrease in employee innovative performance. We also showed that the negative effect of servant leadership on innovative performance was only for employees with low perceived accountability. We discuss the theoretical and practical implications and provide some recommendations for future research.

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Fostering inclusion while baking bread; Enabling all your tempered radicals in the manufacturing industry

Chris Griffiths, Peter McGhee and Roy K. Smollan

Tempered radicals work within the system to deliver significant socially-inspired change, challenging norms in a measured and strategic manner. They are powerful advocates of equity and inclusion. While prior research has primarily focused on tempered radicals at managerial levels, little is known about how they operate at operational and supervisory levels. To address this gap, qualitative interviews were conducted with 27 participants in the manufacturing industry, employing narrative inquiry methodology. The data was analysed using Leximancer text mining and thematic analysis. This study enhances current theory and models insights into the differences across organisational levels by exploring the approaches of tempered radicals at front-line, supervisory, and management levels.

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Why is Generation Z motivated at work? A qualitative exploration

Ravikiran Dwivedula

The purpose of this article is to identify and explain the factors leading to work motivation in generation Z workforce. Self-Determination Theory of motivation is used as a lens for this study. The study involved 317 respondents and utilized open-ended question to gather the textual response using a survey. The responses were analyzed using NVIVO 14. Eight broad themes were identified that explained work motivation for this cohort. Intrinsic motivation, and identified regulation, the two most autonomous forms of motivation significantly explain worker motivation. To a lesser extent, external material motivation explains why generation Z workers are motivated.

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Development and Validation of the Workplace Friendship Questionnaire: Using Pillemer and Rothbard's Theoretical Framework

Chieh Wang, Sen-Kai Yang and Cheng-Hsien Li

Friendship is a well-documented effect of employment in an organization. The study developed a well-rounded scale that captures workplace friendship's nature and construct domains. Under Pillemer and Rothbard's theoretical framework (2018), we developed a 16-item Workplace Friendship Questionnaire (WFQ-16) comprising four dimensions: voluntariness, informality, communal norms, and socioemotional goals, to understand interpersonal and social connections among employees. Multiple quantitative studies, along with independent samples, were used to examine the psychometric properties of the WFQ-16. A nomological network determined how well the WFQ-16 would fit with coworker support, job satisfaction, and turnover intentions. The results showed that the WFQ-16 had satisfactory evidence of reliability and validity for assessing aspects of workplace friendship quality. The theoretical constraints and practical implications are discussed.

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Does Team Promotive Voice Always Promote Team Innovation? The Dispersion Matters!

Ruixue Zhang and Anran Li

We theorize a curvilinear relationship between team mean level of promotive voice and team innovation. We also investigate the moderating roles of different types of dispersion of team promotive voice on this curvilinear relationship. Using data collected from 87 teams with 87 supervisors and 355 subordinates, we found that the mean level of team promotive voice enhances team innovation only to a certain point, after which the relationship turns negative. Different types of dispersion of team promotive voices moderated this curvilinear relationship –the shared distribution and the fragmented distribution of team promotive voice mitigated the negative trend of the curvilinear relationship; the bimodal and minority distribution attenuated the positive trend and exacerbated the negative trend of this curvilinear relationship.

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The Influence of Workforce Diversity and Organisational Culture on Innovation in Very Small Information Technology Entities

Tatsuya Nonoyama, Erica French, Muhammad Ali and Amro Aljbour

Despite innovation's importance for very small information technology entities, little is known about the role of workforce diversity and organizational culture in enhancing innovation in these firms. This qualitative study explores the role of age, gender, and ethnicity diversity as well as organisational culture in improving innovation in very small information technology entities of Australia. A total of 13 semi-structured individual interviews and one group interview were conducted with 18 participants (managers, owners, and baseline workers). Findings indicate that age and gender diversity significantly contribute to higher-quality innovation. Results suggest that workforce diversity and organisational culture are strongly linked to enhanced innovation. Future directions and practical implications were discussed.

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People as the foundation: Nonprofit leaders' perspectives of organisational capacity building

Axelle Marjolin

Organisational capacity plays a critical role in nonprofit organisations' ability to achieve their mission. As the role of nonprofit organisations expands, they face increased pressures to improve their management and organisational systems – to build their capacity – to become better providers. However, our understanding of how to effectively build nonprofit capacity is under-developed. Importantly, the absence of nonprofit organisations' views on the issue is a glaring gap. Despite the acknowledged importance of nonprofit organisations' buy-in and input in the development of capacity building activities to ensure success, studies have predominantly overlooked their views regarding what is needed to effectively build nonprofit capacity. By exploring the topic from the perspective of nonprofit leaders, this research contributes new knowledge to the field.

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Co-creation through the lens of place: temporal and scalar orientations

Elmé Vivier

Co-creation, as a form of collaborative problem-solving, has the dual task of mobilising resources and expertise and ensuring inclusivity and accountability. Research in the field focuses on the institutional design and management of co-creation processes and platforms. In this paper, I explore how a sense of place influences perceptions of co-creation. Drawing on insights from a qualitative study of an urban regeneration project in the UK, I detail how materiality and sense of place generate temporal and scalar orientations, positioning co-creation between both past and future and the local and planetary, with implications for its perceived legitimacy. This provides the impetus for understanding co-creation as a form of place-making and place leadership.

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The Effects of Communicating a Broad Set of SDGs on Enterprises' Financial Performance

Evelize Culpi Mann, Amanda Williamson and Stuart Dillon

As the interest in sustainable development increases, businesses can benefit from aligning their strategies with the Sustainable Development Goals (SDGs). It remains unclear, however, what impact focusing on a broader or narrower set of SDGs has on the enterprises' performance. This study examines the impact of communicating a diverse range of SDGs on the financial performance of for-profit social and commercial enterprises. By using natural language processing (NLP) to analyse textual content from 261 enterprises, we find that communicating a variety of SDGs within a similar category positively influences financial performance for commercial enterprises. Yet, this is not observed for for-profit social enterprises, such as B Corps. Stakeholders may value an SDG diversification strategy to a certain degree and context.

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Organizational culture, performance expectations and wellbeing

Roy Smolla and Shelagh Mooney

In previous studies, performance expectations of employees have been linked positively and negatively to individual performance and wellbeing. Performance is a key element of many organizational cultures and results in increased stress for many employees, mitigated by concern for wellbeing and other support practices. Our qualitative study of the New Zealand finance industry indicates that performance expectations were influenced by internal and external factors, and are mostly related to the quantity, quality and timeliness of work tasks. Given the negative reports of finance companies elsewhere, the findings, somewhat surprisingly, reveal that most participants believed that their organizations have positive organizational cultures. Notwithstanding challenging performance expectations, the organizations tended to provide resources that enabled actual performance and contributed to subjective wellbeing.

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Exploring the transformative potential of Indigenous standpoint theory in the decolonisation of business education

Samantha Cooms, Gaala Watson and Sharlene Leroy-Dyer

Amidst the growing calls to decolonise knowledge across academia and Indigenise the curricula in Australia, this paper examines the context of decolonisation within the framework of business education. It highlights the deeply entrenched nature of colonialism and capitalism in business principles and practices, particularly in business schools that perpetuate white privilege and resist transformative change. This paper explores the potential application of Indigenous standpoint theory within the business education sector, considering the benefits, challenges, and possible pathways forward. The complexities of implementing decolonisation within business education are acknowledged, emphasising the need for a pragmatic approach, specifically Indigenous standpoint theory, to challenge oppressive systems and strives towards aligning with decolonial principles.

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Indigenous philosophy in business: Inclusion as a driver to environmental sustainability

Samantha Cooms and Gaala Watson

Australia's Indigenous cultures have been shown to be both sustainable and inclusive over a period longer than any other culture on the planet. The knowledges and skills of managing this endeavour are novel to the corporate world and could potentially give organisations an ethical path to move forward and decolonise their business and improve sustainability and inclusion. First Nations culture in Australia is founded in connection and relationality, in this model everything is interconnected and interdependent. According to the custodial ethic, relationality to country provides the template for the connection between people, by constantly engaging in empathic relationships practiced by sharing and caring through these connections we improve connection and subsequently sustainability and inclusion. We argue that Indigenous knowledges can be applied in organisations that wish to improve sustainability and inclusion, but this must be done in an appropriate way. We encourage readers to understand that in Aboriginal culture there is no separation between people and country. To understand how this can occur we discuss Aboriginal Governance and philosophy as the avenue to build inclusion with consideration of our governance practices as this structure guides effective relationality, custodianship, and eldership from whence inclusion and sustainability arise.

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Transitioning to circular economy: A review of policies

Swati Awana, Meena Chavan and Zhiming Cheng

Circular economy has emerged as a popular paradigm to achieve sustainability among businesses, scholars, and practitioners. Scholars have mentioned regulations and policies as a major cause for the challenges faced, however, there is a dearth of studies focused on policies in circular economy paradigm. Hence, there is an urgent need to develop a comprehensive framework for policies of circular economy that can encourage the adoption of circular economy. This article is a systematic literature synthesis of 60 papers, which aims to proliferate circular economy through proposing a favourable policy framework. Majorly two themes of policies were identified: Attributive policy elements and applicative policy elements. Attributive policy elements consist of regulatory/legislative, comprehensiveness, standardization, coherence. Applicative policy elements consist of administrative, enforcement/control, procurement, quantifiability, informative, and fiscal.

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Current estimated potential: A peculiar caveat to the talent management literature?

Qian Yi Lee, Keith Townsend and Adrian Wilkinson

This paper examines the impact that Current Estimated Potential has on individual employee ability, motivation, and opportunity in the workplace; the implications on individual performance in the public sector. Using semi-structured interview data with two Singaporean public sector organisations, it was found that the employees' evaluated potential based on their perceived ability affected their opportunity to access to AMO-enhancing HRM practices, which had a flow on effect on their abilities and motivation, affecting their overall performance. The findings contribute to existing talent management and AMO framework literature.

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Do women in upper echelons bring about more gender diversity? Testing trickle-down effects

Tomohiko Tanikawa and Yuhee Jung

This study examined the trickle-down effect of female representation in the upper echelons on gender diversity within lower management positions. Using signaling and agency theories, we tested three factors: (1) the proportion of women in executive teams, (2) outside appointed women executives, and (3) women on outside boards. Our analysis of Japanese-listed firms between 2011–2021 reveals that the proportion of women in lower managerial levels is positively related to (1) the proportion of women in executive teams, negatively related to (2) externally-appointed female executives, and not significantly related to (3) women on outside boards. These results support prior research on the trickle-down effect, but also uncover potential challenges regarding appointing external female executives, which may hinder gender diversity.

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An integrated intervention study to improve wellbeing

John Molineux and Adam Fraser

This paper reports on a wellbeing intervention study involving 26 groups of school leaders. With theoretical underpinning from the job-demands resources framework, the multi-modal intervention focused on improving the personal resources of participants. Content from psychology, health and human behaviour was discussed through an integrated set of techniques in four one-day workshops over a year, plus relationship support within the groups. A paired sample t-test showed significant improvement in 12 measures. The outcomes were confirmed through qualitative comments. A key message for researchers is to co-design implementations with participants for their specific needs, which should lead to stronger outcomes.

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Development of a sustainable business model with net-zero value proposition: A qualitative analysis of Carbon Disclosure Project data

Muhammad Salman Asif, Henry Lau, Dilupa Nakandala and Hilal Hurriyet

Net-zero emission targets are crucial, given the environmental impact of the food and beverage industries. Our study proposes an environmentally focused Sustainable Business Model (SBM) using data from 252 food, beverage, and tobacco companies that reported to the Carbon Disclosure Project (CDP). We investigated the risks, opportunities, business strategies, emission reduction initiatives, and supply chain interactions by analyzing their qualitative answers using the NVivo software. Using a three-step coding process (open, axial, and selective coding), we identified the Environmental Sustainability Factors (ESFs) supporting businesses in environmental improvements. The ESFs were integrated with Osterwalder's business model canvas delivering 'carbon neutral' value to customers. Finally, the paper provides critical support for sustainability theories and assists SMEs to develop strategic business models for net-zero emission targets.

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Assessing Sustainability Integration in Project Management Curricula across Australian Universities

Fatima Afzal and Meilin Huang

Sustainability is considered a key competency for modern project managers. Integration of sustainability competencies is an important step in achieving the sustainable development goals. Although many universities have integrated sustainability into their PM programs, little information is available on the actual status of the integration of sustainability competencies in different PM programs. In order to find out how and to what extent sustainability is present, a content analysis of the sustainability courses within the PM program across Australian Universities was conducted. The results of the analysis show that the level of sustainability integration is very low. The most widely integrated competency is critical thinking. The analysis also highlighted that many sustainability competencies are present within the selected PM programs, though implicit and fragmented, thus not covering all necessary fields of knowledge, skills, and attitudes. This calls for a common framework of sustainable PM Education

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Circumnavigating sanctions through supply chain workarounds: Friendshoring and strategic choices in logistics infrastructures

Anton Klarin and Sergey Sosnovskikh

Organizations find and develop ways to overcome imposed sanctions and deliver goods and services to the sanctioned markets through offshoring, nearshoring, and, most importantly, friendshoring. The literature on offshoring and friendshoring is in its emergent stages and somewhat lacks empirical and substantial mechanisms of how these processes occur amidst global disruptions such as sanctions. This study offers a rich account of how organizations overcome economic sanctions that lead to restrictions in trade among trading partners. After a longitudinal analysis of 31 organization involved in trade between imposing and targeted countries over a period of 3 years, we synthesized six main models of sanction circumnavigation thereby extending the offshoring and friendshoring as well as supply chain disruptions literatures.

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Development and Content Validation of the Family Business Self-Efficacy Scale (FBSE)

Sadhana Singh, Patrick Raymund, James M.Garcia, Laramie R. Tolentino and Francesco Chirico

Family business self-efficacy (FBSE) is an important predictor of next-generation members' engagement in the family firm. However, we currently lack a domain-specific measure of FBSE, as most studies relied on entrepreneurial self-efficacy. Based on social cognitive theory and established scale development practices, this study aims to develop an FBSE scale by undertaking the first two stages of scale development, i.e., scale construction and content validation. Based on an extensive literature review, we conceptualised FBSE to involve two dimensions: self-efficacy in managing family business relationships and self-efficacy in preserving socio-emotional wealth. An initial set of 65 items was developed, further reduced to 51 items after content validation. This study provides clarity on the nature of FBSE and provides initial validity evidence useful in subsequent validation studies.

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The role of ‘idealism’ in employee burnout: An empirical study of Australia and New Zealand workers

Lynnaire Sheridan and Joseph Cooper

Employee burnout harms workers’ productivity and wellbeing. Experts have been studying its organisational causes including overwork, lack of control, and insufficient rewards. We propose employee idealism may be relevant to burnout because idealistic individuals often have high expectations and a strong sense of purpose in their work. They may be more committed and passionate about their jobs, striving for perfection and going above and beyond in their roles. While this can be a positive trait, it could also make them more susceptible to burnout within the usual organisational resource and time constraints. We are taking a workplace health and safety stance in seeking to prevent worker burnout by examining the interrelationship between the organisational and individual contributing factors.

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The importance of corporate culture and climate in creating inclusive workplaces for people with disabilities

Paul Ikutegbe, Lynnaire Sheridan, Robert Gordon and Melanie Randle

This research advances the field of human resource management by providing scholarly and practical insights into the factors that enable people with disabilities to achieve successful employment outcomes. In this Australian study, corporate culture and climate emerged as the most important enabler both in a survey of 392 people with disabilities and in 47 multi-stakeholder interviews incorporating the perspectives of people with disabilities, disability employment services providers and employers. This research endorses and enacts the values espoused in the United Nations Convention on the Rights of People with Disabilities and Sustainable Development Goals, by adopting a social model of disability which recognises that employment enhances the lives of people with disabilities and that barriers to their employment are socially constructed.

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Aotearoa New Zealand’s Textile & Fashion Industry: Small Business Entrepreneur Perspectives on the Values Shift Required to Achieve Sustainability

Ella Sheehy, Lynnaire Sheridan and Elizabeth Nichols

This explorative qualitative study from Aotearoa New Zealand informs the global debate on sustainable fashion by outlining challenges and initiatives pertinent to other heavily supply-chain reliant textile industries in developed economies. Risk of exposure to consumer judgement was identified as a crucial barrier to firms taking their initial steps towards sustainability and that two status quo sustainability methods emerged among the willing; adopting a transparency approach or undertaking certification (with few firms engaging in both due to the cost and human-resource implications of certification). Importantly, a circular economy model was endorsed by all as the authentic way forward as consumers need to engage in sustainable consumption practices rather than simply judging poor textile industry practice.

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Shaping Platform Work: Clients in Gig Work Relations

Maria Hameed Khan, Penny Williams, Jannine Williams and Robyn Mayes

Digital platform work arises from networks of relationships between workers, platforms, and clients, representing multi-party interests and creating complex gig work relations between these stakeholders. An understanding of conditions of gig work has mostly emerged from studies focusing on platform-platform worker relationships, with little emphasis on the role of platform client. This study explores the platform client perspective of organising platform work and the associated decent work implications for workers. The findings are presented through three interrelated relational themes show that platform clients emphasise solidarity, mutuality, and attentiveness in the organisation of platform work. This paper highlights how relational dimensions are a critical in shaping decent conditions of platform work in the gig economy.

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Taking Care of Patients and Hospital Staff: Patient Familiarity and Orientation as Buffering Job Resources

Anya Johnson, Joseph Carpini, Aleksandra Luksyte and Helena Nguyen

We examine patient familiarity and patient orientation as two patient focused job resources within the hospital context that attenuate the negative effects of job demands on emotional exhaustion, as well as the negative relationship between emotional exhaustion and both the quality of patient care and staff mental health. Results from 161 Australian children's hospital employees across two timepoints provides partial support for the buffering effects. Specifically, results suggest patient familiarity attenuates the negative relationship between job demands and emotional exhaustion. Conversely, patient orientation is critical in shaping the relationship between emotional exhaustion and both service quality and staff mental health. This research meaningfully extends the job demands-resources model and provides practically useful insights that can inform best practice in hospitals.

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Valuing the opera in entrepreneurial opera-work: Rethinking the definition of arts entrepreneurship

Malinda Groves

Despite recognition that artists must necessarily be entrepreneurs, generally only the management work of artists is valued as entrepreneurial, not their creative work. The paper argues that all art-work is entrepreneurial work, using the example of opera-work drawn from three sets of interviews with New Zealand-based opera-workers. It considers extant definitions of arts entrepreneurship through social bricolage, a framework particularly relevant to the arts where resources are scarce. The research examines the managing and creating work of opera-workers as they make do with the resources at hand to create economic, social, and aesthetic value. The paper contributes to the arts entrepreneurship literature by proposing a definition that recognises both management and creative work.

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Logic mobilization in digital space: A hermeneutic account of intersectional praxis

Mohammad Zainuddin, Israr Qureshi and Babita Bhatt

Social media platforms often privilege dominant logics, marginalizing peripheral logics held by indigenous communities. Through a hermeneutic analysis of selling posts on the Facebook page, this research reveals the mechanisms employed by indigenous women entrepreneurs to activate their dormant logic and make it more visible and compatible with the dominant logic. The findings highlight two key mechanisms: denaturation, where collective identity is developed and separated from the dominant identity, and renaturation, where compatibility is sought between peripheral and dominant identities. Identity shedding and switching, termed as identity praxis, emerge as strategies for implementing the key mechanisms. This research contributes to understanding the power dynamics of logics in the digital space and offers insights into fostering inclusivity and empowerment.

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Multiple Jobholding: An Overview of the Literature

Aniqa Rehman and Denise Jepsen

Multiple jobholding (MJH) or working more than one job at the same time, has attracted relatively little attention in the management literature. The purpose of this review is to synthesize the extant MJH literature thereby better understanding the conceptual terrain. Commencing with the debate regarding the definition and scope of multiple jobholding, the paper articulates the different types of MJH. The second section summarizes the most cited drivers or motives of MJH highlighting relevant theoretical and empirical support for each driver/motive. The third section examines the role of demography as a boundary condition to explain the intent, types, motives, and experiences of those undertaking multiple jobholding.

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How do leaders earn respect? A Repertory Grid Technique (RGT) Study

Chi Kwan Warren Chiu, Hao Kong, Yi Eko Liao and Doreen, Y. P Tse

Although respectful leadership has been found to be associated with multiple outcomes such as job satisfaction and organizational commitment, it remains unclear how leaders earn respect from their subordinates. To fill this void, the present study examined cognitive schemas Chinese employees used to appraise the respectfulness of their leaders. This was done by soliciting schemas of respect from subordinates using the Repertory Grid Technique (RGT). As a result, a total of 140 bi-polar constructs were solicited. The grounded theory method was then used to analyse these constructs resulting three interconnected domains of earning respect, namely, Self, Tasks, and Others. Each domain consists of two or more subdivisions.

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Too expensive, too hard, too many: Sustainability certification in the Australian fashion industry

Josephine Alice Mckenzie, Sukhbir Sandhu and Carol Kulik

This research explores the complexity of sustainability certification in the fashion industry, focusing on the Australian context. Within the fashion industry, sustainability certifications play a crucial role in restoring consumer trust and signalling adherence to environmental standards. However, the complexity and lack of consensus in measuring and implementing sustainability standards result in confusion, high costs, and loopholes throughout the fashion supply chain. In the Australian fashion industry, fashion organisations encounter challenges in accessing and effectively utilising sustainability certification. The cost of certification, structural imbalances within certification schemes, and lack of coordination among them further complicate the landscape. This research aims to document these challenges and propose strategies for improving certification practices in the fashion industry. By addressing these issues, it is possible to enhance the credibility and effectiveness of sustainability certifications, promoting meaningful change and sustainable practices within the fashion industry.

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Integrated inbound and inplant logistics for the movement of containers via heterogeneous material-handling resources for operational tracking and transparency

Priyam Bajpai, Chandrasekharan Rajendran, Renu Agarwal, Sanjoy Paul, Balakrishnan A.S

Effective logistics is key to managing the supply chain, and within that, there is a lack of integration between inbound and in-plant logistics when moving part containers from docks to their respective marketplaces for storage. Heterogenous Material-Handling Resources (MHRs) are assigned to each dock for this movement. A mixed linear integer model is proposed to minimize the makespan for container movement through integrated dock assignment, truck scheduling and scheduling of all containers via MHRs. This integration aims to tackle operational problems like dock congestion, schedule changes, inventory management, part unloading delays and ensures MHR availability for optimal movement, tracking and operational transparency. A divide-fix-optimize-and-overarch technique using heuristics and modified metaheuristics is used for upscaling, resulting in good outcomes.

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The Comparative Study of the Effect of Service Climate Management in Thailand and Vietnam

Pornlapas Suwannarat, Subchat Untachai, Sarawut Piewdang and Supot Rattanapun

The paper aims to examine the effect of management of service climate on employee commitment in a cross-cultural environment since service climate captures employee perception of firm's emphasis on service quality. A total of 665 survey data collected from employees in hotel businesses in Thailand and Vietnam have been analyzed via AMOS and SPSS. The findings indicate that managerial support positively effects on customer orientation. Also, customer orientation effects on employee commitment positively. Further, the study finds the significant variation of effect of managerial support on customer orientation and the difference of impact of customer orientation on employee commitment between employees in Thailand and Vietnam. Research and practical implications are discussed for supporting sustainable growth of the firms.

Keywords: Service Climate, Customer Orientation, Employee Commitment, Managerial Support, Work Environmental Support, Cultural Distance

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Adapting to new technologies in multidisciplinary healthcare teamwork: A model of multilevel adaptation during organizational change

Natalya Desai, Mark Griffin, Marylene Gagne and Georgia Hay

This study explores the adaptation of complex work systems in healthcare during organizational change, focusing on the implementation of a Remote Monitoring System (RMS) in a large city hospital with the purpose to find out how change participants make sense of and adapt to RMS in the post implementation stage.

Through 29 semi-structured interviews with clinical staff, ward managers, and RMS experts, the authors developed a multilevel conceptual model of adaptation during organizational change. The initial misalignment in RMS implementation prompted ongoing adaptive responses from participants. These responses led to adjustments in both the social and technical systems of the RMS work system. The study enhances our understanding of post-adoptive RMS implementation, emphasizing the active role of employees in redesigning the RMS work system. It also contributes to sensemaking literature by identifying interaction mechanisms among three groups of change participants.

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Measuring circular economy advancements in the automotive industry using machine learning

Melissa Gutberlet and Abhay Kumar Singh

Circular economy is praised as a new sustainability paradigm but little is known as to how it advances in practice. To shed light on these developments we create a circular economy dictionary using the word embedding model and sustainability reports by companies from the automotive industry. We base our model on the latest legislative developments towards standardization of sustainability reporting in the European Union – the Corporate Sustainability Reporting Directive (CSRD). We score companies regarding their circular economy reporting. Our study advances understanding of the circular economy and offers new methodological advancements for the wider accounting literature. Further, our work informs policymakers developing sustainability reporting legislation and practitioners engaged in the circular economy.

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Antecedents of Emergency Services Street Level Bureaucrats' Public Value

Ben Farr-Wharton, Yvonne Brunetto, Aglae Hernandez Grande, Matthew Xerri and Fleur Sharafizad

Street Level Organisations (SLOs) draw from employees' Public Service Motivation (PSM) to generate Public Value (PV) and overcome the gap between available resources and service demand. We examine whether PSM and Psychosocial Safety Climate (PSC) are antecedents of Street Level Bureaucrats' (SLBs') discretionary power. Second, we examine pathways from PSM and PSC, discretionary power, work stress, wellbeing and public value generated by SLBs. The structural equation modelling results from 195 police, fire, ambulance, and emergency services workers indicate that PSC had a more significant role in explaining PV compared with PSM. The implication are that SLOs cannot rely on intrinsic drivers, such as PSM, in isolation; but need to strengthen supportive management practices conducive to wellbeing and generating PV.

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Does PsyCap lead to empowered police officers that can cope with workplace stress and maintain their well-being

Matthew Xerri, Yvonne Brunetto, Chiara Saccon and Paresh Wankhade

This study examines the extent to which Psychological Capital (PsyCap) impacts one group of Street Level Bureaucrats (SLBs) - police officers - operational and organizational stress, and their subsequent well-being. The sample comprised 220 Italian and 228 English police officers. A structural equation model was designed and analyzed using the Analysis of Moment Structures (AMOS) v.27 software. PsyCap explains approximately a fifth of SLBs' organizational stress, and together, their variance accounted for approximately two-thirds of SLBs' well-being. The findings suggest a need to upskill SLBs in PsyCap so that they can better negotiate bureaucratic processes, without becoming more susceptible to stress-related symptoms and disease.

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Applying the Buurtzorg Model in an Australian Context: the role of self-managed teams

Roslyn Cameron and Benjamin Archer

VIVA Mutual is an Australian social enterprise that provides health services to clients of the National Disabilities Insurance Scheme (NDIS) through in-home health care provision. VIVA Mutual has adapted a Buurtzorg model founded in 2006 in the Netherlands ensuring integrated and holistic client outcomes are organised through empowered work models. The model is built on self-managed teams and a flat organisational structure with minimal back-office support. A case study mixed methods research design has been employed to explore the delivery and adaption of the Buurtzorg model in providing quality in-home health services for disability clients in an Australian context and to examine the role of self-managed teams in that service provision.

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Comparing the impact of leadership and psychological capacities on middle manager response to austerity-driven organisational change across two Australian Public Sector Organisations

Yvonne Brunetto and Julia Ashton-Sayers

Purpose – This paper used Social Exchange and Conservation of Resources theories to compare middle managers from two organisations reactions to austerity-driven NPM reforms.

Design and methodology approach – This qualitative study utilised interviews with senior leaders and focus groups with middle managers across two public sector organisations undergoing significant organisational change.

Findings – The findings identified the different approaches to change based on leadership and managers' personal attributes across the two organisations.

Research and limitations implications –This paper identified middle managers across two public sector organisations only.

Originality/value – This paper found that the leadership affected how middle managers perceived the implementation of austerity-driven NPM reforms and it was their psychological capacities that motivated their reactions to change.

Keywords: Leadership, psychological capacities, organisational change.

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A Qualitative Study on the Leadership Behaviours of Joyful Leaders

Katie McIntyre, Rory Mulcahy and Meredith Lawley

Abstract: Joyful leadership has been proposed by previous scholars as a unique leadership style that could address some of the contemporary challenges facing leaders today in organisations. This study aimed to determine the behaviours associated with leaders who demonstrate a joyful leadership style drawing on a model of joyful leadership based on Discrete Emotion Theory. The study shows that patterns of behaviour were identified by participants consistent with a multidimensional approach. Joyful leadership was seen in the study to have distinct actions, nonverbal behaviours, autonomic patterns and language choices including positive language and tone, open posture and a positive and uplifting attitude. Implications for scholars and practitioners are discussed.

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Conceptual Change in Business Organizations: A Systematic Review

Elizabeth Nichols, Jean-Pierre Imbrogiano, Lauri-Matti Palmunen and Tiina Onkila

'When and how do understandings change?' is a central question for management scholars who seek to uncover the cognitive and social processes underlying the stability and change of interpretive schemes in organizations. Here, we propose to extend the analytic toolkit of this literature by highlighting the infrequent occurrences of conceptual change in organizations, that is, the episodes by which organization members change their understandings of phenomena and the associated practices they engage in. We set out the distinctive features of conceptions relative to other scientific concepts of understanding, and review the literature on occurrences of their changing in for-profit organizations. The resulting research agenda underscores the effort needed for more corresponding inquiries, especially, as we argue, for the literature to develop theories that could enable effective societal sustainability transitions.

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Equality for Women in U.S. Healthcare Management Through the lens of Intersectionality

Corey Adalikwu, Diana Rajendran and Anne Bardoeel

This study explores the situational determinates of American women in healthcare through an intersectional lens, examining the challenges they encounter in healthcare environments. By integrating the concept of intersectionality to rethink equitable labor practices and environments, this research highlights the complex factors that contribute to gender equality. Acknowledging and valuing the diverse experiences and contributions of women in the healthcare sector. This paper offers a comprehensive analysis of the multifaceted gender dynamics in healthcare and proposes vital strategies for advancing intersectional gender equity in healthcare management, with a particular emphasis on supporting women in leadership roles. Addressing these nuanced issues will contribute to a more equitable and inclusive healthcare system for all.

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The mediating roles of employee proactivity, proficiency and adaptivity on work engagement and organisational commitment

Buddhika Mudannayake and Ramudu Bhanugopan

This paper sets out to examine the proactive, proficient and adaptive behaviour of employees in the team temporal leadership domain towards work engagement and organisational commitment. The current study employed a multi-level study with leaders and subordinates among five manufacturing companies in Sri Lanka. The hypotheses were underpinned by role theory and time, interaction and performance theory. Analyses revealed that employee proactivity, proficiency and adaptivity mediate the relationship between team temporal leadership and work engagement. Specifically, the results of our study showed that employees become more engaged with their work through higher levels of proactive, proficient and adaptive behaviours under team temporal leadership. From a practical point of view, our results can be applied to strengthen the dyadic relationship between leaders and subordinates to improve their role performances.

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The role of supervisor compassion on PhD students' wellbeing: The mediating role of psychological capital

Seung Jung Yang, Aeson Luiz Dela Cruz, Amrita Gautam and Syed Waqas Shah

The number of students undertaking PhD studies is growing substantially; however, recent research indicates that PhD students experience poor wellbeing outcomes during candidature. Research on compassion in educational psychology has discussed its potential to increase students'

positive emotion which links to psychological wellbeing. However, the role of compassion in the supervisor and PhD student relationship has hardly been researched. The present study draws on broaden and build theory and examines a model that aims to demonstrate the effect of compassion

towards PhD students expressed by their supervisors on students' psychological wellbeing. The model also proposes psychological capital as a mediator of these relationships between compassion and wellbeing. The proposed methodology and the expected contribution to theory and practice are discussed.

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Organisational climate mitigation trajectories in New Zealand

Pii-Tuulia Nikula

This paper evaluates voluntary climate mitigation management efforts of New Zealand based organisations. Greenhouse gas emission disclosures from 35 organisations were compiled to assess changes in gross emissions and emission intensity, as well as to investigate the primary sources of emissions. The results demonstrate a clear reduction in total gross emissions and an improvement in emission intensity. However, challenges in emission management persist as 43 % of the organisations had experienced an increase in their gross emissions or/and reported a poorer emission intensity. The emission profiles vary between organisations, with electricity, air travel and petrol being the most frequently mentioned sources. This paper provides a detailed account of emission trajectories and highlights the opportunities and challenges associated with organisational carbon management.

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How to build more resilient supply chains: an institutional framework

David Herold, Łukasz Marzantowicz, Jennifer Scott and Stephen Kelly

The recent disruption of global supply chains and its ripple effects has led to multiple new, often conflicting, demands from governments, businesses and society for more resilient supply chains, thereby elevating the debate about supply chains to a broader institutional level. In this article, we unpack the notion of institutional complexity behind supply chain disruptions and present a novel institutional framework that identifies a) the patterns of complexity that shape the supply chain susceptibility, namely distance, diversity and ambiguity, and b) present three institutional responses to susceptibility to increase supply chain resilience, namely institutional entrepreneurship, institutional alignment and institutional layering. In this, we use the current disruptive environment to systemically explore the multiple and patterned ways how logics influence both supply chain susceptibility and the supply chain resilience. By expanding and extending research on institutional complexity to supply chains, we provide insights into how institutionalists view supply chain susceptibility, thereby providing managers with theory to think differently about supply chains and its resilience.

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Values and practices of sustainable higher education management: Responsible Leadership, Teaching Satisfaction, and their Implications for University Reputation and Performance

Amlan Haque, Shamirul Islam and Gazi Farid Hossain

Responsible leaders create a positive learning environment, benefiting universities' growth and reputation. Applying Social Cognitive Theory (SCT), this paper explores the impact of responsible leadership on teaching satisfaction, university reputation, and academic performance in Bangladesh. The data collected from 388 Bangladeshi university faculty members indicate that responsible leadership affects the university's reputation and teaching satisfaction. However, teaching satisfaction's moderating effect on the relationship between responsible leadership and university reputation is insignificant in Bangladeshi universities. Moreover, the university's reputation is not significantly associated with academic performance. This paper contributes to understanding responsible leadership in Bangladeshi higher education and the responsible leadership literature by emphasising the importance of applying SCT in the Asian context to inform and guide universities' future leadership.

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The relationship between legitimacy and sustainability in businesses: A systematic literature review

Siân Stephens, Satkeen Azizzadeh and Wee Chan Au

The legitimacy of cooperate actions related to sustainability is a significant consideration, as it concerns how an actor's actions are integrated into the values of the society in which it operates. Carbon reduction is a particularly concrete commitment for firms to make, as it is measurable, and the sustainability impact of such reductions is relatively uncontested. This systematic literature review aims to identify academic knowledge relating to the legitimacy of carbon reduction in the literature relating to business and management, as well as the implications of the nature and scope of this knowledge. We present a systematic review of 38 studies on legitimacy and carbon reduction. Our findings show that most studies relate to carbon accounting disclosure as a tool of legitimation, most closely affiliated with a definition of legitimacy as perception.

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Senior Women Entrepreneurs in Popular Media: Insights from Netflix's Longest-Running Series

Bronwyn Eager and Naomi Birdthistle

This study examines the experiences of later-life women entrepreneurs and mature-aged entrepreneurship, using a case study and cultural artefact, the Netflix Original series Grace and Frankie. Anchored by Social Cognitive Career Theory, a narrative-based enquiry unfurls against the backdrop of senior entrepreneurship and women's entrepreneurship research, illuminating distinct challenges for mature-aged women entrepreneurs and the role of media-based modalities in influencing entrepreneurship career aspirations. Findings elucidate themes subverting normative ageing and gender-related stereotypes while providing unique perspectives on how positive media representations can shape entrepreneurship career pathways and influence engagement in the entrepreneurship sector. Recommendations underscore the importance of media portrayals in shaping societal attitudes and individual aspirations.

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Risks of Representation: Disability and Gender in Leadership in a Public Sector in Australia

Jannine Williams, Maria Hameed Khan and Duncan Chew

This article explores the lived experience and careers of women with disability in an Australian public sector context. Drawing on an analysis of interviews with 49 women with disability, the findings indicate that disability leadership is illustrated through formalistic, descriptive, substantive and symbolic forms of representation. The analysis highlights how interactions between the dimensions of representation with ableist norms and assumptions create paradoxes and tensions, problematising visibility of disability leadership. Women with disability expressed a desire for visible representation yet simultaneously recognised the risks associated with disclosing lived experiences of disability in leadership. This paper lays the foundation for women with disability to consider the implications of representations of disability leadership for their own career aspirations in the public sector.

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Unravelling the Pathways to Improved Export Performance in Entrepreneurial SMEs in Emerging Markets: An Ambidexterity Perspective

Shanika Perera, Paresha Sinha and Antoine Gilbert-Saad

This article explores how entrepreneurial orientation, learning, and networking enhance export performance in emerging market SMEs. It identifies learning types – experiential and vicarious learning – and networking mechanisms – formal and informal networking – to propose how they can enhance the entrepreneurial orientation to lead to superior export performance, considering the mediating mechanisms. In an analysis using PLS-SEM, a sample of 150 SMEs in Sri Lanka supported the direct impact of entrepreneurial orientation and export performance and the mediating role of experiential learning and formal networking. The findings failed to establish the mediating role of vicarious learning and informal networking. We conclude by emphasizing that both learning and networking practices are not equally important in achieving improved export performance in SMEs in emerging markets.

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Unleashing Synergy: Exploring the Mediating Roles of Team Empowerment and Collective Engagement in Task Interdependence and Team Performance

Kiran Gupta, Chandan Singhavi, and Shailaja Karve

ABSTRACT: The research focused on the mediating roles of team empowerment and collective engagement to evaluate the association of task interdependence and team performance. Sixty-two teams performed a three-day management simulation game.

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Positive externality generation: promoting green behaviour through green HRM at work

Nataliya Podgorodnichenko, Fiona Edgar, Safyan Majid and Adeel Akmal

We spend a great deal of our time at work, so it should come as no surprise that research finds the workplace is an effective forum for implementing initiatives designed to bring about behavioural change. These initiatives include the promotion of wellbeing, combatting addiction and developing financial literacy. Building on this research, our study identifies two mechanisms through which green human resource management promotes green behaviour beyond the workplace. Results show green behaviour at work and knowledge integration help individuals to process and assimilate social information about the importance and desirability of green behaviour. By confirming, to employees, the value and salience of green behaviour, these mechanisms support engagement in green behaviours in personal contexts.

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From Decision-maker to Game-changer: How do Supply Chain Executives Influence Fostering Supply Chain Resilience?

Ethan Nikookar and Prajit Deb

Emerging research on supply chain disruptions has accentuated the crucial role of supply chain resilience, underlining collaboration as an integral factor. The nascent field, however, lacks comprehensive understanding beyond the required organizational capabilities for resilience. This study applies dynamic managerial capabilities theory, pinpointing supply chain executives as key agents in fostering collaboration to bolster resilience. It identifies three significant precursors - executive personal relations, work experience, and perceived disruption consequences - which enhance resilience by impacting supply chain collaboration. Analysis of survey data from Australian firms underscores the executive influence on effective collaborative relationships as a protective measure against supply chain disruption fallout. Thus, this study propels theory development on supply chain resilience construction, and underscores the executive role in managing disruptions, advancing the resilience discourse in the supply chain disruption context.

Keywords: Supply chain resilience, supply chain disruption, supply chain collaboration, managerial antecedents, micro foundations, survey research

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The impact of entrepreneurial ecosystem factors on SMEs' financial performance: A Multi-group analysis by business location

Sumedha Weerasekara and Ramudu Bhanugopa

This study aims to investigate the impact of entrepreneurial ecosystem factors on SMEs' financial performance. A multi-group analysis has been conducted to assess the influence of SMEs' location on the relationship between entrepreneurial ecosystem factors and SMEs' financial performance. Data were collected from 12 ecosystems in urban and nonurban Australia and developed a model based on set of entrepreneurial ecosystem factors. The findings demonstrated that in nonurban ecosystems, regional entrepreneurial culture has a strong impact on SMEs' financial performance. These findings have implications for the development of entrepreneurial ecosystem research and entrepreneurship development policies.

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Incumbent responses to moral market emergence

Jonathan Baker

Moral markets promise to relieve social or environmental issues through exchange centered around products with enhanced sustainability credentials. Despite the importance of mainstream incumbents to moral market formation and growth, little attention has been given to how their roles change in response. This study explores the moral market for plant-based alternative proteins in New Zealand. Primary data comprise 55 interviews with 34 representatives of communities for, against, or agnostic to the moral market. The case highlights the critical role of incumbents, including supermarkets as gatekeepers, the strategic response of the meat industry, and changing strategies and identities of different activist groups opposed to the industry.

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Detail Matters: Examining the Impact of Review Concreteness on Online Review Helpfulness

Shijing Fu, Feifei Yang, and Miles M. Yang

Online reviews are vital to consumers' purchasing decisions. Previous research has examined many factors that may impact online review helpfulness, but relatively few works focus on review concreteness. Therefore, in this study, 15,324 reviews were collected from a public Amazon dataset to examine the influence of review concreteness on review helpfulness. The results reveal that review concreteness positively affects review helpfulness, and product type and review length moderate the influence. Specifically, consumers may perceive a concrete review as more helpfulness for search goods than experience goods; they also perceived a concrete review as more helpfulness for longer reviews than shorter ones. Our findings contribute to the understanding of the antecedents of online review helpfulness and provide managerial implications for e-commerce platforms, businesses and consumers.

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Polychronicity Fit (Misfit) and Daily Turnover Intentions: The Mediating Roles of Work Overload and Underload

Syed Waqas Shah, Lucy Lu Xing and Denise Mary Jepsen

Person environment (P-E) fit and temporal congruence literatures have typically treated P-E fit as a static phenomenon. However, individuals can experience misfits every day, which may have immediate implications for individuals and their organizations. We argue that polychronicity fit (misfit) can evoke feelings of work overload and underload that can influence turnover intentions on an everyday basis. Our hypotheses are generally supported in a daily diary study using polynomial regressions and multilevel mediation analyses. Our theoretical contributions include the importance of (a) studying P-E misfits as variable and dynamic phenomena that an individual can experience daily, (b) acknowledging the role of work overload and underload, and (c) understanding the influence of polychronicity fit (misfit) on an individual's daily turnover intentions.

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Skilled migrants negotiating employment in the Australian professional labour market: The impact of cultural distance

Thi Tuyet Tran, Roslyn Cameron, Nuttawuth Muenjohn and Alan Montague

This study investigates how cultural distance impacts employment transitions among Vietnamese skilled migrants (VSMs) in Australia. Fifty semi-structured interviews with VSMs who migrated to Australia within the last five years were conducted along with twelve interviews with Australian recruiters to gain further insights into potential employment barriers faced by SMs. The findings highlighted the cultural challenges encountered by VSMs as they moved between two countries with significant cultural distance. We found that without cultural adaptation support, most VSMs had to experience career setbacks before recognising and devising strategies to overcome these hurdles. The study emphasises the need for specialised human resource management interventions and strategies that account for the cultural dimensions influencing employment outcomes for this specific international mobile workforce.

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Creating sustainable value through Consciousness-based decision-making

Indujeeva Peiris, Renu Joshi, Josiah Koh and Rohana Ulluwishewa

Considering the perpetual changes in our environment and the unprecedented era humanity finds itself in, the future landscape of work and decision-making will significantly deviate from our familiar norms. AI (Artificial Intelligence) experts widely acknowledge that the advancements in AI and its pervasive impact on our lives are unstoppable. In this context, the authors of this paper argue that future leaders must adopt more sophisticated and altruistic decision-making approaches, fostering a symbiotic relationship with AI to ensure organisational survival. By exploring decision-making through historical lenses, as well as considering practical wisdom, ethical considerations, environmental dynamics, and individual and collective consciousness, this paper proposes an integrated consciousness-based framework for decision-making that holds promise for future-proof sustainable actions.

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Mediating Role of Resilience in the Impact of Mindfulness on Emotional, Social and Psychological well-being as the Indices of Mental Health: Evidence from Indian Working Professionals

Nishit Sinha and Pankaj Kumar

The present study examined the impact of mindfulness on mental health, and the mediating effect of resilience on this relationship. A survey questionnaire was administered to 431 working professionals from India. Confirmatory factor analysis confirmed the tripartite structure of MHC-SF, developed by Keyes (2009) to facilitate mental health assessment (including its three components: emotional, psychological, and social) in the Indian context. The study outcomes revealed that mindfulness significantly predicted mental health and its three dimensions: emotional, psychological, and social well-being. Resilience mediated the relationship between mindfulness and mental health and its dimensions. The study findings provide information regarding the resilience process through which mindfulness benefits mental health.

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Ethic of Care for Refugee Support: Evidence from New Zealand

Nadeera Ranabahu, Huibert P. de Vries and Zhiyan Basharati

This paper reports on a study among refugee support organisations (RSOs) in New Zealand. We explored RSOs' services from the ethic of care perspective that includes having a clear purpose of care, recognising power relations in care, and providing pluralistic care and embeddedness of care in political institutions/spaces. Using data from 17 interviews, we show that RSO staff members' lived experiences, alongside organisational mission, influence the identification and delivery of care. The power relationships/dynamics within and between RSOs and stakeholders shape the design of programmes and activities. Embedding on these power relationships in political/institutional spaces, RSOs conduct activities to suit diverse care needs of former refugees in New Zealand. These findings provide managerial implications for theory, policy and practice.

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Working In Two Worlds: The Influence Of First Peoples Enterprise Identity

Mark Jones, Pauline Stanton and Mark Rose

Enterprise has been a bedrock of First Peoples societies in Terra Cognita Australis for over 60,000 years. Colonisation led to dispossession, banishment, infantilisation and exclusion of First Peoples from economic participation, contributing to a multigenerational cycle of poverty. First Peoples activism, focusing on sovereignty and self-determination witnesses the re-emergence of First Peoples enterprises. This paper asks how and why does identity influence the practices of First Peoples enterprises? This qualitative study utilises Indigenous Standpoint and Social Identity Theories in conjunction with Indigenous research methods. Focusing on First Peoples Founders, who own, control and manage profit driven entities and Indigenous Economic Development Agencies. Findings expand understanding of imposed institutional identity, the importance of identity in self-determination and the challenges of 'working-in-two-worlds'.

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Pathway to Commercial Success for Australian Biopharmaceutical SMEs – A Stakeholder Perspective

Shah Riyad, Amrik Sohal and Paul Kalfadellis

The barrier to Australian biopharmaceutical industry's great potential is the low success rates of its Small to Medium Enterprises (SMEs). By interviewing local commercial experts, the study deduced that commercial challenges and opportunities vary across different science-spaces within biopharmaceuticals. Cell and gene therapies face steep regulatory and societal risks due to their controversial subject matters, but enjoy low entry barrier and high Return on Investments (ROI). Single cell molecules, biologics & biosimilars have high entry barrier and low ROI coming from scale-related risks, but enjoy established supply chains overlapping with traditional medicine. Machines for biomedical procedures represent a niche for limited customer-base with safer, yet lower ROI. The current study strives to formulate effective commercialisation models for these three spaces.

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Research Agenda of Psychological Safety and Psychosocial Safety Climate in Workplace Safety: A Bibliometric Analysis and Systematic Review

Xiaomei Li, Rebecca Dong, Heernan Roxas and Ruihui Pu

Workplace safety research has reached fast-growing scholarly attention. However, comprehensive research focus on workplace safety from physical accidents and injuries to offer insights. This lack of conceptual clarity regarding workplace safety from the psychological aspect and its pertinent impact on organizations is problematic. Organizational psychosocial safety climate and employees' psychological safety could jeopardize work engagement and performance productivity. Repositioning the value of workplace safety from the perspective of psychology contributes to strengthening the well-being of employees and organizational resilience.

In this paper, we synthesize theoretical arguments and empirical findings from 990 research articles published between 2000 and 2023 to map the knowledge of psychological safety and psychosocial safety climate, the theoretical underpinnings, and mechanisms, to offer a state-of-the-art overview of the workplace safety research field. Opening this black box through bibliometric and systematic literature review, our findings allow promising researchers to advance an area of safety literature that has been neglected. The managerial implications of this study contribute to offering managerial implications on workplace safety policymakers and human resource managers, enhancing employees' psychological safety, and eliminating workplace psychosocial hazards.

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What is Quiet Quitting? A Thematic Analysis of News Media

Jenna Campton

Overview: A new trend has emerged in news media called 'quiet quitting' a concept with two opposing perspectives. The first is that quiet quitting concerns workers who are rejecting hustle culture and stress by improving work-life balance. The second perspective is that workers who do this are lazy and have lower productivity. Using framing theory how news media defines the concept needs to be explored as academic research interest is increasing.

Method: 16 news articles were selected for thematic analysis.

Findings: Quiet quitting was found to have a conceptual overlap with disengagement and burnout literature. Several unique themes were identified, such as not going above and beyond without reward. A conflict framework was identified as managers claim there will be consequences for this behaviour. Overall, this research highlights that quiet quitting is due to toxic workplace culture and unrealistic expectations.

Contribution: This research is amongst the first to explore the concept and whether it is novel.

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Service blueprint for enhancing older people's well-being by the adoption of frontline social robot in the aged care industry sector

Mingliang Wu, Moira Scerri and Maruf Chowdhury

Concerns regarding the availability of working-age people supporting the rapidly growing ageing population have consistently been raised by researchers and practitioners. Adopting a systematic and user-centred approach is essential when integrating technology into aged care industry sector. The aim of this study is to integrate frontline social robots into a service blueprint (IFSBP) that evaluates the service process of a 5-hour morning shift in frontline settings. The IFSBP visualizes the service procedures, touchpoints, evaluates service delivery, and identifies potential fail points and bottlenecks. The adoption of IFSBP helps organizations address concerns and analyse potential value that it offers. This can be achieved by redesigning the service process through redefining primary elements, drawing on various theories and models. Frontline social robots (FSRs), acting as “digital employees,” provide inputs on behalf of customers and facilitate services between agents to co-produce and co-create value for all parties involved, thereby enhancing customers' well-being. Therefore, this paper applies a conceptual development process to provide insights into the usefulness and interactivity of FSRs in frontline settings through the introduction of an IFSBP. It contributes to the limited research on IFSBP in frontline operations by demonstrating the transformation of traditional dyadic towards triadic relationships, and by integrating FSRs into service blueprint to improve productivity and service quality. Thus, this study offers significant gains to organisations in driving profitability and maintaining a competitive advantage for their organisations.

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Thriving by autonomy: A multi-methods study of human resources

Andrew Creed, P. G. S. Amila Jayarathne, Ambika Zutshi and Ananya Bhattacharya

Key words: Aged Care Industry Sector (ACIS), Frontline Social Robots, Integrating-FSRs-Service Blueprint (IFSBP), Co-produce and co-create value, Digital employee, Service Triad.

Thriving is an emerging research field of organizational. Autonomy has previously been linked with human capital development, motivation, empowerment and other benefits but caution of interpretation is urged, especially given cross-cultural nature of the human resources. Autonomy over-applied in operations may lead to negative outcomes while under-applied may diminish worker motivation. The research question: 'What are the features and conditions of worker autonomy that maximize thriving and subsequent human capital development while minimizing the detrimental possibilities?'

Through mixed methods the research reveals that work autonomy significantly contributes to thriving, yet with marginal magnitude. Thriving needs additional drivers to consider, including relatedness, competence, fairness, and equity. Managers must address the tension between autonomy and control within strategy and structure, job design, and HRM.

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Women Entrepreneurs - “Doing business” and “Doing gender” through intertwined ABCDE approach

Kajari Mukherjee and Naveed Akhter

The study examines how women entrepreneurs (WEs) negotiate the business landscape by considering “gender” as both facilitating tool to be embraced, as well as constraining restraint to be dodged. Our study is based in India, where the business landscape throws many challenges, some unique to WEs, including patriarchal social norms, low female participation in labour force as well as structural issues that is not conducive to doing business. Our study finds that the WEs, engaged in micro and small businesses, prefer to embrace who they are, challenges that they must live with, and have learnt to cope with these, as well as slowly make appropriate changes in their immediate business landscape. We use the social feminist theory to explain how women entrepreneurs negotiate the business landscape by (A) acting out their assigned gender roles, (B) bypassing the gender role expectations, (C) complying to the gender role expectations, (D) defying the gender role boundaries and (E) engaging (with others) to extend their gender role horizons.

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Impact of CSR, Green Practices and Organizational Politics on Sustainable Business Performance: Moderating Role of Employee Pro-Environmental Behavior

Rizwan Danish, Muhammad Ali, Marzena Baker and Ranjita Islam

Organizations face rapid changes in their business environment which demand sustainable business performance. This research focuses on investigating the relationships of corporate social responsibility (CSR), green practices, and perceived organizational politics (POP) with sustainable business performance, incorporating employee pro-environmental behavior (EPB) as a moderator. Data were collected through a survey of managers (n=422) from multiple services and manufacturing organizations. Based on the structural equation modeling, the results indicate that CSR and green practices are positively associated with sustainable business performance and these relationships are strengthened for employees with high EPB. The relationship between POP and sustainable business practices is negative. We discuss theoretical and research contributions and practical implications.

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Complexities Affecting Reverse Logistics Adoption: A Systems Approach

Alaap Elias and Arun Elias

This article presents a research proposal for using systems thinking to analyse the complexities affecting the adoption of reverse logistics in New Zealand. As empirical studies providing a holistic analysis of RL adoption in pharmaceutical industries are limited in the literature, it aims to plug this gap. Methodologically, it proposes a qualitative approach using multiple case studies for analysing three pharmaceutical supply chains in New Zealand. Data will be collected using fifteen semi-structured interviews and two focus groups. The study will identify multiple interconnected factors affecting RL adoption and generate a qualitative systems model capturing the structure of the system. Overall, it will contribute an empirical study to the reverse logistics literature, using a systems thinking approach.

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From the Classroom to the Community: The Impact of Responsible Management Education on Student Satisfaction and University Reputation

Farid Ahammad Sobhani, Amlan Haque and Shafiqur Rahman

This paper examines the impact of Bangladeshi universities' social responsibility (USR) on student satisfaction and university reputation, focusing on the moderating role of the United Nations' proposed principles of responsible management education (PRME). Using data from 650 students via an online survey, the study evaluates USR, student satisfaction, PRME, and university reputation. The findings demonstrate that students' perception of USR significantly influences their satisfaction and the university's reputation. Additionally, student satisfaction positively affects a university's reputation. PRME acts as a mediator, fully moderating the direct impact of USR on student satisfaction. This paper upholds the existing literature on PRME, specifically in the context of developing nations. It is also the first reported empirical study demonstrating how PRME affects Bangladeshi universities' reputations.

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The emergence of social enterprise: Wander with a mission — A grand tour of social enterprise by City Wanderer.

Sen-kai Yang and Shan Kuei Teng

City Wanderer can be retraced to 2013, when it started as a student project at National Taiwan University during the organization of the Wandering Challenge. In 2015, City Wanderer established the International City Wanderer Education Association (ICWEA), a nonprofit organization. Subsequently, in 2016, the organization adopted a business model and quickly became a self-sufficient social enterprise. In this research, we adopted a qualitative approach to examine the development and transformation of City Wanderer. Our study also explored the motivations of stakeholders in the development process for social enterprises and how they forced change in social enterprise.

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Drivers and Outcomes of Green Marketing Strategy in the Context of Developing Country: The Mediating and Moderating Roles of Competitive Advantage and Strategic Proactivity

Girma Demessie and Amit Shukla

This study examined the drivers and outcomes of green marketing strategies using resource-based views and industrial organization theories in the context of developing countries. Primary data was collected using a structured questionnaire from 360 marketing/production managers of manufacturing firms in various sectors operating in Ethiopia. The results indicated that managerial resources, relational resources, financial resources, environmental policies, and eco-technology detection and response are instrumental in the adoption of a green marketing strategy. The study also revealed a partial mediation in the relationship between green marketing strategy and business performance through competitive advantage. Finally, the study found the moderating role of strategic proactivity in green marketing strategy - competitive advantage link to impact business performance.

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Mistreatment in the Moment: The Role of Perpetrator Status in Employee Perpetrator-Directed Outcomes of Customer Mistreatment Events

Miaoqia Huang, Rajiv Amarnani, March To and Gillian Yeo

Customer mistreatment, the poor-quality treatment of service workers by customers, is a prevalent and problematic issue. This study examines how perpetrator characteristics, specifically perpetrator status, influence the outcomes of customer mistreatment events. Drawing on social information processing theory, we propose that high-status perpetrators of customer mistreatment receive more perspective-taking and ultimately more help from targets of customer mistreatment on the one hand, but also instigate more job-related stigma and job-related shame in the moment for the focal employee on the other hand. We tested our proposed parallel mediation model using the critical incident technique based on customer mistreatment events reported by 162 service employees. The results supported our theoretical framework and its robustness to alternative explanations.

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Compensating for an Uneven Lead: The Interactive Effect of Team Proactivity and Differentiated Transformational Leadership

Hai-Viet Nguyen, Chad Chiu and Hao-Chieh Lin

Recent studies express concerns about drawbacks of transformational leadership despite its perceived benefits for team effectiveness. While it can offer personalized support and promote individual development, the variability in leadership support within a team - differentiated transformational leadership - can negatively impact teams. To counter this, we propose that the team's mean proactive personality buffers the negative effects, drawing on the conservation of resources theory. Our survey of 92 work teams in Taiwan shows that differentiated transformational leadership damages team helping norms and reduces satisfaction with supervision, especially in teams with low proactive personality. However, this impact is lessened in teams with high proactive personality. Our findings contribute to the literature and offer practical guidance for team leadership development.

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Leadership that creates value for the public

Geoff Plimmer, Rebecca Taylor, Maira Souza, Evan Berman and Trang Thu Nguyen

This study examines public value leadership, and reports on a scale designed to measure it. While generic leadership constructs work well in public administration, they do not capture the distinct features and challenges of public administration. They also emphasise psychological influence tactics rather than value creation, the point of public organisations. Preliminary analysis, based on temporally separated data, identifies four factors that comprise public value leadership: a) innovation and impact, b) trust and integrity, c) service quality and d) strengthening the community and outcomes for disadvantaged people. We also report convergent, divergent, criterion and incremental validity. Results indicate that introducing value creation into public leadership has a broad range of positive outcomes including organisational commitment, job satisfaction mission valence and less red tape.

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The Influence of Collectivism, Guanxi and Mianzi in the Enactment of Responsible Leadership in Confucian Asia

Carolyn Koh, Nik Teck Siong Chong and Kevin Chuen-Kong Cheong

The paper examines responsible leadership within the context of Confucian Asian societies. It provides an overview of Confucian Asian culture, underlining the influence of Confucianism and collectivism on societal norms and leadership expectations and behaviours. Building on collectivism's overarching framework, the paper further discusses the concepts of guanxi (interpersonal connections) and mianzi (face) and their role in shaping responsible leadership in Asian societies. Synthesising the similarities between the Western perspectives of responsible leadership and the Eastern philosophy of Confucianism's collectivism, and related concepts of guanxi and mianzi, this paper propose a conceptual model and attempts to explain the enactment of responsible leadership in Confucian Asian countries and beyond.

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In Times of Crisis, Does it Matter if Work is Decent? Validating and Assessing Decent Work in Ghana during the Covid-19 Pandemic

Albert Amankwaa, Irene de Pater, Isaac Kosi and Desmond Ayentimi

The COVID-19 crisis has uncovered a huge deficit in decent work, especially in developing economies where large proportions of the workforce hold precarious jobs in the informal sector and social security is lacking. To better understand the importance of decent work in times of crisis, we explore the concept of decent work in sub-Saharan Africa, a context where the pandemic had a major – and negative – impact on the world of work. The purpose of this paper is twofold. First, we validate the Decent Work Scale in the Ghanaian context during the pandemic. Second, integrating psychology of working theory with psychological contract and conservation of resources theories, we develop and test a theoretical model of decent work and employee outcomes. The results of our study showed that a 5-factor correlational model of Decent Work Scale consisting of the dimensions safe working conditions, access to health care, adequate compensation, free time and rest, and complementary values best fits our data. Test of our theoretical model showed that safe working conditions, access to health care, and adequate compensation were negatively related to turnover intention through psychological contract fulfilment. Adequate compensation and complimentary values negatively related to turnover through work engagement. Theoretical and practical implications of these findings are discussed.

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Perceived Collective Efficacy Amongst Short Duration Teams

Kiran Gupta, Shailaja Karve and Chandan Singhavi

This research explored the experiences, perspectives, and underlying processes that lead to teams' assessment of their collective efficacy throughout the 3-day business simulation exercise by using a qualitative research approach, specifically grounded theory. The results of this research have significant implications for both theory and practice.

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Tell us how it is: Unravelling the dynamics of academic voice and silence

Victoria Lister, Jennifer Kosiol, Ellie Meissner and Anneke Fitzgerald

Employee voice and silence research shows workers' ability to express dissatisfaction is impeded by a range of factors. This paper focuses on two: the power asymmetry inherent in the employment relationship, and work context. It examines early career academics (ECAs), mainly doctoral students, associate lecturers and assistant professors, many of whom are immersed in atypical, employment-like relationships that are frequently experienced as disempowering. A scoping review provides a frame for understanding ECA voice and silence. Complex work arrangements, difficult supervisory relationships and hierarchical norms stifle ECA voice. Doctoral supervision conceptualised as co-created 'critical friendship' facilitates voice. Research that expands knowledge of ECA voice and silence is recommended, especially as concerns about ECA wellbeing grow.

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Using Anonymous Application Procedures to Address Discrimination in Recruitment and Selection – A Rapid Systematic Review

Victor Sojo Monzon, Melissa Wheeler, Lindsie Arthur and Melanie McGrath

We assessed the evidence about the capacity of Anonymous Application Procedures (e.g., CV de-identification) to reduce discrimination towards women and minority groups in personnel recruitment and selection processes. After a systematic search and selection of peer-reviewed and industry/government literature, we conducted a rapid analysis of 15 publications containing 24 separate intervention studies. We found that Anonymous Application Procedures (AAPs) may be effective at reducing discrimination towards women and ethnic minority groups at the CV shortlisting phase of the selection process. AAPs also appear effective at reducing discrimination towards women for job offers but this positive effect was not observed for ethnic minority groups. We provide recommendations to improve AAPs and outline an employment-life-cycle approach to reduce workplace discrimination and enhance inclusion.

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A systematic literature review of employee engagement in remote working environment

Neeru Choudhary and Shilpa Jain

Purpose – This study aims to identify and review the research articles to understand the conceptualisation of employee engagement in remote working environment. It focuses on identifying the key factors influencing employee engagement in the context of remote working environment.

Design – A systematic literature review was conducted and empirical studies were screened from across databases of EBSCO, Emerald and Gale. Only studies that were published in peer-reviewed journals between 2013 and 2023 covering countries in the Organisation for Economic Co-operation and Development (OECD) were included. PRISMA guidelines were followed to identify the relevant articles.

Results – The final list of articles were analysed and results are reported in terms of three research objectives. A total of 25 empirical studies published across 18 journals were synthesised. The researchers identify and discuss the definitions and theories discussed in the literature in relation to employee engagement in remote working environment. Authors concluded that personal, organisational /job resources and organisation/ job demand are the three main categorization of factors affecting the employee engagement in remote working environment.

Implications – The study intends to fill the gap in literature by conducting a systematic literature review in the field of Employee Engagement in remote working environment. However, recently the rise of WFH, remote working, hybrid working etc has raised the need to understand the employee engagement in this context. This study may serve as an important source of information for academicians and practitioners as well as postulates new avenues for future research.

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A systems analysis of solid waste in New Zealand: Using multiple methodologies to improve problem framing

Warren Fitzgerald, Vicky Mabin, Bob Cavana and Vipul Jain

Solid waste represents a loss of resources and leads to various forms of human and environmental harm. Despite increasing effort being put into waste management solutions, the volume of waste created around the world continues to increase. A Theory of Constraints and System Dynamics multi-methodological approach has been used to investigate the underlying assumptions that have led to this poor performance. Findings show how the different methodologies provide complementary insights that challenge the traditional framing of waste issues and proposed solutions. These findings add value to New Zealand – and other nations – by clearly defining the problem statement that is preventing improvements in waste systems. Other environmental issues may also benefit from similar multi-methodological approaches to problem framing.

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Learning from external and internal familiarity in temporary teams: The role of goal orientation

Hadi Faqih

While temporary teams lack the temporal stability to familiarize members with each other, some have suggested these teams can overcome this limitation by assembling members with a shared history in outside organizations. We argue that internal familiarity is needed to enable learning from external familiarity. However, we differentiate between internal familiarity gained in learning contexts and familiarity gained in performance contexts. We theorize that learning familiarity augments the positive effect of external familiarity on team performance by encouraging exploration and incorporation of new routines. Conversely, we theorize that performance familiarity prevents learning from external familiarity because it prompts adherence to established routines. We test our hypotheses in the context of European national football teams using a sample of 5,525 games played by 56 teams between 2005 and 2021 and find supporting evidence.

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AI-Driven Strategic Human Resource Management: Changing the HRM Game or Creating a New HRM Game?

Gerson Francis Tuazon, Dinithi Padmasiri, Liang-Chih Huang and Rachel Wolfgramm

As AI, specifically Large Language Models (LLMs), progressively saturate Human Resource Management and Organizational Behaviour, exploring the vital skills and competencies for HR managers and leaders to efficaciously leverage these novel technologies will become crucial. Our research explores some of the critical competencies that leaders will need in order to harness AI-driven technologies, facilitating the development of training, preparation, and upskilling of managers. Our conceptual paper examines the significant roles, scope and value of LLMs (a type of AI which utilizes deep learning via massive large data sets) in personnel development. We pinpoint the potential for LLMs to automate HRM functions, yet emphasize the need for what we conceptualize as an “empathic balance” with AI which we define as the cognizance of the cultural, ethical, emotional, and meaning-making capabilities of individuals/personnel irreducible to mere data sets. Our novel theoretical framework draws inspiration from Weicke’s Sensemaking Theory. Furthermore, we propose some fundamental axioms of what constitutes as a healthy integration between OB/HR and AI-driven HRM technologies.

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Optimal Distinctiveness and Multimodal Identity Claims

Andrew Argue and Thijs Velema

Audiences engage with offerings whose identities signal both legitimacy as a category member and differentiation from competitors as a novel offering. We propose that the communication of identity claims is more engaging when moderately distinctive verbal texts are combined with highly typical visual texts. We test our hypotheses using original data consisting of both text and images contained in restaurant menus collected from 2,237 restaurants participating in an online food delivery platform in Taiwan. Our study leverages an innovative deep learning methodology to show that by accounting for fundamental differences in how audiences process visual and verbal identity claims leads to a better understanding of why audiences interpret particular multimodal configurations of identity claims as optimally distinct.

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The role of dynamic and operational capabilities in sustaining organizational resilience: Conditional effects of supply chain complexity

Mesbahuddin Chowdhury, Girish Prayag, Xin Jia and Maruf Hossen Chowdhury

Based on the dynamic capabilities view (DCV), this study proposes and tests a model that suggests positive relationships between dynamic capabilities (DCs), operational capabilities (OCs), and organizational resilience (OR). We suggest that OCs mediate the relationship between DCs and OR, and that supply chain complexity (SCC) attenuates the benefits embedded in the relationship between DCs and OCs in enhancing OR. Our results suggest that DCs have a positive effect on OR which is mediated by OCs. The study also shows that increasing SCC weakens OR through diminishing benefits that can be extracted from DCs and OCs. Implications for theory and practice are provided.

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“To be or not to be?” Exploring the contentious landscape of women leadership at the nexus of religion and culture.

Amna Yameen

This paper explores women leadership at the intersection of gender, religion, and culture. Adopting feminist autoethnography and drawing on social constructionist theory, I reflect on my gendered workplace experiences to assess the impact of religious beliefs and cultural norms in shaping women's sense of leadership. The findings indicate that prescriptive practices of femininity based on male interpretations of religious texts pose challenges for women leaders. Calling for an inclusive approach to leadership that challenges religion-based gendered stereotypes and promotes agency at the crossroads of gender and religion, the paper makes a critical contribution to the scholarship on women's leadership. It underscores the significance of contextual and situational variables that have implications for the development of emancipatory practices in organizational settings.

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Work-family Border Busting: The Case for Zigzag Working

Candice Harris

This study seeks to advance understanding of work and family and their interaction. While the intersection of these domains is established as either being detrimental as work-family conflict (WFC) or beneficial as work-family enrichment (WFE), I argue there is a fundamental issue with timing. Zigzag working is offered as an approach to understanding how work and family interact; rather than being separate. Often employees and managers have work and family roles intersecting simultaneously. In this study with two samples (n=502 employees and n=170 managers) support is found for zigzag working at the hour-level and that it is positively related to WFC and WFE dimensions, and positively related to happiness.

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Gender and Ethnicity of Owner managers and Conflicts in Malaysian Family Businesses

Sujana Adapa and Subba Yarram

The conflicts experienced by the owner-managers in family-owned firms in Malaysia are explored in this paper. Agency, stewardship, resource-based and socioemotional wealth theories underpin the conflict type, nature and extent as experienced by the owner-managers of family-owned firms. In-depth interviews were conducted to deeply understand the lived experiences of the owner-managers of family firms. Qualitative data analysis software NVivo was used to identify macro and micro categories of thematic relevance from the interview data. Results obtained elicit the emergence of conflict triads. The conflict orientation and the nature of conflict experienced by the owner-managers in the Malaysian family-owned firms varied on the basis of their gender and ethnicity. The findings from this study provides important theoretical, practical and social implications.

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Human resources management and expatriation: Why and how work engagement matters

Marian van Bakel, Mette Strange Noesgaard and Snejina Michailova

Work engagement is critical to company performance and success. A context that has remained under-researched in work engagement research is expatriation. Equally, the expatriation literature has not paid sufficient attention to the phenomenon of work engagement. Through e-interviews with 27 Nordic assigned expatriates in 16 host countries, we explore the factors contributing to assigned expatriates' work engagement. We identify two clusters of antecedents – general and specific – and decompose each cluster into contextual and job-related factors. We establish how these antecedents lead to absorption, dedication, and vigor as three components of work engagement and depict the links in a conceptual framework.

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Examining the Challenges of Peer Review: A Systematic Review

Angela Paladino and Laura Cutroni

It is evident that much work has been conducted in understanding peer review of teaching frameworks globally. However, much of this work has primarily focused on the structure of the programs that have been implemented, staff attitudes towards the programs and obstacles in the implementation and long-term sustainability of these programs. Moreover, the extant literature does not yet examine the effects of peer review on teaching quality. We proffer that this work, while informative, does little to advance the adoption of peer review programs in higher education, including business schools. This paper seeks to provide a systematic review of the peer review literature and highlight some key gaps in research which impede the progression of peer review as a viable and sustainable mechanism to collect data on teaching quality.

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A Longitudinal study of newcomers' honeymoon-hangover-hangover relief effect on job satisfaction: A moderating role of locus of control

Jooyeon Son and Chiho Ok

In this study, we examine the moderating role of locus of control in the job satisfaction trajectory of newcomers. According to previous studies, newcomers' job satisfaction increased significantly in the early stages of entering a new organization (i.e., honeymoon effect), and then their job satisfaction decreased rapidly over time (i.e., hangover effect). In addition, this pattern of decline in job satisfaction gradually alleviates over time (i.e., hangover relief effect). This study predicts that these patterns of change in job satisfaction of newcomers will vary depending on the individual's trait, that is, locus of control. In other words, we predict that the effects of honeymoon, hangover, and hangover relief effects will be greater for individuals with an internal locus of control. Analyzing nine-wave unbalanced panel data of 10,147 individuals and 65,757 observations, the results show that moderating effect of locus of control is confirmed such that newcomers with an internal locus of control (i.e., internals) experience greater honeymoon and hangover relief effects. Based on the results, theoretical and practical implications, and future research directions are discussed.

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"Strength, pride, hope, care": Action research on employment pathways for Indigenous communities of Djilang (Geelong)

Jo Ingold, Mitch Browne, Andrew Creed, Alfred Presbitero, Christina Spetzler Gregersen, Mark Rose and Louisa Whettam

This paper is based on a unique place-based action research project intended to understand the barriers, challenges and opportunities to facilitate more Aboriginal employment opportunities in Djilang. The study was based on knowledge generation from community at grass roots and agencies, community organisations, education, training and employment providers, and government departments (n = 112). The paper draws on the theory of heutagogy (Rose, 2013; Stoten, 2023), especially the recognition of self-determination of culturally relevant learning and improvement objectives to inform a different approach to Aboriginal employment, as well as methodological insights on a multi-stakeholder approach with cultural safety and Aboriginal voice at the heart.

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Flexible talent management approach: guidelines through signaling theory

Nigar Sultana

Abstract

Selecting the right approach or philosophy for conceptualizing and implementing talent management is a concern in talent management literature. This conceptual paper reviews empirical and non-empirical research on talent management and introduces a new approach with some guidelines based on the underlying assumptions of the signaling theory. The core concerns in the conceptualisation and operationalisation of talent management: talent identification, talent development and talent retention are addressed. Guidance for practitioners with a set of principles is provided to adopt this new talent management approach to get better individual and organisational outcomes.

Keywords- Talent management approach, signaling theory

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Fostering equity students' experience and success through a lens of universal design for learning

Hossein Mohammadi, Chen Zheng and Saadia Shabnam

This project aims to develop a decision support tool for tertiary education institutions on how to provide more effective support to students from low socio-economic status (SES) and remote and regional (RR) backgrounds. Utilising students as partners approach, this project explores how the inclusion of student voice can influence traditional ways of working in higher education, including curriculum design, course delivery, assessment practices, and support services. Through focus groups and in-depth interviews, equity students will be asked to reflect upon their awareness and perceptions of the current Universal Design for Learning (UDL) implementation in curriculum design, course delivery, and assessment of their courses, and that how these are related to fostering student experience, increasing student retention, and improving employment prospects.

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Access to meaningful work experience for young people with intellectual disability: A preliminary analysis of challenges and opportunities

Alyssa Chhim, Susan Mayson and Hannah Meacham

We present preliminary findings on access to work experience for young people with intellectual disability (YPwID) during and post, secondary school. For YPwID, engagement in work experience can lead to ongoing employment and improved quality of life. However, access to work experience is uncertain and quality uneven within the National Disability Insurance Scheme (NDIS). Preliminary analysis of interviews with Disability Employment Transition consultants (DETCs) reveals system challenges affecting the quantity and quality of work experience programs. Challenges include competing stakeholder interests, competition in the NDIS framework, misconceptions and limited understanding of disability, and ethical concerns relating to unpaid work experience and supported employment. We conclude with practical suggestions to improve access to work experience for YPwID.

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Reading the Signs: A semiotic perspective on metaphors in strategy

David Stiles

Metaphors are central phenomena in organizations, but current theories only partly explain how such tropes work. Here, we offer a new perspective on metaphorical processes, using semiotic theory within a Strategy-as-practice (SAP, or SP) approach to build on the idea of metaphors as embodied, experiential cognitive-linguistic devices. Conventional theories see metaphors emerging from simple processes comparing similarities and/or differences between concepts from two distinct semantic domains. Instead, we apply semiotics - the science of signs - to emerging theories of embodied metaphors and metaphor-blending to explicate the processes creating the complex, mixed structures used in everyday strategy practice.

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Leading an age-diverse workforce: Evaluation of a leadership development intervention based on the Include, Individualise, Integrate framework

Eva Zellman, Franziska Jungmann, Leah Zoszak, Tamara Ronski and Daniela Andrei

On the backdrop of demographic changes due to population ageing, leaders need to develop their competencies to effectively manage age diversity within the workplace. We report on the development and evaluation of a two-day leadership training intervention delivered to leaders in a local government organisation (N=35) in Australia aimed to increase leaders' Include, Individualise and Integrate competencies. Preliminary analysis of pre-post evaluations found that leaders who participated in the program reported positive reactions to the training as well as improved cognitive and behavioural learning. Additionally, qualitative data gathered from participants provides initial evidence for positive team and organisational impact of the program.

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Navigating the Complexities and Paradoxes of Organisational Growth: A Study of Australian SMEs

Hanako Frawley, Mark Edwards, Richard Gruner and Christine Soo

Research suggests that managers' understanding of organisational growth play an important role in decision-making and therefore shape governance, strategy, and operational processes. However, scholarly inquiry into managers' understanding of organisational growth has been limited to date. To address this shortcoming, we explore Australian SME managers' (n = 449) and non-managerial employees' (n = 236) understandings of growth. The findings show three distinct understandings: i) no-focus; ii) externally-focused, and iii) internally-focused. The findings also show managers and employees may develop multifaceted understandings. This research suggests that we cannot assume managers and employees have the same understanding of organisational growth and hence, this presents important implications in terms of different strategic priorities among SME managers and employees.

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Data-driven healthcare supply chain transformation: A case study of Victoria's largest public health service

Alka Nand, Tayla Wilmot, Amrik Sohal and Neil Sigamoney

Purpose

Healthcare Supply Chain Management (SCM) remains an important topic for both academics and industry professionals but has recently faced numerous challenges as a result of the COVID-19 pandemic. With a specific focus on the health consumables procurement process within SCM, this paper explores how data-driven healthcare supply chains can employ key performance indicators (KPIs) to transform their processes towards becoming more people-centred, integrated with technology-enabled care in a pandemic challenged environment. Guided by this information, a digital supply-chain transformation framework will be co-developed.

Design/methodology/approach

Using a knowledge mobilisation lens, this paper undertakes a three-phased qualitative study of Victoria's (state in south-eastern Australia) largest public health service Monash Health, involving a secondary study followed by a primary study and finally multiple forum discussions critical for co-developing a digital supply chain transformation framework.

Findings

Our study identifies several key indicators for improved performance in healthcare supply chains from a procurement perspective. Specifically, our findings suggest that to digitally transform an organisation, especially in a pandemic environment, organisation capabilities compatible with industry specific requirements and appropriate digital technologies are a necessary requirement for successful implementation and desirable outcomes. These findings further enabled the development of a digital supply chain transformation framework that can be proactively used by managers and practitioners embarking on a digital transformation journey for their organisations.

Originality/value

This paper, through its timely setting and context, contributes to healthcare knowledge by offering a co-developed digital supply chain transformation framework which can be a catalyst for improved healthcare services.

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Are Older Colleagues More Trustable? The Interactive Effect of Employee Relational Age and Voice Behaviour on Coworker Trust and Task Performance

Chad Chiu, Sanjeewa Perera and Valerie Caines

It is very common for modern organizations to have three generations of people working together and professionals are staffed in age-diverse teams. However, the present literature holds a mixed view on whether the chronologically older employees are more trustable and capable in the eyes of their colleagues and supervisors. To address this issue, we integrate the stereotype content model with the status attainment theory to propose that when employees' voice behavior is frequently witnessed, the potential destructive effect of their relational age (i.e., the difference between their chronological age and their team's mean age) on coworker trust will be neutralized. If, on the contrary, older members choose to keep quiet, they will be less trusted by their peers and thus hurt their performance evaluations in the eyes of their supervisors. We test our hypotheses using a sample of 199 employees from 56 professional work teams in Taiwan. We adopt a round-robin design and social network approach to capture employees' voice behavior and coworker trust; performance evaluations are rated by teams' supervisors. After controlling for several important personal employees' gender, education, team tenure, and peer-rated performance capability, we find a significant moderating effect of voice behavior on coworker trust and a significant moderated mediation effect on supervisor-rated task performance. Our research conclusions contribute to the literature on workplace aging, voice behavior, as well as the protean careers, and provide important insights for older professionals who are motivated to build a sustainable career and for organizations who manage age-diverse teams.

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Integrative Conceptual Framework for Understanding the Drivers of Certification in used Solar Panels.

Ishika Chhillar, Sukhbir Sandhu, Peter Majeswski, Subha Parida and Shruti Sardeshmukh

The paper explores the drivers of third-party certification in the secondary solar panel market by integrating three theoretical perspectives: information economics, stakeholder theory, and institutional logics. The study addresses the need for third-party certification in the secondary market, considering the presence of information asymmetry, opportunistic behaviour, and market failure. It also examines the role of stakeholders and their influence on sustainability and certification practices. Additionally, the paper explores how institutional norms and pressures shape certification policies. The integration of these theoretical frameworks provides a comprehensive understanding of the drivers of certification in the secondary solar panel market and its potential impact on market transparency and product quality. This research contributes to advancing the understanding of complex phenomena like certification by embracing multiple perspectives and exploring the interplay of various factors involved in the certification process.

Keywords: Certification; Used Solar Panels; Conceptual Framework; Sustainability; Circular Economy.

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Perceived organizational support and organizational time demands as organizational predictors of work passion

Jennifer Ann Lajom, Laramie Tolentino, Hataya Sibunruang, Patrick Raymund James Garcia and Peter Lemuel Cayayan

We utilized self-determination theory and the dualistic model of passion to explain the different ways in which harmonious and obsessive passion for work can be nurtured, further affecting employee outcomes. Accordingly, we expect that work contexts that provide employees with perceived organizational support (POS) would be conducive for harmonious passion, while contexts with organizational time demands (OTD) encourage obsessive passion. We also expect that the two types of passion will mediate the relationships between these work contexts and employee outcomes, including job satisfaction, psychological wellbeing, and helping behaviors. Utilizing a time-lag survey study consisting of 194 matched employee-coworker dyads, we found empirical support for our proposed relationships that inform theoretical and practical implications for research on work passion.

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Factors Affecting Employees' Willingness to Speak Up: Exploring the Moderated Mediation Model of Voice Solicitation and Leader Identification

Yu-Hsuan Wang, Fu-Chen Kuo and Ru-Ting Ke

In the workplace, it is common to observe employees remain silent even after being solicited for their input. We draw upon Social Identity Theory and Social Information Processing Theory to examine the mediating role of leader identification in the relationship between subordinates' perception of voice solicitation and their subsequent voice behavior. Additionally, this study investigates the potential moderating influence of supervisors' self-perceived voice solicitation on this relationship. Analysis of data gathered from 508 supervisor-subordinate dyads reveals that subordinates' perception of voice solicitation positively affects voice behavior via leader identification. Notably, this mediating effect is stronger when supervisors have a lower self-perceived frequency of soliciting input. These findings carry practical implications for effective management practices and suggest future research directions.

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When a video is worth more than a million words: the effects of media richness on information processing in entrepreneurial opportunity evaluation

Antoine Gilbert-Saad, Jenny Gibb and Marta Sinclair

Opportunity evaluation is a critical step in the entrepreneurial process that has lasting consequences for entrepreneurs and investors. While some common decision criteria have been established, there is less understanding about the influence of information processing in evaluating opportunities. The reported study used a judgment task that generated 3000 opportunity evaluation decisions by 50 entrepreneurs and 50 non-entrepreneurs. Participants were asked to predict the success of 10 early-stage ventures over a three-year period, based on either textual or video information. Opportunities presented in an elevator-pitch style format led to more accurate accounts of business survival, growth, and funding predictions, where more highly intuitive participants benefited more from rich media.

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Employees' perspectives of Onboarding in a Hybrid Work Environment

Momo Kromah, Remi Ayoko, Ken Tann and Dhaval Vyas

The reported processes and outcomes of onboarding are well documented in the literature. However, little is known about the characteristics of onboarding program in a hybrid work environment. The aim of this study was to explore the experiences of employees regarding onboarding programs in a hybrid work environment. We recruited thirteen participants from two private organisations (a consultancy firm and a financial services firm) to participate in a 30 – 60 minutes interview in describing their experiences of onboarding in their organisations. Six themes revealed the characteristics of onboarding programs in a hybrid work environment: (a) formal onboarding program; (b) informal onboarding program; (c) structured onboarding activities; (d) unstructured onboarding activities; (e) information purpose of onboarding and (f) immersion purpose of onboarding. We discuss implications of the findings for theory, research and practice in organizations.

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The Impact of Dark Triad Personality Traits on the Climate Change Attitudes of the Executive Managers

Sweta Singh

Understanding the repercussions of Climate change is the need of the hour, thus it becomes imperative to explore as many predictors of the climate change attitude as possible. The following paper is one of the first studies conducted on Indian executive managers that discuss how and which of their Dark Triad (DT) personality traits affect their attitude towards climate change and whether possessing knowledge of climate change moderates the relationship between the two or not. Around 227 (140 male and 40 female) employees participated in the study and all three dark triads (DT) personalities were negatively related to the climate change attitude but only Machiavellianism was significantly associated with the latter.

Keywords: Dark Triad (DT) personality traits, Climate change attitude, Climate change knowledge, Machiavellianism, narcissism and psychopathy

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Can Anger Steer Positive Outcomes in a Negotiation? Using EASI Theory to understand its Impact

Sweta Singh

Negotiators often suppress their anger to avoid an impasse. Scholars have explained the inconsistent findings of the anger-outcome relationship. However, there exists a lack of work that explains the effects of the anger of a fellow negotiator on a focal negotiator. Therefore, I discuss how the anger of a fellow negotiator influences the focal negotiator as well as the outcome in the negotiation process. Emotions-as-Social-Information (EASI) theory is used to explain this asymmetrical relationship between anger and positive outcomes, via inferential processing which is based on the focal negotiator's perceived emotions. Further, I explore how Emotional Intelligence (EI) helps focal negotiators in perceiving anger as well as the Machiavellian trait of the fellow negotiator by proposing a conceptual model to understand this asymmetrical relationship.

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When industries lose their shine: Can ambivalence erode stakeholder support?

Mark Pritchard

WHEN INDUSTRIES LOSE THEIR SHINE: CAN AMBIVALENCE ERODE STAKEHOLDER SUPPORT?

Abstract

This study introduces the concept of ambivalence to better understand how stakeholder attitudes toward an industry fluctuate. Attitude change is an oft studied area and the field's interest in ambivalence (i.e., mixed +/- attitude) has continued to increase (Ashforth et al., 2014; Rothman et al., 2017). The current inquiry examines how stakeholder perceptions of a region's tourism industry change over time. Two stage random sampling surveyed initial resident attitude in a host community (n1=428) and followed-up a decade later (n2=505). A path model examined the effect positive, negative, and ambivalent (mixed) attitude had on industry support. Baseline and Post group samples both confirmed positive perceptions as the primary driver of support. However, when negative and positive attitude linked more strongly to ambivalence (mixed attitude), levels of industry support diminished in stakeholders.

Key words: industry support, stakeholder, positive/negative perceptions, ambivalence, attitude change.

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Rise of the machine: AI, is this the death of HR?

Wahed Waheduzzaman, Mahen Jayawaredena, Michael Callaghan, Justine Ferrer and Puvaneswari P Arumugam

The rise of Artificial Intelligence (AI), and more recently, Generative Artificial Intelligence (GAI) has fundamentally changed the landscape for businesses, where tasks reliant on human judgement and creativity, can now be easily undertaken by AI with some specific human guidance. This is especially prevalent in human resource management, where the AI technology has been embraced for some years. The purpose of this paper is to examine the influence of AI on the HR role, and whether the machines will take over the function. To do this we have used a narrative literature review, where we identified that there are many complementary elements to the linkages between AI and HR, thus improving the capacity of HR. Human judgement, however, is the core requirement for effective HR which is a limitation of AI applications, leading us to conclude that AI will not be the death of HR.

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Implications of Artificial Intelligence for Student Learning in Business Schools

Dr. Richa Gulati, Dr. Christian Hoyer and Assoc. Prof. Leonie Hallo

This paper examines the implications of implementing AI tools and platforms in business schools and their potential effects on traditional forms of assessing students' learning performance. A rapid literature review was conducted, focusing on recent discussions surrounding AI in higher education, particularly within business schools. The review identified both opportunities and challenges associated with the use and implementation of AI tools. The findings reveal that AI can effectively support class activities, learning experiences, and course delivery, offering individualized dynamic content delivery as a significant opportunity for the higher education sector. However, challenges arise regarding the authenticity of student work, as AI-generated content can be easily claimed as one's own, potentially undermining the existing performance evaluation system. Additionally, the study highlights the need for a holistic approach to integrating AI as an evaluation and learning tool, emphasizing the importance of curriculum design and teaching relevant skills. The limitations of the study are acknowledged, and the implications of the research extend to the development of AI-enabled curricula and the exploration of new learning models in business schools. Furthermore, ethical considerations and the importance of balancing technical knowledge and skills with ethical principles in AI development and application are emphasized. The research contributes to the ongoing dialogue on AI's role in education and offers practical implications for innovative teaching approaches in business schools.

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Leader Mental: A Systematic Review

Zita Chan, Irene E. De Pater, Gareth S. X. Ting, Amy Wei Tian and Tim Bentley

While the antecedents and consequences of employees' mental health and well-being have drawn ample scholarly attention from organisational behaviourists, leaders' mental health and well-being has received far less scholarly attention. Yet, it is crucial to also study the antecedents and consequences of leaders' mental health and well-being, as their job demands and resources may quantitatively and qualitatively differ from those of their subordinates. Also, leaders' mental health and well-being may have a broader range and more consequential direct and indirect effects on the organisation and its members. The current study aims to gain insight into the breadth and depth of the available quantitative research on leaders' mental health and develop an agenda for future research that, we hope, will further explore this area.

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Manipulating Authentic Leadership with Vignettes for Experimental Research: Recommendations for Designing Causally Defined Studies

Andrei Lux and Ling Abbott

The authentic leadership literature is routinely criticized for an over-reliance on cross-sectional studies that are replete with endogeneity. Editors bemoan the lack of causally defined authentic leadership research, and yet such calls have all but failed to redirect scholarly efforts. Rather than adding our voices to the clamour, we seek instead to contribute by offering authentic leadership scholars viable ways forward to both encourage and enable the uptake of experimental research. We review four published experimental studies on authentic leadership and offer three simple recommendations for using online written or video vignettes to manipulate authentic leadership. We demonstrate that causally defined authentic leadership research using online vignette experiments is just as easy as correlational studies and offers considerable complementary benefits.

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Evaluating the beneficial application of strategy tools for micro and small business owners and managers.

Kerry Anne Toyer, Noel Tracey and Wayne Graham

The knowledge of strategy tools and their application are relevant and beneficial for micro and small businesses (MSBs) and their owner-managers. Substantially contributing to the economy, MSBs represent Australia's largest number of organisations, creating economic and social benefits. They seek resilience and how to effectively sustain competitive advantage, yet clear and defined articulation of strategy tools application, relevance, and benefit for MSBs and the owner-managers are not yet refined in the literature. We demonstrate that strategy tools benefit the MSB owner-managers. This study adopted a thematic analysis method within a case study methodology that investigated MSBs owner-managers in southeast Queensland. We argue that strategy tools are relevant and beneficial to MSBs and their owner-managers

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Why doctors silence doctors: Understanding medical professional silence in hospital-based healthcare

Victoria Lister

Healthcare professionals are motivated to care for their patients but frequently fail to speak up on their behalf – a paradox that has been noted but not explained. Focusing on medical professionals, this integrative review draws on diverse literatures to examine why they are silent at work. It finds junior doctors undergo a professionalisation process in which powerful norms and hierarchies dictate how they are to play the 'game'. The rules of the game let them know they are to be seen and not heard, subverting their training and the professional obligation to do no harm. Senior doctors, who supervise junior doctors and determine the professionalisation process, perpetuate the medical professional climate of silence as they too are immersed in the game.

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Double-Loop Learning: Constructive Peer-Feedback to Enhance Teamwork Experience and Skill

Ju Li Ng and Kevin Lowe

Scholars continue to advocate that the double-loop design helps students learn better, in practice, the double loop approach is extremely challenging due to the 10-13-week semester. This research aims to explore how the double-loop peer feedback design helps to facilitate students' learning of teamwork and enhance their teamwork experience. Using a two-study design of focus group and students' assignment data, our findings reveal how each feedback loop prescribes specific aims to help students develop teamwork skills. These findings provide crucial insights into the importance and the purpose of the double-loop design and its benefits on engaging peer-feedback to facilitate teamwork skills building.

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The Role of Compassion in Guiding Muslim Entrepreneurs' Opportunity Recognition.

Farhana Sidek, Rosmah Mat Isa and Hamizah Abdul Hamid

This study examines the process of how Muslim entrepreneurs discovers opportunity to start their ventures. Using qualitative research, we interviewed 15 Malay Muslim entrepreneurs on their journey in starting a venture. In analysing the data we discovered that the theme 'compassion' emerged to be one of the factors that guide Malay Muslim entrepreneurs to pursue their entrepreneurship journey. We contribute to the literature by showing that compassion plays a role in guiding Muslim entrepreneurs to recognise and pursue entrepreneurial opportunities.

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I Tell You I Like It! Experimental Investigation of Employer Branding Techniques to Attract Talents

Kedarnath Thakur and Nazia Gera

Abstract

Purpose - The purpose of this paper is to assess the impact of humorous advertisements on job pursuit intention and word-of-mouth intention of potential job applicants.

Methodology - The paper employs a multi-method (N=530) study to investigate the proposed model. The study encompasses vignette experiments, and a two-wave experimental investigation method indicating the robustness of the finding.

Findings- Our findings suggest that humor integrated with informativeness increases the perceived credibility of the organization through ease of processing which positively influences the JPI and WoMI of potential candidates.

Keywords - Humor, Job advertisement, Credibility, Job pursuit intention, Word of mouth intention

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Effects of CSR and Gender Diversity on Financial Performance of Family Businesses

Subba Yarram and Sujana Adapa

The main objective of this study is to examine the effects of CSR and gender diversity (GD) on financial performance (FP) of family businesses. We also consider the interaction effects of CSR and gender diversity on financial performance. Using a quantitative analytical approach we employ a sample of businesses from 68 countries for 2011 to 2019. The main contribution of our study is that the interaction effects of CSR and gender diversity are positive for financial performance of family businesses. effects are positive for FP when considering the different dimensions of CSR. These findings are consistent with resource dependence theory as well as socio-emotional wealth theory.

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From Agents to Agency: Sustainability Leadership is Everybody's Work

Tim Williams and Melissa Edwards

Actor-led perspectives dominate our understanding of how humans facilitate organisational sustainability transformations. Whether focused on senior leaders, middle managers or change agents and champions, research gives prominence to the attributes, competencies and activities of specific actors. This oversimplifies the nature of agency in change for sustainability. In response, through the social-symbolic realm, this paper develops a conceptual and emancipatory understanding of 'sustainability work'. This is the complex and distributed agency of multiple actors shaping the ideas, identities, strategies and institutions to prioritise social and ecological outcomes. Human agency shapes and recursively is shaped by the objects, discourses and symbolism that manifest in artificial systems and regimes of practices. Finally, we explore how ecocentric sustainability narratives might emerge through the social-symbolic realm to enable transformative outcomes.

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The influence of work-group inclusion and work control on work-life interface: A study of New Zealand SME employees

Jennifer Scott, Kazunori Kobayashi, Wayne Macpherson, Beth Tootell and Stephen Kelly

Underpinned by social exchange and spillover theories, we examined how an employee's work-group inclusion and work control factors relate to their work-life interface. Data were collected for measures of employees' belongingness and uniqueness within their organisations, job autonomy, working pattern control, work-life enrichment, and work-life conflict, for 700 employees in New Zealand small and medium sized enterprises (SMEs). Results show statistically significant relationships between these predictors and the work-life interface outcomes. Notably, work-group inclusion factors had a stronger positive relationship with work-life enrichment and a stronger negative relationship with work-life conflict than the work control factors. We highlight the need for research and SMEs to assess approaches that encourage inclusions and work control, facilitating work-life enrichment and mitigate work-life conflict.

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Good apples in business barrels: CEO's tenure, corporate social responsibility and the moderating roles of CEO's business background and corporate governance training

Dung Thi Phuong Nguyen and Jung-Ching Lin

Despite scholarly attention to CEOs' influence on corporate social responsibility (CSR), the CEO-CSR relationship is more complicated than assuming linear monotonic changes. Taking into consideration the power and motivation of CEOs during their regimes, we propose that there is a curvilinear (inverted U-shaped) relationship between tenure and CSR. Further, sparked by the metaphor for "good" apples or "bad" apples in barrels proposed by Trevino & Youngblood (1990), this article represents an extended arm of this seminal work to examine how ethics intervention alters CSR activity. We argue that the CEO's business background (good apples) and corporate governance training (CGT) (good barrels) will moderate this relationship. Our results show that the association between tenure and CSR changes dramatically with CGT.

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Shedding Light on the Organisational Growth Puzzle: A Systematic Review and Integrative Framework

Hanako Frawley, Richard Gruner, Christine Soo and Mark Edwards

The aim of this study is to explore what organisational growth understandings exist within the management literature, as theoretical development has been fragmented and slow. To achieve this goal, we conducted a systematic review of 147 peer-reviewed journal articles published between 1960 and 2021 to consolidate the empirical and theoretical research. The review explores six theoretical perspectives of growth—economic, strategic orientation, sustainability, managerial, resource-based view, and life cycle—based on five dimensions: (a) definition, (b) underlying theory, (c) determinants, (d) outcomes, and (e) contribution to research. Based on these six perspectives, we develop an integrative framework, which maps the landscape of past and current research by encompassing determinants, mediators, moderators, and outcomes of organisational growth.

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Women at the Crossroads: Barriers and Facilitators to Their Leader Identity Development

Carol Gill and Isabel Metz

Women's leader identity may provide insight into women's underrepresentation in leadership. Women are not prototypical leaders, and this may impact on their ability to claim a leader identity and receive reciprocal grants. To develop an authentic leader identity, one must have an opportunity to experiment with provisional selves and integrate a leader identity into a constellation of identities. We conducted 20 interviews: 13 with women who participated in an external leadership program with a significant mentoring component, and seven with program mentors. We found that women received little developmental support, and had no relatable leadership role models, at work. External mentors filled these gaps by, for example, providing a safe workspace in which women could build their authentic leader identities.

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From observed customer mistreatment to creative service performance: the mediating role of identity threat emotion and the moderating role of job crafting

Xiaowen Hu, Hongmin Yan, Siran Zhan and Fangfang Zhang

Employees who observe customer mistreatment directed at their co-worker are also adversely affected. Going beyond this victimization perspective, we draw on identity control theory and propose that employees tend to experience identity threat emotions (e.g., powerlessness, frustration) after witnessing customer mistreatment, which then results in identity protection behavior (e.g., creative service performance). We contend that this effect between identity threat emotions and creative service performance is contingent on job crafting behavior. We tested our hypothesized model using multi-wave data with critical incident technique. Results show that customer mistreatment will evoke identity threat emotions among observers, and job crafting can turn “lemons into lemonade” such that it converts negative emotions stemming from observing customer mistreatment to creative service performance.

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Green HRM practices in the Hospitality and Tourism Industry: Antecedents, Outcomes and Future Outlook

Abdul-Razak Suleman, Mehran Nejati, Azadeh Shafaei and Janice Redmond

Green Human Resource Management (HRM) has become a crucial means of improving sustainable business performance and meeting the much-needed environmental standards in the hospitality and tourism (H&T) industry, resulting in a proliferation of literature. Hence, the need to compile and systematically evaluate the literature to provide an overview of prior studies and suggest research directions. A comprehensive analysis of 66 empirical studies published in ranked journals reveals: a) concentration of research from emerging economies, b) the need for more diverse theoretical perspectives and a broader geographical scope, c) over-concentration of quantitative research designs, and d) under-exploration of the antecedents, mediators, moderators and outcomes of Green HRM. Implications of these findings are discussed with several suggestions made for future research.

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Integrating Work-Family Conflict with Ambivalence in Hierarchical Relationships: A Conceptual Model

Alina Haider and M K Dinithi Padmasiri

Studies linking ambivalence to work-family conflict are virtually non-existent, making this area ripe for future research. We propose an integrated conceptual model that introduces family life, hitherto neglected, into the theoretical understanding of ambivalent relationships at work. Drawing from the work-family border theory and spillover theory, we holistically explicate the transfer of stress between one's hierarchical and familial relationships due to ambivalence. The conceptual model serves as a useful starting point for examining antecedents and outcomes related to family and beyond organisational, group, or individual factors previously studied. We offer a framework for future research to explore and test associations in both holistic and parsimonious ways.

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How do individual actors strategify created shared value in a business-to-business field? A case study from Australian social procurement

Natalya Turkina, Joona Keranen and Kevin Argus

This paper asks how individual actors strategify (i.e. make things strategic) creating shared value (CSV) in a business-to-business (B2B) field. By adopting a qualitative longitudinal single case study approach, we examine how individual actors from two Australian construction and infrastructure firms, a social enterprise, and a consulting firm strategify CSV in the Australian Social Procurement Framework. Our research aims to address the existing gaps in the literature, such as the static depiction of CSV, the lack of understanding of how individual actors, including but not limited to managers, strategify CSR, and the relative dearth of CSR research in B2B fields.

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Where to engagement? A genealogical exploration of the state of employee engagement in the Australian Public Service from 2012-2022

Jayne Bye, Louise Ingersoll and James Weng

Employee engagement is a significant yet contested concept in understanding the dynamics of the employment relationship and the means by which management aims to improve performance and other HR outcomes. In the Australian Public Service (APS), the role for employee engagement has changed over time, with the concept appearing to shift from a central priority in the 2011-12 APS State of the Service Report, to just one of a number factors measured in the APS Employee Census and compiled in the 2021-22 State of the Service Report. The significance of this shift over a decade, lends itself to a Foucauldian genealogical analysis of the ways in which the State of the Service Reports reveal changed practices and priorities in the APS.

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Connecting Leadership and Compassion in the Creation of Dignified Workplaces

Bhavya Kapoor and Sumit Kumar Ghosh

A human-centric approach has emerged as a priority for organizations in the post-pandemic era, gaining traction as a reformed concept of societal progress, replacing economistic management. Hence employee well-being and dignity at work are increasingly becoming leaders' focus globally. A nuanced understanding of dignity experiences cultivates sustainable work lives. Within the overarching workplace dignity theory framework, the present study investigates the pivotal role of compassionate servant leaders in establishing workplaces characterized by dignity within the leader-follower dynamic. Additionally, it aims to explore how the dimension of emotional intelligence in these leaders interacts with the feeling of compassion to conceptualize followers' dignity experiences further. This research contributes to the leader-follower relationship literature. Potential implications for future research are discussed.

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What is your true entrepreneurial identity? The Conundrum of Femininity and Identity in female entrepreneurs

Vanita Yadav, Monica Adya, Jeemol Unni and Nicky Morrison

Entrepreneurial identity is often misunderstood and deconstructing a female entrepreneur's 'true identity' is even more challenging. There has been considerable progress in female entrepreneurship research, but it is often limited to the use of a "gender comparative" lens, thereby, immediately stereotyping all aspects of the female entrepreneur. In the struggle to fit in, some female entrepreneurs try to adopt identities mimicking men while running their businesses, thereby, disregarding their own femininity. Our study adopts the case study research method using qualitative data on female entrepreneurs from diverse industries. Unravelling the conundrum, we posit a theoretical framework and offer implications for future research and practice on how female entrepreneurs shape their femininity while embracing or discarding their true identities

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Revisiting Adam Smith's open system and the moral sentiments at work in his micro-foundation

Mark Pritchard and Jane Zhao

REVISITING ADAM SMITH'S OPEN SYSTEM AND THE MORAL SENTIMENTS AT WORK IN HIS MICRO-FOUNDATION
ABSTRACT

Research has shown that human moral behaviors are profoundly influenced by worldviews. Yet, how worldviews shape moral thinking and behavior at a micro level remains unclear. In this paper, we distinguish worldviews as open and closed system based on the ontological aspect of General Systems Theory. We then use this lens of open vs. closed system worldview to re-examine Adam Smith's seminal work in the Theory of Moral Sentiments (TMS) which he wrote 250 years ago. Through a careful examination of this work, we illuminate Smith's insights linking major moral constructs such as sympathy, self-interest, and restraint to self-interest to worldviews. Viner's (1972, p.81) claim that Smith's entire system suffers if one disregards the role of his worldview, and more recently Hill's (2001, p.1) argument for a "revisionist account" compel reflection. Although largely overlooked by many commentators, it is important for us to bring Smith's insights back to the forefront of moral and ethical discourse as they lay an indispensable micro-foundation for discussing moral behavior. In business contexts, the implications of several of Smith's observations are used to shed light on three different ethical considerations: shareholder value, stakeholder value, and what amounts to transcendent, purpose driven business.

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The Influence of Management Values and Practices in the Construction of Sustainable Futures and a Circular Economy

Judy Matthews

Extant literature on the contributions of management values towards sustainable futures largely focuses on the challenges that large organisations face in actioning values in practice. This paper investigates the ways in which the values and concerns for sustainability and the environment of new enterprises influence the purpose, strategy and operations for sustainable futures. Using an example of a small construction enterprise, we argue that the founder's values, beliefs and attitudes are the core drivers of the strategy and operations of moving towards a circular economy, by designing out waste, keeping materials and products in use for as long as possible and regenerating natural systems, for a sustainable future.

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Pedagogical Innovation and Business Education for Sustainable Development: Implications for Curriculum Design and Delivery the Era of Generative Artificial Intelligence

Subas Dhakal

Business Education for Sustainable Development (BESD) can be characterised as - purposeful teaching and learning initiatives within business schools with a focus on the triple bottom line. Although the utility of appropriate assessment design to equip students with skills and knowledge has been acknowledged, there is no one-size-fits-all pedagogy to advance BESD, particularly in this generative Artificial Intelligence (gAI) era. This paper adopts an exploratory qualitative research method to present a case study of a core sustainability strategy unit taught at the undergraduate and graduate levels at the University of New England. Evidence indicates that constructivism and production pedagogies informed curriculum that allows students to be active co-designers of the assignment with a real-world purpose and personal value attached to the final product significantly: a) enhance the overall learning outcomes, b) foster critical thinking and c) diminish the misuse of gAI.

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Diverse circular economies: The transformative power of the Māori economy

Diane Ruwhiu, Mawera Karetai and Gavin Walsh

The concept of the circular economy is a model of production and consumption that aims to reduce waste and pollution by keeping resources in use for as long as possible. However, CE has been limited by its focus on technical and economic rationality, which does not meet the needs of all members of society, particularly Indigenous communities. We propose the diverse economies framework recognizes the distinctive socio-economic capabilities of place and people which exists at the heart of the Māori economy and hence offers an alternative way of understanding the CE. This interactive paper explores the intersection of circular and diverse economies, using te ao Māori as an epistemological lens to consider the potential for transformative social and economic change.

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Fostering Employee Thriving through Proactive Career Support

Zhongmin Wang, Zhou (Joe) Jiang, Hongmin Yan and Xiaowen Hu

This study explores how and when contextual factors beyond local work environments affect employee thriving. Based on the socially embedded model of thriving, we posit that proactive career support implemented by human resource management (HRM), as a factor featured in larger organizational contexts, fosters thriving via reducing job content plateau. We further contend that employees' political skill strengthens this role of proactive career support. As expected, our three-wave data demonstrates a positive indirect effect of HRM's proactive career support on thriving as mediated by job content plateau. For employees with stronger political skill, proactive career support is more likely to reduce job content plateau and, consequently, promotes employee thriving. From a practitioner perspective, these findings shed light on the importance of HRM's proactive career support in contributing to a thriving workforce, as well as when the benefits of this support can be enlarged.

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Mango mechanization: readiness, impact on the value chain and way forward from the lens of the Australian growers.

Saumindra Bhattacharya, Imran Ali and Kerry Walsh

Abstract: The growing reduction in labour is a threat to the profitability and sustainability across the globe, including the Australian mango industry. The adoption of automation technologies in the harvesting operations that contribute to almost 50% of the cost of production in tree fruits, therefore, becomes an imperative. However, it faces the challenges of capital investment, reliable equipment performance, heterogenous planting systems, and in-house skills and capability development. The researchers have investigated the performance parameters that the mango auto-harvester must achieve to substitute labour and the requirements for its adoption. Using a qualitative research approach, findings are from more than 200 farmer members' insights. The analysis has provided unique theoretical, economic, and social contributions that were a clear research gap, and have a global relevance.

Keywords: Labour, Growers, Automation, Value Chain, Adoption.

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'I have learned just how much I depend on other people': the impact of Covid-19 on workplace relationships

Ann Parkinson

This interactive structured submission proposes research that builds on two earlier studies before and during the lockdown in the UK to explore the outcome of long periods of enforced working from home and impact it had on the participants' workplace relations. It builds on a theoretical base of personal engagement, relational contexts, safe spaces and workplace relationships. The participants have been from the UK public sector taking part in a total 34 interviews and 470 diary entries using an app to collect rapid time responses to interactions. Findings of previous stages so far have confirmed the importance of workplace relationships in supporting engagement, showing a continuum of depths of relationship from transactional, transitioning to relational and emotional involvement.

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Future-making through pragmatist language: An illustrative case study of Bjarke Ingels Group

Nico Klenner, Silvia Sanasi and Stefano Magistretti

Research on future-making has sparked a burgeoning debate on how futures are imagined and enacted. However, there remains a gap in our understanding of the actionability of such futures. In particular, we lack insights into how organizations make actionable futures. Given the inherent tension between desirability and feasibility, organizations require adequate tools to make actionable futures. To this end, we propose the conceptualization and illustration of pragmatist language as a significant vehicle for future-making that can complement the use of practical and poetic language. To illustrate the application of pragmatist language, we draw from the revelatory case of the Bjarke Ingels Group (BIG), one of the world's most renowned architecture firms. Through the illustration of BIG's style of communication and use of language, we showcase how pragmatist language can be employed in future-making. We conceptualize pragmatist language as a set of four guiding principles and discuss how pragmatist language can constitute a tool for building legitimacy across diverse groups of stakeholders. This study contributes to the emerging literature on future-making and organizational imagination. Managers, entrepreneurs, innovators, and policymakers involved in future-making will find value in this study as it offers guidance on the principles to be followed when utilizing pragmatist language for future-making. By understanding and leveraging the power of pragmatist language, practitioners can enhance their ability to engage stakeholders and drive successful future-making efforts over time. Policymakers and public institutions will benefit from our study by gaining insights into the use of language in future-making.

Developing a Māori Economic Development Strategy – Reflections on Open Strategy and Co-design

This Research Symposium will discuss the ongoing development and implementation of a regional Māori economic development strategy for Te Upoko o te Ika, the Greater Wellington Region. We'll explore the community engagement and development of the strategy, addressing the combination of traditional business school knowledge and a Māori perspective. After that we will consider the engagement strategies, relating these to the opening up of strategy. Finally, we will ask 'where to from here?' and look at a data driven approach to development in the region, and the establishment of a charitable trust to implement the strategy.

The workshop will:

- Explore the notion of Māori economic development
- What material tools (i.e., a modified business canvas) supported engagement, and how
- Relate insights from the project to Open Strategy

We expect to broaden perspectives of what 'development' means from a Māori worldview, develop engagement strategies for community projects, and explore the intersections between traditional business school knowledge and Indigenous worldviews, while relating many of our findings to Open Strategy.

Workshop Leaders: Jesse Pirini (VUW), Stephen Cummings (VUW), Rebecca Bednarek (VUW)

Early Career Academic Challenges and Strategies to Support Wellbeing

Recently, researchers have called for more attention to the wellbeing of management students and faculty, particularly those in the early stages of their careers. For example, in a recent Special Issue of the Journal of Management Education (2021) focused on mental health, the co-editors noted that very few scholars have explored this topic in the context of business schools. This is somewhat surprising, given that many management academics study wellbeing and would appear well-placed to investigate these concerns.

Broadly speaking, researchers have found that both PhD students and Early Career Academics (ECAs) face numerous challenges that can negatively affect their wellbeing. These include financial pressures, the expectation to "publish or perish", bullying and harassment, and high workloads. Many of these issues are present during the doctoral experience and are further exacerbated once scholars formally commence their professional careers. We also know that a considerable number of ECAs in Australia, in particular, are employed on fixed-term contracts and such precarity can have a profound, harmful impact on mental health.

Indeed, there is growing evidence that the challenges of an academic career are associated with a range of maladaptive outcomes. Research supports the notion that ECAs are an especially vulnerable group, who report high rates of loneliness, isolation, stress, and burnout, as well as reduced social support at work. Increasing work demands and work-life conflict during the COVID-19 pandemic also meant that female ECAs faced more negative outcomes as compared to other groups of scholars. Collectively, studies from different disciplines indicate that many ECAs report reduced job satisfaction and engagement, and a considerable number eventually leave the academic workforce.

In this workshop, facilitated by leading academics from four different business schools across Australia and New Zealand, we will explore some of the major challenges ECAs can face and the potential consequences for well-being. The five facilitators, including three mid-career academics and two senior academics, will share how they personally addressed these challenges, and which strategies/approaches were most effective. The workshop will therefore offer participants a unique opportunity to hear from scholars about the difficulties they faced during their careers. Participants will also learn evidence-based strategies to support their own wellbeing (including specific strategies to support mental health) as ECAs, and how to encourage wellbeing in business schools broadly.

Workshop Leaders: Todd Bridgman (VUW), Melanie Bryant (Tasmania), Marissa Edwards (UQ), Stuart Middleton (UQ), Elizabeth Nichols (Otago)

The benefits and burdens of service and leadership roles in mid-career: Honouring your purpose, crafting your profile

Not finding enough quality time for research or teaching innovation because you feel swamped by administration or overwhelmed with requests to edit, review, join committees, and attend meetings are commonly reported mid-career frustrations. Yet, taking on service and leadership roles is part of the academic contribution expected from mid-career academics. While it is true that some service activities and roles can feel burdensome, a purely negative framing can be a self-fulfilling prophecy that can lead to missed opportunities. We highlight the potential, in particular, for meaningful roles that provide leadership to journals, the academic community and institutions and how career pathways can be established in each. Across all the pathways, based on our experience in service and leadership roles and mentoring others, we seek to establish and explore how the burdens of academic service and leadership may be offset with key benefits. In this way, certain service activities can provide value in several different forms, from intrinsic rewards to developing new connections and skills or providing a mechanism for delivering new or improved initiatives for academic and stakeholder communities. However, there is a requirement to carefully consider and shape such roles to maximise the benefits and minimise the burdens, and in this workshop, we also identify practical strategies and theoretically-informed tools that can help participants to do this.

While there is much focus on doctoral and early-career development, the mid-career stage – which can extend over decades and includes the majority of the ANZAM academic community – receives relatively little specific attention. While research and teaching innovation support can extend across multiple career stages, service and leadership roles are different and the mid-career stage is when such opportunities and duties are likely to become significant. In order to make the most of attractive service and leadership roles and opportunities (and to reshape those that are more burdensome to be more rewarding), mid-career ANZAM members will benefit from building on the experiences of the panel members, engaging with relevant career management theories and tools, and sharing experiences with colleagues from a range of institutions.

Workshop leaders: Lisa Callagher (Auckland), Bill Harley (Melbourne), Paul Hibbert (St. Andrews), Tine Köhler (Melbourne)

Editors Panel: Insights, Lessons Learnt plus Interactive Discussions

This workshop explores insights for publishing academic research and how one's research expertise may be published for a variety of audiences. The workshop brings together editors and associate editors from a wide range of management journals: international and regional journals, disciplinary specific and general management journals, as well as specialist journals for teaching, research methods, and policy implications. In the first workshop section, the editors will introduce their journals and explore points of commonality and differentiation between the journal's editorial remit and readership. The second workshop section is interactive, including: time for question-and-answer between the panel and audience; a facilitated panel discussion to identify synergies between the outlets and extract Editors 'lessons learnt' about publishing; and break-out tables for journal specific conversations.

Workshop Leaders: Catherine Collins (AJM), Remi Ayoko (JMO), Chinmay Pattnaik (APJM), Vipul Jain (IJIE), Gavin Schwarz (JABS), Kevin Lowe (LQ), Veronique Ambrosini (AMP), Neal Ashkanasy (JME), Tine Koehler (ORM)

Sustainable Development and Decolonisation in Business Education

This workshop will introduce the topics of sustainable development and decolonisation and the role they could play in business education. Sustainable development and decolonisation are hot topics at educational institutions all over the world, but we wonder whether we agree on their understanding and the implications of meaningfully including them in business education. Better understanding should allow us to discuss how they can, or whether they should be incorporated into business education. This is important especially after there have been many calls to transform management education to move beyond profit maximisation towards a model that promotes environmental stewardship, social protection, and the incorporation of indigenous perspectives “decolonising” current Western educational approaches. At this workshop, we will set the context by presenting information on sustainability education in Australia and Canada as well as identifying a baseline of activities undertaken by Canadian business schools towards reconciliation with Indigenous Peoples. Further, Indigenous Works Canada will speak to partnerships and relationships and what Luminary (a strategic arm of Indigenous Works Canada) is aiming to do to grow the Indigenous innovation eco-systems by creating new research and innovation collaborations between the academic and business school community with Indigenous business.

We will also present the experience of Griffith University changing its business school education to align more strongly with the SDGs and share ideas/conversations occurring in regards to decolonising management education and or management education organizations in Australasia.

Despite some encouraging findings and the relative success of some initiatives, we would argue that we are not doing enough to address our current societal state and how business schools could do more. While traditional approaches are no longer acceptable, we fully expect that transforming business schools will be challenging. So, how much should we change? What would be enough? While we will set the stage with academic research and practitioner initiatives, the most important part will be the discussion we expect to foster among attendees to the workshop. We will leave plenty of time for reflection, discussion, and interactions among attendees in a structured but open manner so we can together try to reflect on the questions this workshop proposes. We do not expect to answer the questions as a result of this workshop but rather to create a space for reflection and discussion. We hold the strong belief that no one alone is better than all of us together to discuss these topics and collaboratively start a journey towards further action.

Workshop leaders: Teresa Rose (Athabasca), Nathalie Lachance (Athabasca), Eduardo Ordonez-Ponce (Athabasca), Ruth McPhail (Griffith), Kelly Lendsay (Indigenous Works, Canada), Craig Hall (Indigenous Works, Canada)

How might we more effectively integrate ecological sustainability and social responsibility agendas in management education?

The workshop will begin by providing an overview of where management education is in integrating considerations of ecological and societal responsibility into the curriculum, and on the Principles of Responsible Management Education (PRME).

The workshop will then explore three key questions:

1. What can we learn from institutions' experiences so far? What are the different experiences (both positive and challenges) of interpreting and implementing PRME (or wider responsibility and sustainability goals)?
2. What do we as management educators need to do to better integrate PRME? Does this require new ways of thinking about management education? Does it require innovative approaches to teaching and learning?
3. What are the key areas of research (and research questions) needed to better understand how institutions can move forward? Are there opportunities for attendees at ANZAM to work together to design research projects to tackle the key RQs to extend our understanding of PRME interpretation and implementation, and to educate the next generation of socially responsible and globally sustainable business leaders?

Overview:

- Raise awareness about PRME and its aims and objectives
- Create dialogue opportunities for workshop participants on three key questions about the challenges of integrating PRME in to the curriculum (see description below)
- Share good practice between different individuals and institutions from the ANZAM area and globally
- Open up collaboration opportunities for individuals to develop research opportunities on this topic
- Feedback mechanism on this topic for attendees whose institutions are in PRME or are considering joining
- Improved understanding about how we can create more socially responsible leaders of the future through these activities.
- Workshop leaders: Joanne Larty (Lancaster), Emma Watton (Lancaster), Brad Jackson (Waikato), Danny Soetanto (UNISA)

From climate literacy to action: using threshold concepts to reimagine responsible management education for a climate-changed world

As management educators, we have a key role to play in supporting the transition to a zero-carbon and regenerative economy. Our curriculum equips professionals to make a difference for sustainable prosperity. Yet, despite our best efforts to integrate sustainability and responsibility into management practice, climate change worsens and progress towards sustainable development goals stalls. Perhaps being more knowledgeable about climate change is necessary but not sufficient to make managers capable of leading responsibly in a climate-changed world. With this provocation we invite you to participate in this workshop to explore thresholds concepts as a means to draw us - and the professionals we teach - out of habits of mind and practice that impede transformative climate action.

Threshold concepts can serve as 'portals of understanding' that confront learners with 'troublesome knowledge' that challenges naïve understanding and assumptions. They can lead to a transformed and integrative way of seeing and interpreting the world. Examples of threshold concepts with relevance for climate action include 'complex systems', 'collaborative and polycentric institutions', and 'multiple ways of knowing'. Across disciplines, the notion of TC has encouraged educators to design learning environments and approaches with the potential to lead to profound shifts in learners' worldviews and their academic or professional identity.

Our workshop makes use of participative methods: you will be encouraged to be reflexive, to inquire, and to co-create together with known and new colleagues. You will benefit from this action oriented collaborative approach as you learn from and are inspired by your colleagues to challenge and reframe how you think about learning design, and adopt a transformative mindset to think differently about learning thresholds and how to support threshold-crossing in your programs, courses and workplaces. Imagine the beneficial outcomes if we were to succeed in this session to co-produce a shared way of thinking about thresholds in learning design. Collectively, we would help Business Schools better equip professionals to operate productively in a climate-changed world and empower them to restore and regenerate the planet and our communities.

Overview:

- Despite scientific consensus on climate science and global and national policy frameworks setting regulation and guidance on mitigation and adaptation goals, there is no universal agreement on the most effective pathways for action. Managers in a climate changed world need to challenge taken-for-granted ways of thinking and operating, and find ways to shift business practice towards decisive climate action
- While other social and environmental sciences have already developed integrative, holistic approaches to educate about climate change, business schools may be caught in a form of incrementalism, with a siloed focus on responses to climate change conceptualized from narrow disciplinary perspectives (e.g. impact finance, responsible marketing, green supply chain management). This approach may be insufficient for averting irreversible damage to ecological systems and catastrophic climate impacts
- Threshold concepts (TC), pioneered by Meyer and Land, offer a powerful mechanism for moving beyond incremental implementation of climate-change-related learning into the management curriculum. TC have been described as 'portals of understanding' that confront learners with 'troublesome knowledge' that challenges learners' naïve understanding and assumptions, and lead to a transformed and integrative way of seeing and interpreting the world. Examples of TC from sustainability science, with relevance for climate action include 'complex systems', 'collaborative and polycentric institutions', and 'multiple ways of knowing'. Across varied disciplines, the notion of TC has proven generative, and encouraged educators to design learning environments and approaches with the potential to lead to profound shifts in learners' worldviews and their academic or professional identity.
- The proposed workshop offers management educators the opportunity to:
 - Rethink the 'stuffed' and entrenched business curriculum, and reimagine it around climate-focused threshold concepts
 - Learn about and ideate innovative ways to develop students' climate action competencies, and to cultivate their boundary-crossing curiosity and their courage to 'change the game' rather than 'play the game'.

- To reach these objectives, the session offers: (1) a short panel discussion to stimulate and orient subsequent discussion, knowledge sharing and co-creation; and (2) facilitated small breakout groups. The breakout groups will discuss how threshold concepts can inform curriculum and course design, identify relevant and distinctive threshold concepts from business and management research; and share and explore effective methods to guide threshold-crossing.

Workshop leaders: Melissa Edwards (UTS), Franz Wohlgezogen (Melbourne), Fara Azmat (Deakin), Sukhbir Sandhu (UNISA), Robert Hales (Griffith), Tim Williams (UTS)

Developing Responsible Business Leaders: Creative and Playful Pedagogies for a Sustainable Future

The future of humanity and our planet demands a radical shift towards more responsible and sustainable business practices. To develop responsible business leaders who can shift management values and practices, educators must be equipped with the tools needed to teach sustainable values and practices. As tomorrow's decision makers, business students hold immense potential to drive meaningful change if equipped with holistic skill sets. This workshop will introduce an innovative pedagogy and praxis meant to empower educators and provide attendees with the tools needed to meet these demands. The Impactful Five (i5) Project intends to transform business education with five impactful methodologies.

This project was built on research by the LEGO Foundation. By making learning meaningful, fostering joy and well-being, developing supportive social interactions, facilitating active engagement, and designing for iteration, educators can transform their classrooms and help students develop holistic skill sets. This workshop is designed to be an in-person workshop with 50-100 participants. The session is estimated to be 100 minutes long, broken down into three major sections. First, introducing the i5 project and research foundation. Second, delving into how the i5 pedagogy can transform business education through creative and meaningful interventions. Finally, creating a space for meaningful dialogue and outlining next steps for deep engagement, impact, and connection.

The session will be conducted using the i5 signature moves and aims to provide insights into the challenges and opportunities in business and management schools to engage participants in practical reflections and applications of creative pedagogy in the classroom. The hope is that this session will be a starting point for the i5 conversation-to-spark dialogue within the ANZAM community which educators can carry forward into the school year. As educators, it is important to understand that leadership is not an individual position but a complex process of social influence that shapes the thinking and action of others toward collective goals. Responsible leaders exhibit self-awareness and ethical attention to others in the world. This is key to attaining sustainable development goals which are vital for long-term business and societal success. To strengthen learning, business educators must shift from common models of presenting information to designing and facilitating dynamic learning experiences that enable students to become the responsible business leaders of tomorrow.

Overview:

- Introduce the Impactful Five (i5) pedagogy and research foundation.
- Delve into how the i5 pedagogy can transform business education through creative and meaningful interventions.
- Highlight examples and the application of i5 methods in the business school context.
- Discuss how the i5 methods in business education can promote sustainable values and practices.
- Create a meaningful dialogue through networking and engagement with the i5 methods.
- Encourage a space for questions and next steps to continue engagement and professional development.

Workshop leaders: Robert Hales (Griffith), Christian Schott (VUW), Smanatha Thompson (UN PRME), Cheyenne Maddox (UN PRME)

Leading for the Future: Vision(s) of Business and management education

The future of the higher education sector in general, and that of higher education institutions, is both troubling and uncertain. At the moment, it seems that there are several social, political, economic and technological trends that test the sector's and the institutions' adaptive capacities. This year's ANZAM conference theme, "Changing Management Values and Practices for a Sustainable Future" is a testament that shifts need to occur in management and organisations today, as they seek to address the challenges of rapidly changing business environments. Business schools and management academics are core actors in assisting and expand business students' management knowledge and skill repertoire for the changing world of the future. And an essential aspect of preparing for the future is having a futures mindset – scanning, analysing, evaluating and preparing for multiple futures. Instead of letting the "future happen to you," why not actively participate in creating the future?

Through this workshop, we would like to invite the attendees of this year's ANZAM's conference to participate in visioning the future of business education. This will be a futures thinking workshop based on the futures foresight work of James Dator (2002), Elise Boulding (1995), Michel Foucault (1984), P.R. Sarkar (1984), Graham Molitor (2004), Ivana Milojevic (2005) and Sohail Inayatullah (2008, 2015).

In this workshop, participants in the room provide the data input and the facilitator (Dr. Hafsa Ahmed alongside Dr. Justine Ferrer) will take the group through several exercises to enhance futures literacy using methods such as the futures triangle, emerging issues analysis, the futures wheel, causal layered analysis, scenario development, visioning, and backcasting (Inayatullah, 2022). From these methods, concrete outputs about alternative and preferred futures of business education would emerge. Through a step-by-step process, we anticipate moving the participants from today to a set of tomorrows and preferred futures.

The symposium's objectives are to:

- Share and gather insights into the role and future of management education
- Share and explore opportunities as to how management education can be designed to be future-ready.

The activities of the symposium are:

- Introduction for futures foresight pillars
- Facilitated brainstorming in groups
- Concluding comments and wrap up

Workshop leaders: Hafsa Ahmed (Lincoln), Justine Ferrer (Deakin)

Building on research in the classroom: Developing your impact as a management educator through scholarly journal publication

Understanding the distinctive focus of the main management education journals is vital in enabling potential authors decide the most appropriate outlet for their manuscript. Journals in this field are characterised by different methodological, philosophical, theoretical and practical orientations and traditions. Authors are therefore more likely to find success with publishing their work if they understand the background of each journal and how they might engage with previously published work.

Understanding also entails appreciation of the topics and areas where journal editors, reviewers and readers have an interest in seeing further research develop, and how work in these traditions is shaped for successful publication.

This workshop will help scholars to position their work thoughtfully in the overlapping spaces occupied by the different management learning and education journals, through highlighting key success (and failure!) criteria, helping participants learn from successfully published exemplar papers, and offering direct one-to-one feedback to potential authors on their draft papers or management education project ideas.

To accomplish these aims, this workshop brings together editors and associate editors of four leading journals in the field of management learning and education who can help participants understand how to find the right journal for their work, how to shape their paper to maximise their publication chances, and how to connect with researchers and readers to have impact.

A key part of the workshop is the chance to submit a full paper (ANZAM conference length) or research idea (5 pages) for one-to-one discussion with an editor, to help authors develop and target their specific project. This one-to-one feedback is optional; if you wish to take advantage of it, send your paper (which may be your conference paper or any other in the management education domain) to Stuart Middleton (s.middleton@business.uq.edu.au) by 1 December 2023.

Through presentations, panel Q&A and one-to-one feedback, this workshop will help participants to:

- Learn about the main journals in the management education space.
- Understand how to target the right outlet for their scholarly writing and education research projects
- Be informed about the specific criteria for publications to succeed at key outlets, including how to fit with the aims, the different kinds of contributions expected, and 'hygiene factors'
- Learn from the analysis of successfully published papers in each outlet
- Develop the benefits and impact of their management education research for educators, students or (future) managers
- Receive in-person, one-to-one feedback on research project ideas or draft journal papers, from editors of the leading journals in the field

Workshop leaders: Stuart Middleton (UQ), Paul Hibbert (St. Andrews), Todd Bridgman (VUW), Marissa Edwards (UQ)

Key Lessons from science-based open innovation: An eight-year journey addressing engagement and impact

Researchers across all disciplines are being pushed to engage and collaborate more actively with external stakeholders as part of their research. These new practices add to rather than replace existing academic outcomes and expectations. For science teams, this would include actively involving external stakeholders (such as industry or Māori businesses, organizations and communities) throughout the project. However, this practice is not typical of project teams, which tend to rely on existing social connections. Project teams are often restricted to single organizations, disciplines, experience and expertise due to having fewer external connections as well as organizational constraints on what, how much and who can be funded.

Breaking away from these entrenched practices requires doing science in a deliberately different manner, to address different meanings, skills and competences, infrastructure and 'materials'. The symposium will provide insights and suggestions for undertaking research differently. It will extend this to reflect on how business academics can achieve greater impact by reconsidering established practices and trialling new options for identifying and connecting to key stakeholders. For example, greater impact could result from developing and promoting policy implications of their research more actively and separately from academic publications. Achieving such practices and outcomes requires the development of human and relational capacities prior to and during projects.

- Why is this a problem? Who is it a problem for?
- indicate deliberately different perspectives taken on by SfTI and associated practices to address paradoxes typical in research projects and teams
(includes mission-led challenges and design, capacity development, project management, and best team formation so that greater external engagement, inclusion of Māori/early career researchers)
- summary of evolution of practices and deliverables during longitudinal project
- present benefits, learnings and insights related to engagement/collaboration with external stakeholders (before, during, at end of research projects)
- present best practice insights for co-design with Māori [decolonising approach]
- findings related to values-based innovation, particularly with respect to inclusion of early career researchers
- applying learnings to understand expanding impact beyond academic excellence

Workshop leaders: Katharina Ruckstuhl (Otago), Urs Daellenbach (VUW), Jarrod Haar (Massey), Sara Walton (Otago), Paula O'Kane (Otago), Jesse Pirini (VUW), David Brougham (Massey), Omid Aliasghar (Auckland)

From Participation to Partnership: the value proposition of researching with employee networks – a case study of a disability-based employee resource group (ERG) in the research project 'Getting on at Work: Progression and Promotion of Women with Disability in the Victorian Public Service'

This interactive discussion and workshop will pose the questions: what is the role of the collective voice through disability-based employee resource groups (ERGs) in fostering organisational diversity and inclusion? And how can research projects leverage these professional networks for shared outcomes? Participants will hear about the co-creation process with reflections from QUT researchers and the then VPS Enablers Network President and the workshop will share insights into vertical and horizontal alignment approaches for multi-partner research partnerships and a tool used to map, manage and maximise the dissemination and impact of the research.

The workshop is based on a recent research project 'Getting on at Work: Progression and Promotion of Women with Disability in the Victorian Public Service' led by the Queensland University of Technology (QUT) that explored the career experiences of women with disability, highlighting the enablers, barriers and inclusive practices central to their career progression and promotion opportunities in the Victorian public service (VPS). It centred the voices of participants and encouraged senior leaders and critical stakeholders in the VPS to consider how the lived experiences of women with disability could contribute to a review of current practices and the development of more inclusive career contexts. The research aimed to enable the VPS to achieve its vision to support people with disability to realise their full potential and provide a safe and inclusive environment for employees with disability.

The research project was supported by partnerships with the Victorian Public Sector Enablers Network, a disability-based employee resource group, and the Disability Leadership Institute, a professional community of practice for people with disability to build & support their leadership development.

'Getting on at Work: Progression and Promotion of Women with Disability in the Victorian Public Service' was funded by the Victorian Government through the Commission for Gender Equality in the Public Sector Research Grants Round 2022.

Overview:

- To provide a high-level summary of the research project 'Getting on at Work: Progression and Promotion of Women with Disability in the Victorian Public Service' and its findings.
- To provide a facilitated discussion of the workshop presenters of factors that supported the research project through a lens of a project 'post-mortem', including:
 - aligning to a common purpose
 - highlighting the opportunity of disability employee networks and other employee resource groups to researchers in recruiting participants,
 - understanding contextual uses of language and terminology through co-creation,
 - framing and presenting the research findings for a range of audiences,
 - dissemination of research findings into organisational and/or network processes, and
 - discussing the research project's impact at the organisational, practice/policy and individual levels.
- To demonstrate the value proposition of the collective 'lived experience' through disability employee networks (and other employee resource groups) through a case study and storytelling.
- To share a planning framework to maximise the dissemination and impact of research activities.

Workshop leaders: Jannine Williams (QUT), Maria Hameed Khan (QUT), Duncan Chew (VPSEN)

Examining best practices in measurement scale quality & demonstrating a straightforward solution - measureQ - using participants' data

This workshop is based on the following recently-published article: Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2023). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*. <https://doi.org/10.1007/s10490-023-09871-y>

Our overall aim in this workshop is to provide a best-practice reference for future authors, reviewers, and editors in reporting and reviewing the quality of measurement scales in empirical management studies using a simple R-based software package called measureQ. Moreover, in the second half of the workshop, participants will have the opportunity to see how measureQ can be implemented with their data. The issue that we solve is as follows.

Many constructs in management studies, such as perceptions, personalities, attitudes, and behavioral intentions, are latent constructs that are not directly observable. Typically, empirical studies measure such constructs using established scales with multiple indicators. Researchers commonly report the quality of these measurement scales based on Cronbach's alpha and confirmatory factor analysis results, including the model fit of the measurement model, significance tests of the factor loadings, and whether the correlation coefficients among latent constructs are significantly lower than unity. However, these results are usually inadequate and sometimes inappropriate as evidence for reliability, convergent and discriminant validity. For example, Cronbach's alpha is commonly reported but assumes equal item factor loadings, which is rarely the case. Moreover, researchers rarely report sampling errors for these psychometric quality measures.

In this workshop, we critically review current practices and recommend best practices in assessing reliability, convergent and discriminant validity based on multiple criteria and taking sampling errors into consideration. Then, we illustrate with numerical examples provided beforehand by participants the application of a specifically-developed R package, measureQ, that provides a one-stop solution for implementing the recommended best practices and a template for reporting the results. measureQ is easy to implement, even for those new to R. Those leaving the workshop should be ready and able to implement measureQ in their own work.

Workshop leaders: Gordon Cheung (Auckland), Helena Cooper-Thomas (AUT)
email: gordon.cheung@auckland.ac.nz

Generating impactful research through problematization: Strategies, techniques, and illustrations

Key for social scientists is to have something to say not only to academics but also to a broader audience, such as students, practitioners, and educated public. This requires an understanding of how to generate knowledge that are experienced as interesting and relevant in terms of new ideas and other forms of intellectual insights. However, most contemporary research tends to adhere to standardized methods and formulas, leading mainly to marginal contributions instead of more influential and ground-breaking research.

The aim of this workshop is to discuss and exemplify how academics can generate more interesting and impactful research through problematization. In other words, to be able to have something to say both academically and practically. The workshop consists of one 'seminar' and one 'practice' component: The seminar component will provide an overview of the (sad) state of management studies and outline a problematization methodology for generating more impactful research. In the practice component participants will apply the problematization methodology on actual research texts, as a way to generate more interesting and impactful research.

The main objective of this research symposium is to provide researchers with the necessary resources to develop research that is both interesting and impactful. Specifically, during the symposium, we will delve into how researchers can generate interesting and impactful research by employing the method of problematization. The seminar will cover the following topics:

- Discussing the factors that differentiate influential theories from others.
- Demonstrating how the commonly used method of "gap-spotting" in theory development typically falls short in leading to impactful research.
- Proposing Problematization as a more promising method to generate influential theories and providing a comprehensive explanation of this methodology.
- Providing concrete illustrations of how the Problematization method enables researchers to generate novel research questions that have the potential to produce interesting and ground-breaking research contributions

Workshop leader: Jörgen Sandberg (UQ), Alina Haider (VUW)

From the land of the long white cloud to the land of the long weekend: Findings from the Unilever 4-Day Work Week Trial

Flexible Work Arrangements have long been considered as a potentially mutually beneficial solution for organisations to support employees to manage work and non-work commitments. Most recently, the interest in one particular form of flexible work known as the 100-80-100 Four-Day Work Week (4DWW) has grown. To measure the longer-term impact of the 100-80-100 4DWW on key business and employee outcomes, as well as the processes that determine its successful implementation, the 18-month trial (December 2020–June 2022) of the 100-80-100 4DWW at Unilever New Zealand was evaluated. Using a mixed methodology research design, which included three online surveys of all employees (N=78) and 57 in-depth semi-structured interviews, this evaluation found that by the end of the trial, Unilever New Zealand had achieved strong business results, exceeding all business key performance indicators, including sales, market share, profit and overheads. Absenteeism was also significantly reduced, turnover was stable, and all other employee outcome metrics were stable or showed directional improvement.

In this workshop, attendees will benefit from the experience of the UTS academics who conducted the Unilever NZ 4DWW research as well as hearing from the Unilever executives involved in the implementation of the trial.

Alongside discussion of the trial results workshop attendees will gain an understanding of the barriers to implementation of the four-day work week, challenges in the implementation process and critical success factors.

As well as consideration of business and employee outcomes, a broader societal lens is also applied in the workshop. The drivers of interest in the 4DWW are examined and questions are asked around the current limitation of a benefit such as the 4DWW to skilled, permanent and educated workers. Will the 4DWW create a greater divide between those white-collar workers with permanent positions and unskilled workers in the gig economy? Is the 4DWW the future of work or a fad?

Attendees will have the opportunity to ask questions in a Q & A session during the workshop and will leave the workshop having advanced their knowledge of the 4DWW as a flexible work arrangement.

Workshop leaders: Bronwen Johns (UTS), Rowena Ditzell (UTS), Cameron Heath (Unilever)

ANZAM SPECIAL INTEREST GROUP (SIG) WORKSHOPS

Indigenous management for sustainable futures: What succession looks for indigenous management scholars

The workshop theme is succession among Indigenous management scholars, researchers, academics, and practitioners. The provides a forum for relationship building, facilitated dialogue and planning on what the Indigenous Issues Special Interest Group can and will do to advance the aspirations of Indigenous peoples through collaborative research, knowledge sharing, and engagement, with a particular focus on the issue of succession.

The objectives and activities of this workshop are to:

- Re-establish connections among Indigenous and non-Indigenous scholars, researchers, and students who have an interest in and support for Indigenous management research
- Host a panel of diverse speakers on the long term future of Indigenous management research and what values, practices, and frameworks can help to realise that future
- Facilitate small group discussions on desirable initiatives and actions to support the realisation of the long term future of Indigenous management research within ANZAM and with other groups
- Devise a plan and programme of activity for the Indigenous Issues Special Interest Group over the next three years and how to achieve this

Workshop Leaders: Jason Mika (Waikato), Mark Jones (Melbourne), Jarrod Haar (Massey), Ella Henry (AUT), Teresa Rose (Athabasca), Diane Ruwhiu (Otago)

Wellbeing At Work SIG Launch and Symposium

This symposium will a) showcase the world-leading and impactful wellbeing at work research that is being led by research centres across Australia and New Zealand and b) foster collaborations on exciting workplace health and wellbeing issues with the aim of fostering excellent and impactful research. Attendance will provide insights into some of the key challenges that ANZAM researchers are addressing through their innovative projects as well as highlighting some exciting emerging themes and projects.

- To launch our Wellbeing@Work ANZAM SIG - a national consortium of world-leading scholars in workplace health and well-being
- To showcase research accomplishments related to health and wellbeing at work as well and build a wider understanding of research accomplishments and priorities in workplace health and wellbeing.
- To bring together researchers in a manner that will facilitate research excellence as well as engagement and impact.
- To foster research collaborations in the field of workplace health and well-being with the aim of facilitating research excellence and national competitive funding success.

Workshop Leaders: 1. Rebecca Mitchell (Macquarie), Brendan Boyle (Newcastle), Jarrod Haar (Massey), Ashlea Troth (Griffith), Helena Nguyen (Sydney), Tim Bentley (ECU), Michelle Tuckey (UNISA), Helen DeCieri (Monash)

HMO: The HealthTech Nexus: What does technology mean for the future of healthcare?

The future of healthcare is intrinsically intertwined with the rapid evolution of technology. As cutting-edge advancements continue to reshape every aspect of our lives, they hold the promise of revolutionising healthcare delivery, patient outcomes, and the entire medical ecosystem. From precision medicine and telemedicine to artificial intelligence (AI) driven diagnostics and personalised treatments, technology's role in healthcare is poised to be transformative.

Technology offers healthcare many avenues to improve what we do and how we do it with considerable benefits at the personal, social, organisational, and economic levels. Consider precision medicine, whereby medical interventions are tailored to individual patients, accounting for their genetic makeup, lifestyle, and environmental factors. Similarly, the convergence of high-speed internet, mobile devices, and sophisticated communication platforms has enabled healthcare professionals to diagnose and treat patients remotely using telemedicine. The value of telemedicine was particularly apparent during the global pandemic. AI, particularly generative AI, is emerging as a game-changer in healthcare. Machine learning algorithms can analyse vast amounts of medical data to identify patterns, predict disease outcomes, and aid diagnosis. Furthermore, AI-driven chatbots and virtual assistants provide immediate medical information and guidance, enhancing patient education and engagement. The future of healthcare also envisions the integration of the internet of things (IoT) devices into medical practices. Wearable sensors and smart medical devices can continuously monitor vital signs, detect early warning signs of health issues, and transmit real-time data to healthcare professionals. Data analytics and interoperability are crucial aspects of the future healthcare landscape. The accumulation of vast amounts of patient data, when properly analysed and shared across healthcare systems, can lead to valuable insights for population health management, epidemiological studies, and drug development. Interoperable electronic health records systems ensure seamless communication between different healthcare providers, reducing medical errors, duplication of tests, and enhancing the continuity of care. Collectively, these innovations have the potential to redress health inequities that continue to compromise the wellbeing of equity groups.

Despite the aforesaid opportunities to improve healthcare, technology also comes with challenges and consequences, including those that are unintended and those that might emerge in time. Consider ethical and privacy concerns. As more data are generated and shared, cybersecurity breaches remain a real concern, and can erode public trust in technological innovations. Furthermore, there is a limited understanding of the implications for leadership, management, interprofessional care, as well as education and training.

This event will address what remains both an exciting and a contentious area in healthcare – namely, the use of technology. It invites conference delegates to critically consider the role of technology in healthcare. A panel discussion will be hosted to consider its benefits and challenges, with reference to: generative artificial intelligence; the opportunities for, and compromises to value-based healthcare; how it is implemented and sustained; its ethical use; and the implications for leadership, management, interprofessional care, as well as education and training. Following this, conference delegates will be invited to participate in a question-and-answer session.

Workshop leaders: Ann Dadich (WSU), Eric Ford (Alabama), Timothy Huerta (Ohio State), Lester Levy (AUT)

Advances in Mixed Methods Research Designs and MMR Notation Systems

The Workshop will provide an update on Advances in Mixed Methods Research Designs and MMR Notation Systems. Topics to be covered include innovations in MMR designs that better reflect rapidly changing business contexts, complex research problems, new advances in mixing of methodologies and the new extended MMR notation system which assists in the rigorous reporting of innovative and complex MMR studies. The Workshop will provide guidance for editors, reviewers, supervisors, examiners, researchers and HDR students alike. We encourage attendance to those who utilise MMR and want to take note of the recent advances, those new to or curious about MMR, supervisors and HDR students navigating their way through MMR and reviewers and journal editors.

Content to be covered includes:

- Innovations in MMR Designs
- MMR Designs that reflect multi-level analysis
- MMR Designs that reflect complexity
- Mixing of methodologies (E.g., Mixed Methods Action Research (MMAR), Longitudinal Mixed Methods (L-MMR), Mixed Methods Grounded Theory (MM-GT) and Case Study-Mixed Methods Research (CS-MMR & MM-CS)
- New Extended MMR Notation System

Workshop leaders: Roslyn Cameron (Torrens), Anneke Fitzgerald (Griffith)

