MOTIVATIONS, WORK-FAMILY ENRICHMENT AND JOB SATISFACTION:

A TWO STUDY SAME OF CEOs AND JUNIOR/SENIOR LEADERS

Two studies, (1) 386 junior/senior leaders and (2) 205 CEOs, investigated the role of Self Determination Theory (SDT) motivations and work-family enrichment towards leaders' job satisfaction, and a partial mediation model was found to best fit the data for both studies. In study one, the effects of self determined motivation dimensions on job satisfaction were fully mediated by work-family and family-work enrichment. However, the non-self determining dimensions of SDT motivations were directly and negatively related to job satisfaction and enrichment. In study two, self determining forms of motivation were positively related to work-family and family-work enrichment and job satisfaction, while only work-family enrichment was positively related to job satisfaction. The non-self determining dimensions of SDT motivations were negatively related directly to work-family enrichment and job satisfaction. Overall, the influence of motivations on the job satisfaction for both studies of leaders is better understood by including enrichment.

Keywords: self-determination theory, work-family enrichment, job satisfaction.

INTRODUCTION – SELF DETERMINATION THEORY

Self Determination Theory (SDT) is primarily concerned with how the *quality* of motivated action influences wellbeing outcomes (Ryan & Deci, 2000; Sheldon et al., 2004). According to SDT, motivation ranges along a quality continuum from (1) undertaking activities because they are inherently interesting (*intrinsic*); or (2) the leaders' own values and beliefs guide their motivation (*integrated*); or (3) the leader identifies with the importance of their role or organizations' values, or value of the activity being undertaken (*identified*). These are seen as self determining and autonomously engaged in and as such reflect high quality motivation (Gange & Deci, 2005). Low quality motivation involves undertaking activities for (4) ego enhancement - such as to gain external recognition or prestige (*introjected*); or (5) work for pay or to avoid punishment (*external*); and (6) amotivation because reasons for undertaking these activities stem from a need to satisfy something external to the self (e.g. recognition from others or to avoid punishment). Thus, motivation and action, if any, is externally induced. That is, it is controlled by influences outside of the self and hence are

non-self determined (Deci & Ryan, 2000). These non-self determined motivations are low quality motivations resulting in less beneficial outcomes for the individual.

INSERT FIGURE 1 ABOUT HERE

Self-regulation (i.e. autonomous and self determining or controlled and non-self determining self-regulation) is what underpins motivational quality. Self determined regulation garners greater personal and positive organizational outcomes. Self determined employees, for example, have greater commitment to their organizations, fewer turnover intentions, and less physical illness (Deci & Ryan, 2000; Gange & Deci, 2005; Richer, Blanchard & Vallerand, 2002). In spite of these findings, research in this area is limited (Tremblay, Blanchard, Taylor, Pelletier & Villeneuve, 2009) particularly in relation to all six forms of motivation and how this may vary by leadership level.

SDT research typically assesses only four dimensions of motivation due to the size constraints (typically excluding integrated regulation and amotivation; see Gange, Forest, Gilbert, Aubé, Morin, & Malorni, 2010). However, Deci and Ryan (2000) emphasize the importance of all six forms of motivation towards understanding wellbeing. Tremblayet al., (2009) following closely Deci and Ryan's (2000) assertions, validated the six dimensions of motivation within the workplace. We further suggest that these six discreet forms of motivation are likely to garner a finer grained analysis of leaders' wellbeing, especially across organizational levels (CEOs versus lower level leaders). As such, we use the six dimensions of SDT motivations: three self determined motivations (including intrinsic, integrated and identified) and three non-self determined motivations (including introjected, external and amotivation). Hence, overcoming previous limitations with SDT research, and extending understanding of SDT motivations towards leaders.

WORK FAMILY/FAMILY WORK ENRICHMENT

Simultaneously, calls for a greater understanding of the role and influences of employees 'whole lives' and not just their work lives has been made (Greenhaus & Powell, 2012; Haar & Roche, 2010). However, we argue that how this might apply to leaders' quality motivation and job satisfaction requires attention. Although there is a rich literature on work-family conflict which talks about the incompatibility between work and family and their detrimental consequences (Greenhaus & Beutell, 1985), focus on the positive side of the work-family interface, such as work-family enrichment,

highlights that potential positive synergy can exist between work and home (Greenhaus & Powell, 2006; Haar & Bardoel, 2008). While it has been asserted that enrichment remains empirically underdeveloped (Frone, 2003), the present study suggests enrichment might play an important role in understanding leaders' motivation-to-job satisfaction relationships.

Overall, this paper makes three contributions. Firstly, we extend the SDT research by examining each of the six dimensions of motivation towards leaders' job satisfaction. Secondly, we use two separate samples of leaders: (1) junior and senior leaders and (2) CEOs, in order to extend the understanding of the complex nature of job satisfaction towards different echelons of organizations. This further answers calls for greater analysis of outcomes across varying leadership levels (De Church, Hiller, Murase, Doty & Salas, 2010). Finally, we test the potential mediation effects of enrichment on the relationships between SDT motivation and job satisfaction and find strong support.

SDT MOTIVATIONS, JOB SATISFACTION & HYPOTHESIS

Job satisfaction is the most common method of assessing employee wellbeing (Judge & Klinger, 2008) and although broadly captures the degree to which a person is happy with their job, it is related to a number of important firm level outcomes such as turnover intentions, financial performance, leadership quality, product quality and employee satisfaction (Harter, Schmidt, Asplund, Killham & Agrawal, 2010). Furthermore, leaders are said to have a central role in influencing their employees and organizational outcomes (Harter et al., 2010). Job satisfaction is also related to an array of positive workplace behaviors such as greater job performance and pro-social and organizational citizenship behaviors (Judge & Klinger, 2008), and these are particularly salient in leadership influence.

We suggest in accordance with the SDT literature, self determined motivation dimensions are likely to create positive feelings within the leader, and thus be positively related to their job satisfaction. We also include identified regulation, as this has not been tested previously within SDT literature, towards job satisfaction of leaders. Alternatively, non-self determined motivation dimensions will likely leave the leader feeling restricted and controlled (albeit, at times, psychologically) and thus link negatively with job satisfaction. We also include amotivations within

this second hypothesis, in order to overcome limitations in previous SDT studies on motivation (Tremblay et al., 2009). This leads to our first set of Hypotheses.

Hypothesis 1: *High (a) intrinsic motivation, (b) integrated regulation, and (c) identified regulation, will be positively related to job satisfaction.*

Hypothesis 2: *High (a) introjected regulation, (b) external regulation, and (c) amotivation, will be negatively related to job satisfaction.*

MEDIATING EFFECTS OF ENRICHMENT

We suggest that work-family enrichment, as a more recent construct, may play a role in better understanding the motivations-to-job satisfaction relationship. Enrichment refers to the process whereby an employee's involvement in one domain is beneficial for functioning of another (Wayne, Grzywacz, Carlson & Kacmar, 2007) and enrichment can occur both within the workplace: work-family enrichment (WFE) or the home: family-work enrichment (FWE). Studies have shown that the beneficial nature of work and family roles is both distinct and bi-directional (Wayne, Randel & Stevens, 2006; Haar & Bardoel, 2008).

The positive links between WFE and FWE and job satisfaction have been supported (Carlson, Kacmar, Wayne & Grywacz, 2006) and a recent meta-analysis (McNall, Nicklin & Masuda, 2010) found job satisfaction as the most popular outcome tested in the enrichment literature. Furthermore, they stated that both WFE and FWE "had a positive relationship with job satisfaction" (pp. 388-389). As such, we expect enrichment to be positively related to job satisfaction.

Hypothesis 3: *High WFE will be positively related to job satisfaction*.

Hypothesis 4: High FWE will be positively related to job satisfaction.

Finally, we also suggest that given SDT motivation is a within-person theory and enrichment relates to something external and removed from the individual leader (e.g. occurrences in one domain crossing to another) that motivations are more likely to drive enrichment than vice versa. Our assertion is backed by a meta-analysis of the work-family literature (Eby, Casper, Lockwood, Bordeaux & Brinley, 2005) who classified motivation as an individual difference (with personality), and these types of constructs have been established as predictors of work-family dimensions (Allen, Johnson, Saboe, Cho, Dumani & Evans, 2012). As such, we suggest motivations are likely to

influence enrichment, and indirectly effect job satisfaction. In one of the few studies to explore similar variables, Karatepe and Tekinkus (2006) tested one direction of work-family conflict (work-to-family) and a global intrinsic motivation dimension towards job satisfaction and found both were significantly related, although no mediation test was conducted. While Senecal, Vallerand, and Guay (2001) focused on emotional exhaustion as an outcome, they found work motivation led to work-family conflict (albeit through another construct). Overall, we suggest that WFE and FWE will mediate the influence of SDT motivation dimensions towards job satisfaction.

Hypothesis 5: Work-family enrichment (WFE and FWE) will mediate the influence of SDT motivation dimensions on job satisfaction.

METHOD

Sample and Procedure

In study one; data were collected from over 250 organizations, spread across a wide regional location in New Zealand. Leaders were the target of this survey and a question was included in the front of the survey to confirm they were in a position of authority (junior or senior manager). A total of 386 surveys (from 500) were returned for a response rate of 77.2%. In study two (three months later), data were collected from a mail survey of 1300 New Zealand CEOs in firms with a minimum 50 employees. A total of 205 surveys were returned for a response rate of 15.8%. Both studies collected data in two waves. Survey one included the motivation and enrichment dimensions as well as demographic variables. Two weeks (study one) to four weeks (study two) later, survey two was administrated to the same participants and this contained the job satisfaction measure.

In study one, manager participants were on average 37.4 years old (SD=13), male (58%), married (59%), parents (54%), worked 39.7 hours per week (SD=13.4), and had job tenure of 5.7 years (SD=6.6). By industry, study one was 64% private sector, 30% public sector and 6% not for profit. In study two, CEO participants were on average 51.3 years old (SD=7.5), male (92%), married (96%), parents (91%), worked 54.2 hours per week (SD=8.2), and had job tenure of 7.4 years (SD=7.5). By industry, study two was 60% private sector, 32% public sector and 8% not for profit. Paired sample t-tests confirmed these groups were distinct: with study two (CEOs) being significantly older, and more likely to be male,

married, parents, and to work longer hours and have longer tenure than study one participants. There was no significant difference by industry.

Measures

Outcome variable:

<u>Job Satisfaction</u> was measured using 3-items by Judge, Bono, Erez and Locke (2005), coded 1=strongly disagree, 5=strongly agree. Respondents were asked to indicate how satisfied or unsatisfied they were with different features of their present job. A sample item is "I find real enjoyment in my work" (α =.79 study one, α =.82 study two).

Predictor variables:

Motivations were calculated using 18-items by Tremblay, Blanchard, Taylor, Pelletier and Villeneuve (2009), coded 1=does not correspond at all, 5=corresponds exactly. These items correspond to the six motivation dimensions (3-items each). Questions followed the stem "*Please indicate to what extent each of the following items corresponds to the reasons why you are presently involved in your work*". Sample items for each dimension are: "Because I derive much pleasure from learning new things" (Intrinsic Motivations, α =.87 study one, α =.77 study two), "Because it has become a fundamental part of who I am" (Integrated Regulation, α =.84 study one, α =.85 study two), "Because this is the type of work I chose to do to attain a certain lifestyle" (Identified Regulation, α =.81 study one, α =.73 study two), "For the income it provides me" (External Regulation, α =.81 study one, α =.79 study two), and "I don't know why, we are provided with unrealistic working conditions" (Amotivation, α =.81 study one, α =.72 study two).

Mediator variables:

Work-family enrichment (<u>WFE</u>) and family-work enrichment (<u>FWE</u>) were measured using 6-items from Carlson et al. (2006). The statements divided equally (3 each) between work-family and family-work dimensions, following the stems "My involvement in my work..." and "My involvement in my family...". Sample items are "Puts me in a good mood and this helps me be a better family member" (WFE, α =.92 study one, α =.91 study two) and "Helps me acquire skills and this helps me be a better employee" (FWE, α =.91 study one, α =.93 study two).

Measurement Models

To confirm the separate dimensions of measures, items were tested by structural equation modeling (SEM) using AMOS. Typically, SEM studies use a large number of goodness-of-fit indices, although recently Williams, Vandenberg and Edwards (2009) suggesting that some of these indices are meaningless such as the chi-square goodness-of-fit statistic (as a standalone measure of fit). They suggested the following goodness-of-fit indices: the comparative fit index (CFI, \geq .95), the root-mean-square error of approximation (RMSEA, \leq .08) and the standardized root mean residual (SRMR, \leq .10). The hypothesized measurement model and alternative models are shown in Table 1 for both studies.

INSERT TABLE 1 ABOUT HERE

Overall, the hypothesized measurement model fit the data best for both studies. To confirm this, the CFA was re-analyzed following the approach on testing comparison models by Hair, Black, Babin and Anderson (2010). Overall, the alternative models were both significantly worse than the hypothesized model, confirming the six dimensions of motivation, two dimensions of work-family enrichment and the job satisfaction outcome for study one and two.

Analysis

Hypotheses were tested using SEM in AMOS to assess the direct and meditational effects of the study variables.

RESULTS

Descriptive statistics for the study one and two variables are shown in Table 2.

INSERT TABLE 2 ABOUT HERE

For study one, Table 2 shows that overall, the self-determined motivation dimensions are all significantly correlated with each other (all p< .01), and with WFE, FWE, and job satisfaction (all p< .05), all in the expected direction (positive). Of the non-self determined motivation dimensions, introjected regulation is significantly and positively correlated with external regulation and amotivation and positively with WFE (all p< .01). With FWE, external regulation (r= .14, p< .01) and amotivation (r= -.12, p< .05) are significantly correlated with but in opposite directions, while both are significantly and negatively correlated with job satisfaction (both p< .05). Finally, WFE and FWE

are significantly correlated with each other (r=.49, p<.01) and both with job satisfaction (both p<.01).

For study two, Table 2 shows that overall, the self determined motivation dimensions are significantly correlated with each other (all p< .01) in the expected direction (positive), although intrinsic motivation is not significantly correlated with integrated regulation. Furthermore, intrinsic motivation is significantly correlated with WFE, FWE, and job satisfaction (all p< .01), while integrated regulation is only correlated significantly with WFE and job satisfaction (both p< .01), while identified regulation is only correlated significantly with FWE (p< .05). These are all in the expected positive direction. Within the non-self determined motivation dimensions, all are significantly correlated with each other (all p< .05), while amotivation is significantly and negatively correlated with job satisfaction (both p< .01), and external regulation is significantly and negatively correlated with each other (r= .37, p< .01) and both with job satisfaction (both p< .05). Overall, Table 2 shows support for Hypotheses 1a and 1b from both studies and 1c in study one only. Similarly, Hypotheses 2b and 2c is supported from both studies and Hypotheses 3 and 4 are supported from both studies.

Regarding testing the relationships, three alternative structural models were tested (the same for both studies), to determine the most optimal model based on the data. These were: (1) a direct effects model, where the SDT motivation dimensions predicted WFE, few and job satisfaction; (2) a full mediation model, where the SDT motivation dimensions predicted WFE and FWE, and in turn, these enrichment dimensions (alone) predicted job satisfaction; and (3) a partial mediation model, where SDT motivation dimensions predicted WFE, FWE and job satisfaction and WFE and FWE also predicted job satisfaction. The three structural models and comparisons between them (for both studies) are shown in Table 3.

INSERT TABLE 3 ABOUT HERE

We tested comparison models using the technique of Hair et al. (2010) and found that model 3 (partial mediation model) was superior to model 1 (direct effects model) and model 2 (full mediation model)

for both studies. As such, model 3 (partial mediation model) is superior to the other models, and is shown in Figure 2 (study one) and Figure 3 (study two).

INSERT FIGURES 2 AND 3 ABOUT HERE

Structural Models

Aligned with the recommendations of Grace and Bollen (2005), unstandardized regression coefficients are presented and Figures 2 and 3 shows the significant SDT motivation dimensions only. We see from Figure 2 (study one) that intrinsic motivation is significantly linked with FWE (path coefficient = 0.31, p < 0.001) as was external regulation (path coefficient = 0.15, p < 0.001).Towards WFE, integrated regulation (path coefficient = 0.14, p < 0.05) and identified regulation (path coefficient = 0.20, p < 0.05) were also both significantly related. Towards job satisfaction, external regulation (path coefficient = -0.14, p < 0.001) and amotivation (path coefficient = -0.22, p < 0.001) were significantly related. Furthermore, WFE (path coefficient = 0.11, p < 0.05) and FWE (path coefficient = 0.11, p < 0.05) were also significantly related to job satisfaction.

Figure 3 (study two) shows that intrinsic motivation is significantly linked with WFE (path coefficient = 0.44, p < 0.001) as was amotivation (path coefficient = -0.39, p < 0.1). Intrinsic motivation was also significantly linked with FWE (path coefficient = 0.47, p < 0.001). The direct effects towards job satisfaction came from integrated regulation (path coefficient = 0.21, p < 0.001), external regulation (path coefficient = -0.18, p < 0.1), and WFE (path coefficient = 0.25, p < 0.001).

Figure 3 also provides support for Hypothesis 5, confirms the partial mediation effects of WFE (both studies) and FWE (study one only) on the direct effects of SDT motivation dimensions on job satisfaction. Overall, the structural model shows that the SDT motivation dimensions accounts for modest amounts of variance in study one: WFE (15%) and FWE (12%) and slightly more in study two: WFE (23%) and FWE (19%). Overall, the amounts of variance are large for job satisfaction in study one (30%) and study two (46%). Furthermore, the partial mediation model shows the amounts of variance towards job satisfaction increased from 25% to 30% (a 5% increase) in study one and 39% to 46% (a 7% increase) in study two.

DISCUSSION

We now explore the major themes from the findings, specifically (1) self determined motivations, (2) non-self determined motivations, (3) work-family enrichment, (4) mediating effects, and (5) leadership differences, and we combine findings from both studies into each theme.

Self Determined Motivations: In study one (junior and senior leaders) we find support for motivation working through enrichment towards job satisfaction but only for self determined motivation. While all three self determined motivation dimensions were significantly correlated with WFE, FWE, and job satisfaction, the best fit structural model (partial mediation) supported a fully mediated relationship, where all three dimensions worked through both dimensions of enrichment and in turn, both enrichment dimensions predicted job satisfaction. As such, we find support for our argument that self determined motivation influences a leaders' enrichment from both their work and family domains, and these then in turn, lead to greater satisfaction with their job.

However, in study two (CEOs) we also find support for these effects, although not to the same extent as study one. Specifically, *intrinsic motivation* was positively related to work-family and family-work enrichment, integrated regulation did not relate to either enrichment dimension and was directly related to job satisfaction. Thus, for CEOs, this dimension of self determined motivation was not mediated by enrichment, although this was supported for intrinsic motivation. In both studies, *integrated regulation* was significant in understanding leaders' job satisfaction; although it was fully mediated by WFE in study one (junior/senior). This is an important finding as many studies in SDT motivations do not use the integrated dimension (Trembley et al., 2009). This supports the inclusion of integrated regulation within workplace research, especially of leaders. This was previously unknown, despite the importance of self-congruent values in the leadership literature (Spreitzer, 2006).

Identified regulation was not significant for the CEO study, but worked indirectly through WFE for junior and senior leaders. This could be because lower level leaders, unlike CEOs, have less chance of reflecting their personal values across organizational activities. So, we suggest that identified regulation may hold little influence on the job satisfaction and enrichment of CEOs as this reflects a lower level of value internalization, that CEOs will no longer need to invoke, yet, for lower level leaders *identifying* with values and beliefs of the organization or activity is important for their

wellbeing. As such, *indentified* motivation is important in understanding junior/senior leaders' job satisfaction. In summary, the three forms of self determined motivation *(intrinsic, integrated and identified)* all work through the work-family interface, improving job satisfaction for organizational leaders, suggesting that the higher quality (self determining) motivations work in combination with the work-family interface to enhance leader wellbeing towards their job.

Non-Self Determined Motivations: Across the two studies of leaders we found consistency in terms of *introjected* regulation, which was unrelated to both dimensions of enrichment and job satisfaction. One potential explanation is that introjected motivation is reliant on increasing ego and external evaluations of success and worth, and this may run counter to both family life (FWE) and personal feelings of job satisfaction. This is in stark contrast to Trembaly et al., (2009) who found that introjected regulation was related to job satisfaction within the military. As such for leaders at both levels, the external reliance and need for outwards approval (i.e. approval for ego) is not congruent with job satisfaction. In both studies *external* regulation was directly and negatively related to job satisfaction, and so, consistent with the SDT literature, it is likely those leaders who work only for pay or to avoid punishment feel constrained and uninterested in the work itself, decreasing their own job satisfaction. Interestingly, for study one, external regulation was *positively* related to FWE. We suggest that lower-level leaders whose motivation is driven by pay may still lead to greater FWE because the *pay itself* may provide for enhanced family life (e.g., higher quality vacations), and thus this type of non-self-determined motivation may actually be beneficial for lower-level leaders. Finally, in study one *amotivation* was negatively related to job satisfaction, while for CEOs, the relationship was indirect, being significantly and negatively related to WFE. As such, this suggests that CEOs who are amotivated take this lack of enthusiasm back into the home. This was previously unknown and again supports using the six dimensions of SDT motivation.

Work-Family Enrichment: Overall, we find strong support for WFE being positively related to job satisfaction for both studies and FWE for study one. Perhaps CEOs (study two) are so entwined and focused on their job, that the family-work domain is not sufficiently strong enough to benefit their feelings towards their job. While meta-analyses have supported both domains influencing job satisfaction (McNall et al., 2010), there is evidence in the literature of WFE being the dominant

predictor of job satisfaction, and thus the lack of support for FWE towards job satisfaction for CEOs is not unusual. Furthermore, as we note above, this may reflect the unique perspectives of the CEO towards job satisfaction.

Mediating Effects: Overall, the partial-mediation model was superior to the direct-effects and fullymediated effects for both studies. In particular, we find strong and consistent support for self determined motivations appearing to be better understood as working through work-family enrichment rather than as direct predictors of job satisfaction. In study one; self determined motivations appear fully mediated by enrichment, while partially mediated in study two, where integrated regulation directly influenced job satisfaction. Furthermore, both studies showed evidence of partial mediation, with non-self determined motivations working through WFE and FWE to influence job satisfaction, further supporting our mediated hypotheses.

Leadership Differences: The two studies also allow us to make some comparisons between the two groups of leaders: (1) junior and senior leaders and (2) CEOs. Overall, CEOs reported significantly higher levels of self determined motivation and significantly lower levels of non-self determined motivation, except for introjected regulation. They also reported significantly higher levels of job satisfaction but no difference towards WFE and FWE. This raises the question of whether having higher levels of self determined motivation marks one out as 'CEO-material' or do these types of motivations develop and change when one becomes a CEO and enjoys greater autonomy and freedom? While we find evidence of a significant difference, further research is required to understand what and how these differences develop. The one curious finding was CEOs reporting higher levels of introjected regulation, which relates to ego by positive external evaluations.

Limitations: The present study drew on a sample of leaders only, and while this sample is large and from a wide range of organizations and industries, it is still focused on a professional job type. Further exploration of this amongst other job types (e.g. blue collar workers) is desirable. While data collection method was cross-sectional and a limitation common to the OB literature, the collection of independent and dependent variables at separate times, and the use of SEM (Kenny, 2008) does limit the potential influence of common method variance. Our use of two differing and the overall commonality in effects found (a partial-mediation model) provides us with greater confidence in these findings.

REFERENCES

- Allen, T. D., Johnson, R. C., Saboe, K. N., Cho, E., Dumani, S., & Evans, S. (2012). Dispositional variables and work-family conflict: A meta-analysis. *Journal of Vocational Behavior*, 80, 17-26.
- Bono J. E., & Judge, T. A. (2003). Self-concordance at work: Toward understanding the motivational effects of Transformational leaders. *Academy of Management Journal*, 46, 554-571.
- Carlson, D. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. (2006). Measuring the positive side of the work–family interface: Development and validation of a work– family enrichment scale. *Journal of Vocational Behavior*, 68, 131–164.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation, *Psychological Bulletin*, 125(6), 627-668.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the selfdetermination of behaviour. *Psychological Inquiry*, 11(4), 227-268.
- DeChurch, L. A., Hiller, N. A., Murase, T., Doty, D., & Salas, E. (2010). Leadership across levels: Levels of leaders and their levels of impact. *The Leadership Quarterly*, 21(6), 1069–1085.
- Eby, L.T., Casper, W.J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980–2002). *Journal of Vocational Behavior, 66*, 124–197.
- Frone, M. R. (2003). Work-family balance. In J. C. Quick & L. E. Tetrick (Eds.).*Handbook of occupational health psychology* (pp. 143–162). Washington, DC: American Psychological Association.
- Gange, M., & Deci, E. L. (2005). Self-determination theory and work motivation. Journal of Organizational Behavior, 26(4), 331-362.
- Gange, M., Forest, J., Gilbert, M..H., Aubé, C., Morin, E.M., & Malorni, A. (2010). The motivation at work scale: Validation evidence in two languages. *Educational and Psychological Measurement*, 70, 628-646.

- Grace, J. B., & Bollen, K. A. (2005).Interpreting the results from multiple regression and structural equation models. *Bulletin of the Ecological Society of America*, *86*, 283-295.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. Academy of Management Review, 10(1), 76-88.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, *31*(1), 72-92.
- Greenhaus, J.H., & Powell, G.N. (2012). The family-relatedness of work decisions: A framework and agenda theory and research. *Journal of Vocational Behavior*, doi:10.1016/j.jvb.2011.12.007.
- Haar, J. M., & Bardoel, A. (2008). Work-family positive spillover predicting outcomes: A study of Australia employees. *Asia Pacific Journal of Human Resources*, 46(3), 275-289.
- Haar, J., & Roche, M. (2010). Family supportive organisation perceptions and employee outcomes: The mediating effects of life satisfaction. *International Journal of Human Resource Management*, 21(7), 999-1014.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate Data Analysis, 7thEd. New Jersey, USA: Prentice Hall.
- Harter, J. K., Schmidt, F. L., Asplund, J. W., Killham, E. A., & Agrawal, S. (2010). Causal impact of employee work perceptions on the bottom line of organizations. *Perspectives on Psychological Science*, 5, 378-389.
- Judge, T. A., & Klinger, R. (2008).Job satisfaction. Subjective wellbeing at work. In: The Science of Subjective Wellbeing. (ed) Eid, M. & Larsen, R.J. Guiford Press, NY.
- Judge, T. A., Bono, J. E., Erez, A., & Locke, E.A, (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology*, 90(2), 257–268.
- Karatepe, O.M., &Tekinkus, M. (2006). The effects of work-family conflict, emotional exhaustion, and intrinsic motivation on job outcomes of front-line employees. *International Journal of Bank Marketing*, 24(3), 173-193.
- Kenny, D. (2008). Reflections on mediation. Organizational Research Methods, 11(2), 1-6.

- Koestner, R., & Losier, G. F. (2002).Distinguishing three ways of being internally motivated: A closer look at introjection, identified and intrinsic motivation. In E. L. Deci & R. M. Ryan (Eds.). *Handbook of Self Determination Research* (pp. 101 121). Rochester. NY: University of Rochester Press.
- Locke E. A. (1969). What is job satisfaction? *Organization Behavior Human Performance*, 4 (November), 309–36.
- McNall, L. A., Nicklin, J. M., & Masuda, A. D. (2010). A meta-analytic review of the consequences associated with work–family enrichment. *Journal of Business Psychology*, 25, 381–396.
- Richer, S. F., Blanchard, C., & Vallerand, R. J. (2002). A motivational model of work turnover. *Journal of Applied Social Psychology*, *32*, 2089-2113.
- Senecal, C., Vallerand, R.J., & Guay, F. (2001). Antecedents and outcomes of work-family conflict: Toward a motivational model. *Personality and Social Psychology Bulletin*, 27(2), 176-186.
- Sheldon, K. M., Elliot, A. J., Ryan, R. M., Chirkov, V., Kim, Y., Wu. C., Demir, M., & Sun, Z. (2004). Self concordance and subjective well-being in four cultures. *Journal of Cross-Cultural Psychology*, 35(2), 209-223.
- Spreitzer, G. (2006). Leading to grow and growing to lead: Leadership development lessons from positive organizational studies. *Organizational Dynamics*, *35*(4), 305-315.
- Tremblay, M. A., Blanchard, C. M., Taylor, S., Pelletier, L. G., & Villeneuve, M. (2009). Work extrinsic and intrinsic motivation scale: Its value for organizational psychology research. *Canadian Journal of Behavioural Science*, 41(4), 213-226.
- Wayne, J.H., Grzywacz, J.G., Carlson, D.S., & Kacmar, K.M. (2007). Work-family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review*, 17, 63-76.

Wayne, J. H., Randel, A. E., & Stevens, J. (2006). The role of identity and work-family support in work-family enrichment and its work-related consequences. *Journal of Vocational Behaviour*, 69(3), 445-461.

Williams, L. J., Vandenberg, R. J., & Edwards, J. R. (2009). 12 Structural equation modelling in
management research: A guide for improved analysis. *Academy of Management Annals*, 3(1), 543-604.

		Мо	del Fit Indic	es		Model Differences				
Model	χ ²	df	CFI	RMSEA	SRMR	χ ²	∆df	р	Details	
			Study	l (Leaders)						
Model 1. 9-factor model	588.7	288	.95	.05	.06					
Model 2. 8-factor model	1186.1	296	.84	.09	.07	597.4	8	.001	Model 2 to 1	
Model 3. 5-factor model	1968.5	314	.71	.12	.13	1379.8	26	.001	Model 3 to 1	
			Study	2 (CEOs)						
Model 1. 9-factor model	400.9	288	.96	.04	.06					
Model 2. 8-factor model	843.6	296	.79	.10	.10	442.7	8	.001	Model 2 to 1	
Model 3. 5-factor model	1073.4	314	.71	.11	.13	672.5	26	.001	Model 3 to 1	

Table 1. Results of Confirmatory Factor Analysis for Study Measures

Model 1= Hypothesized 9-factor model: Three intrinsic motivations: intrinsic motivation, integrated regulation and identified regulation; three extrinsic motivations: introjected regulation, external regulation and amotivation; two enrichment dimensions: WFE, FWE; and job satisfaction. **Model 2**= Alternative 8-factor model: Three intrinsic motivations: intrinsic motivation, integrated regulation and identified regulation; three extrinsic motivations: introjected regulation and amotivation; two enrichment dimensions: WFE, FWE; and job satisfaction. **Model 2**= Alternative 8-factor model: Three intrinsic motivations: intrinsic motivation, integrated regulation and identified regulation; three extrinsic motivations: introjected regulation, external regulation and amotivation; combined enrichment dimensions: WFE, FWE; and job satisfaction.

Model 3= Alternative 5-factor model: Combined intrinsic motivations: intrinsic motivation, integrated regulation and identified regulation; combined extrinsic motivations: introjected regulation, external regulation and amotivation; two enrichment dimensions: WFE, FWE; and job satisfaction.

	Stuc	dy 1	Stu	dy 2									
Variables	М	SD	М	SD	1	2	3	4	5	6	7	8	9
Motivation:													
1. Intrinsic Motivation	3.7	.88	4.0	.64		.25**	.13	.12	26**	19**	.33**	.34**	.31**
2. Integrated Regulation	3.4	.99	3.7	.85	.56**		.23**	.18**	.14	04	.23**	.11	.32**
3. Identified Regulation	3.2	1.0	3.5	.80	.49**	.57**		.29**	.39**	.12	.07	.15*	.09
4. Introjected Regulation	3.1	1.1	3.3	.92	.35**	.37**	.44**		.26**	.15*	.03	.14	02
5. External Regulation	3.5	.96	3.2	.81	01	.04	.20**	.25**		.24**	13	.01	16*
6. Amotivation	1.9	.91	1.3	.48	10*	08	01	.26**	.08		23**	11	25**
Enrichment:													
7. WFE	3.3	.81	3.3	.72	.28**	.30**	.30**	.15**	.05	04		.37**	.43**
8. FWE	3.8	.73	3.9	.68	.25**	.12*	.12**	.05	.14**	12*	.49**		.18*
Job Outcome:													
9. Job Satisfaction	3.6	.70	4.2	.54	.29**	.31**	.26**	.10	13*	23**	.29**	.22**	

Table 2. Correlations and Means of Study Variables

LeadersN=386, CEOs N= 205 (top diagonal). *p<.05, **p<.01.

Table 3. Model Comparisons for Structural Models

Model Fit Indices												
Model	χ ²	df	CFI	RMSEA	SRMR	χ ²	Δdf	р	Details			
Study 1 (Leaders)												
1. Direct Effects Model	608.5	290	.94	.05	.06							
2. Full Mediation Model	644.9	294	.94	.06	.07	36.4	4	.001	Model 2 to 1			
3. Partial Mediation Model	588.7	288	.95	.05	.06	19.8	2	.001	Model 1 to 3			
						56.2	6	.001	Model 2 to 3			
			Stud	y 2 (CEOs)								
1. Direct Effects Model	436.9	291	.94	.05	.07							
2. Full Mediation Model	453.2	295	.94	.05	.08	16.3	4	.01	Model 2 to 1			
3. Partial Mediation Model	418.4	289	.95	.05	.07	18.5	2	.001	Model 1 to 3			
						34.8	6	.001	Model 2 to 3			

	Leaders	(n=386)	CEOs	CEOs (n=205)	
Variables	Μ	SD	Μ	SD	Difference
SDT Motivation Dimensions:					
Intrinsic Motivation	3.7	.88	4.0	.64	4.320***
Integrated Regulation	3.4	.99	3.7	.85	2.823**
Identified Regulation	3.2	1.0	3.5	.80	3.143**
Introjected Regulation	3.1	1.1	3.3	.92	2.680**
External Regulation	3.5	.96	3.2	.81	-4.261***
Amotivation	1.9	.91	1.3	.48	-8.401***
Enrichment Dimensions:					
WFE	3.3	.81	3.3	.72	-1.133
FWE	3.8	.73	3.9	.68	1.494
Job Outcome:					
Job Satisfaction	3.6	.70	4.2	.54	8.347***
*n < 05 $**n < 01$ $***n < 001$					

Table 4. T-Test for Differences in Study Variables between Leaders (study one) and CEOs (study two)

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

Figure 1: Motivation and Regulation Type (Adapted from Tremblay et al., 2009)



Figure 2.Final Structural Model Study 1 (Partial Mediation Effects)



Figure 3.Final Structural Model Study 2 (Partial Mediation Effects)



MOTIVATIONS, WORK-FAMILY ENRICHMENT AND JOB SATISFACTION:

A TWO STUDY SAME OF CEOs AND JUNIOR/SENIOR LEADERS

Maree Roche* Principal Academic Staff Member School of Business Waikato Institute of Technology Private Bag 3036 Hamilton, New Zealand Phone: +64 7 8348800 ext 8914 Email: maree.roche@wintec.ac.nz

&

Professor Jarrod M. Haar School of Management, College of Business Massey University (Albany) Private Bag 102904 North Shore City 0745 Mobile: (021) 902-711 <u>j.haar@massey.ac.nz</u>

*Corresponding and presenting author