

RESEARCH ARTICLE

Motivations, Work-Family Enrichment and Job Satisfaction: An Indirect Effects Model

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Self Determination Theory (SDT) recognises that people may experience their motivations as either coming from *within* themselves (autonomous) or from *outside* of themselves (controlled). Unlike traditional motivation processes, SDT makes distinctions between *underling regulatory* motivational processes. On one side, *amotivation* reflects a lack of any motivation towards work, whereas *external regulation* and *introjected regulation* reflect controlled motivation where they are controlled by external forces, such as work for pay or prestige. At the other end of the continuum, *identified regulation*, *integrated regulation* and *intrinsic motivation* reflect autonomous motivation where an employee is internally motivated towards their work (e.g. work activities being viewed as meaningful). The following study explores the six dimensions of motivation on a sample of 386 New Zealand managers towards work-family and family-work enrichment and job satisfaction using SEM.

The data fit a partial mediation model best. The model showed that autonomous motivation dimensions influenced job satisfaction only indirectly through enrichment rather than as a direct predictor. Intrinsic motivation was found to be significantly and positively related to family-work enrichment, while integrated regulation and identified regulation was also significantly and positively related to work-family enrichment. However, controlled motivation dimensions were found to both directly influence job satisfaction and enrichment dimensions. Amotivation was significantly and negatively related to job satisfaction, while external regulation was significantly and negatively related to job satisfaction and family-work enrichment. Both work-family and family-work enrichment positively influenced job satisfaction. Overall, the six motivation dimensions accounted for moderate amounts of variance towards family-work enrichment (12%) and work-family enrichment (15%), while a sizeable 25% job satisfaction. When enrichment is included, the model accounts for 30% of the variance towards job satisfaction. Overall, motivation influenced enrichment and job satisfaction as expected, with motivation influencing job satisfaction both directly and indirectly through enrichment dimensions. This study shows the importance that motivation can play towards enhancing enrichment and job satisfaction at least amongst managers.

Keywords: work-family enrichment, motivation, job satisfaction, mediation, SEM.

Introduction

Managing the interface between work and family remains a central challenge for employees and employers (Valcour, 2007). There is a rich literature on work-family conflict, which talks about the incompatibility between work and family and their negative consequences on individual's health and organizational performance (Greenhaus, & Beutell, 1985). However, recently a growing number of work-family researchers have made efforts to focus on positive side of the work-family interface, referred to as work-family enrichment (Greenhaus & Powell, 2006; Haar & Bardoel, 2008), and evidence suggests that synergies between work and family exist (Haar & Bardoel, 2008). Furthermore, researchers suggest that this enrichment version of work and family is related to satisfaction outcomes (e.g., Stewart & Barling, 1996). Unfortunately, relative to conflict, enrichment remains conceptually and empirically underdeveloped (Frone, 2003).

Greenhaus and Powell (2006) suggested that the work family interface may produce positive outcomes for the individual, and defined work-family enrichment (WFE) as “the extent to which experiences in one role improves the quality of life in the other role” (p.72). Enrichment is gained when a positive experience at work (or home) is transferred into the other domain, creating additional positive outcomes. Although previous research has explored parents overall motivation for parental or work activities (Senecal, Vallerand and Guay 2001), research in enrichment has not yet assessed how the intrinsic or meaningful nature of ones work influences enrichment and subsequent wellbeing.

Intrinsic motivation is defined as the engagement in an activity for its own sake, for the satisfaction and enjoyment experienced from undertaking the activity in itself (Gagne & Deci, 2005). An intrinsically motivated employee is fully interested and engaged in the experiences they gain while working. Alternatively, extrinsic motivation is concerned with undertaking an activity in order to obtain an outcome that is separate to the *activity*. Hence,

extrinsically motivated employees would put effort into their jobs to obtain pay, or better their status, or enhance their own self esteem (Vallerand, 1997; Koestner & Losier, 2002, Baard et al., 2004). Overall, as intrinsically motivated behavior is driven by a person's interest in an activity itself, is autonomous. However, extrinsic motivation can vary in the degree to which it is autonomous versus controlled externally from the person (Deci and Ryan 2000). Thus, according to SDT motivation theory, motivation ranges from intrinsic to extrinsic and the *reasons* for acting this way range along a continuum. The present study assesses the implications of motivation type (from intrinsic to extrinsic) on employee enrichment, towards employee job satisfaction.

SELF DETERMINATION THEORY AND MOTIVATION

SDT is a motivation theory based on the premise that people actively seek opportunities to develop their fullest potential (Deci & Ryan, 2000; Greguras & Diefendorff, 2009). SDT assesses the type and nature of motivation, and provides a *within person* assessment of motivation, ranging from intrinsically motivated to amotivated. Each of these is discussed below, and represented in Figure 1.

Insert Figure 1 about here

Intrinsic motivation refers to engagement in an activity, as the activity itself provides for enjoyment, meaning and interest - hence it relates to the nature of the job (or task) itself (Gagne & Deci, 2005). Alternatively, extrinsic motivation addresses motivation that is undertaken to obtain something, like a reward, that is separate to the job itself. Hence, extrinsically motivated employees would put effort into their jobs to obtain pay, or better their

status, or enhance their own self esteem (Vallerand, 1997; Koestner & Losier, 2002, Baard et al., 2004).

Initially, SDT drew from *Cognitive Evaluation Theory* (CET) to describe the basis by which individuals sought autonomous activities and goals, or ways in which these were thwarted and controlled by the external environment (Gagne & Deci, 2005). CET aimed to demonstrate that contingent, tangible rewards, and other such *extrinsic* factors, such as competition and evaluations, have detrimental implications for the perusal of intrinsic activities such as creativity, cognitive flexibility and problem solving (Deci & Ryan, 1985). Hence, CET highlighted the importance of autonomy on intrinsic motivation, and the thwarting of motivation by external controls (such as rewards). However, CET was limited by a number of factors such as many activities in life that people undertake (such as work), are not always inherently interesting but are done for other reasons (such as work for pay) (Gagne & Deci, 2005). Furthermore, CET assumed *no connection* or meeting of intrinsic motivation and extrinsic motivation and that managers, for example, would have to focus on one or the other (Gagne & Deci, 2005).

Given these limitations, SDT incorporated CET into a much broader framework which includes intrinsic motivation which is autonomously 'regulated' by the person as they work towards their goals, as well as a range of external and controlled motivators. Generally, SDT recognises that people may experience their motivations to undertake activities, such as work, as coming either from *within* (intrinsic) or from *outside* (extrinsic) of themselves. The former type of experience has been labelled 'internal locus of causality' and the corresponding motivational forces have been called 'autonomous or self-determined motivation' (Chirkov et al., in press). Alternatively, if people experience these forces from outside of their selves, this is referred to as 'external locus of causality' and is accompanied by a 'controlled motivation' (refer Figure 1).

Therefore, SDT postulates that intrinsic or extrinsic motivation differ in terms of the *underling regulatory* processes and assessments a person makes about goal directed behaviour, and their ability to reach their goals within certain contexts. Unlike traditional work motivation theories that approach motivation from a between-person perspective, that usually emphasises individual differences in motivation (Latham & Pinder, 2005) or consider motivation from the degree to which individuals are motivated (high or low) as a predictor of their optimal functioning (e.g., Vroom, 1964), SDT considers optimal functioning not only to be determined by the strength (or quantity) of motivation, but also by the type (or quality) of motivation. This is because SDT suggests that behaviours can be characterized in terms of the *degree* to which they are autonomous versus controlled. As motivation is more autonomous it is *internalised* within the person, creating better outcomes (reflecting motivational quantity), and, since it is *internalised*, motivated action presents a reflection and integration of the *self*, and as such reflects higher quality in motivation (Gagne & Deci, 2005). Furthermore, autonomous motivation *and* controlled motivation are both *intentional* actions, and together they stand in contrast to amotivaton, which involves a lack of intentional motivation (Gagne & Deci, 2005; Deci & Ryan, 2000). Therefore, from an SDT perspective it is not whether motivation towards reaching ones (work) goals that is intrinsic or extrinsic that is the most crucial, but the degree to which the person reflectively and *intentionally* moves towards, and *integrates*, within themselves the activity.

SDT researchers have standardized the experience of the autonomous and controlled forms of motivation along five types of motivational regulations (Deci, Connell & Ryan, 1989), these are explained below:

1. *External regulation* describes the experience of being forced to do something through rewards, punishments or direct coercion. Examples of external regulation are 'I work because my supervisor is watching me' and 'I work to get paid'.

2. *Introjected regulation* refers to the experience of being driven by the (internalised) expectations of others. Examples of introjected regulation include contingent self esteem and ego involvement, which pressures people to undertake activities in order to feel self worth (e.g. I work so as to become a CEO, and hence having higher status than those around me). Introjected regulation differs from external regulation, in that the regulation towards the activity is within the person, however, it is relatively controlled by (perceived) external pressures to conform. This is because it represents the internalisation and actions based on others (perceived) expectations. For example, a leader may gather others' approval of their style or decision making so as to engage in their ego enhancing motivations (i.e. everyone tells me I made a great speech/decision; hence I am a great leader).

(Both extrinsic regulation and interjected regulation are *controlled* forms of regulation).

3. *Identified regulation* relates to value-based acting. With identified regulation a person is both being autonomous in their actions (rather than controlled) though they are still extrinsically motivated. Hence, with identified regulation, people feel greater freedom and volition because the behaviour is more congruent with their personal goals and identities. Thus, they perceive an internal locus within the activity, and this reflects an aspect of themselves. For example, servant based leadership would suggest that a leaders role is to undertake to remove all barriers for employee success (Greenleaf, 1998), hence leaders may end up performing tasks they don't enjoy to free up employees to focus on tasks they do enjoy. Therefore, a service based leader, would feel relatively autonomous while performing such task (e.g. filing) even though the activities are not intrinsically interesting (Gagne & Deci, 2005). Hence the person is acting with a degree of autonomy, yet is extrinsically motivated.

4. *Integrated regulation* refers to the decision to act in a certain way, based on the reflection of one's needs, goals, values, and constraining circumstances. With integrated regulation people have the full sense that the behaviour is an integral part of who they are, and stems from their sense of self and thus is self-determined (Gagne & Deci, 2005). This is the fullest type of internalisation, which allows extrinsic motivation to be truly autonomous or volitional, as it involves the integration and identification with other *aspects* of oneself. Therefore the employees other interests and values are integrated into the self and motivation regulation. For example, if integrated, the leader above would not only identify with the importance of the activities in order to maintain their employees interest and wellbeing, but regulation of the activities would be integrated with other aspects of their job and life as well (Gagne & Deci, 2005). Thus it would be the notion of "service", that is more central to their identity and they would be more likely to act in ways that are consistent with serving people more generally, hence they could come to *appreciate* the importance of doing uninteresting activities (Gagne & Deci, 2005).

Integrated regulation is theorized to represent the most developmentally advanced form of extrinsic motivation. However, integrated regulation does not become intrinsic motivation but is still considered extrinsic motivation (even though it is an autonomous form of it) because the motivation is characterised not by the person being interested in the activity, but rather by the *activity being instrumentally important for personal goals*. In short, intrinsic motivation, identified and integrated (extrinsic) motivation, are *three different types* of autonomous motivation (Deci & Ryan, 2000). Intrinsic motivation is explained below.

5. SDT researchers distinguish *intrinsic motivation* as another type of self-determined motivation, because intrinsic motivation is not based on reasoning and reflections

about being in a *situation*, nor how important this is to a person's goals. Intrinsic motivation is instead generated by *unconditional* curiosity, interest, and the enjoyment of the activity *regardless* of rewards and outcomes that may follow. Hence in a leadership position, it would interest and enjoyment in engaging staff or solving complex problems that motivated the leader, not the role, nor compensation of the leadership position.

Overall intrinsically motivated behaviour, which is driven by a person's interest in an activity itself, is autonomous. However, as stated, an important aspect of SDT is the notion that extrinsic motivation can vary in the degree to which it is autonomous versus controlled. Deci and Ryan (2000) found that intentional behaviour can be chosen freely or it can be chosen because of internal or external constraints or controls. Thus, individuals' *reasons* for acting range on a continuum from complete control by reward or punishment (e.g. I go to work in the morning so I am not fired) to full integration and internalisation (e.g. I stay late and help a co-worker because I believe that the what we do is important) to intrinsically motivated (e.g. I do this work as I love it – it's exciting, interesting etc). Although studies have confirmed the undermining role of pursuing extrinsic motivation (Deci, Koestner & Ryan, 1999: 2001; Ryan & Weinstein, 2009), research surrounding this area remains contentious (refer to Cameron, Banko & Pierce, 2001 for a meta analysis) particularly in relation to job complexity (such as a leaders role), therefore, according to SDT, extrinsic motivation is not necessarily negative, as long as the reason underlying the behavior is internalized so that it becomes autonomous in executing the activity (Van den Broeck et al., 2008).

Further the differentiation between the types of extrinsic motivation “must not be considered as a stage theory” (Gagne & Deci, 2005 p. 337). Individuals can integrate

different behaviors to various degrees and can at any point in time internalize behaviors that were not assimilated previously. Moreover, the self regulation aspect of motivation has attracted recent interest as a *within* person motivation theory on its own, as it recognises the differences in motivation based on ones regulatory processes and goals in relation to the work environment (Lord, Diefendorff, Schmidt & Hall, 2010).

In summary, SDT is one of the few psychological theories that directly address the issue of the autonomous and self regulation of people's motivation (Gagne & Deci, 2005) *and* the consequences this type of regulation has for health, wellbeing, and general functioning (Deci, Koestner & Ryan, 1999), as further outlined below. In reviewing the literature in which extrinsic to intrinsic motivation is explored, overwhelmingly, intrinsic motivation is seen as superior, not only in today's work context and workplaces, but in terms of life satisfaction and overall wellbeing of employees (Greguras & Diefendorff, 2010). As a micro level theory of motivation in Human Resource Management studies, intrinsic motivation has been found to moderate the relationship between both perceived empowerment and perceived information sharing, with regard to their relationship with work performance, affective commitment and turnover intentions within organisations (Kuvaas & Dysvik, 2010).

Intrinsic motivation also moderated the relationship between work performance and training opportunities (Dysvik & Kuvaas, 2008), suggesting that best practice involves autonomous and empowering work, though this remains untested for leaders specifically. Autonomous motivation has been associated with a number of outcomes including active information seeking (Koestner & Losier, 2002), goal attainment (Sheldon & Elliot, 1998), enhanced performance (Amabile, Goldfarb & Brackfield, 1990; Baard et al., 2004), and increased wellbeing (Ilardi et al., 1993). Controlled motivation has been associated with inconsistent striving towards goals and vulnerability to persuasion (Koestner & Losier, 2002),

and impaired performance and persistence because of concentration difficulties (see Vallerand, 1997 for a review).

According to SDT, adopting an autonomous versus controlled regulation style yields positive effects in terms of higher wellbeing and better performance (Deci & Ryan, 2000; Richer, et al., 2002). With respect to the work context, being autonomous compared to controlled regulated for one's job has been found to relate positively to job satisfaction, life satisfaction, feelings of professional efficacy, engagement, employee commitment and general mental health, whereas it is negatively related to emotional exhaustion, cynicism, burnout and turnover intentions (Bakker, Schaufeli, Leiter & Taris, 2008; Meyer, Becker & Vandenberghe, 2004; Fernet, Guay & Senécal, 2004; Milette & Gagne, 2008; Richer et al., 2002; Houkes, Jansses, De Jong & Bakker, 2003; Judge, Bono, Erez & Locke, 2005; Houkes, Janssen, De Jonge & Nijhuis, 2001). Thus, it is related to a high number of beneficial outcomes.

Autonomous versus controlled regulation has also been seen as a personal resource that helps one to shape the work environment, as highly autonomously motivated employees make use of job control, as defined by Karasek (1979) as encompassing the nature of the job and the context of the job, to reduce the health impairing effects of job demands (Fernet et al., 2004). Fernet et al. (2004) found that in relation to low intrinsically motivated employees, those who are less inclined toward autonomous actions, job control appeared to have little value in terms of stress reduction, when faced with high job demands. Hence, in that study job control mattered less than motivational regulation, in stress reduction for employees. Within the context of career exploration, being intrinsically rather than extrinsically motivated is associated with less career indecisiveness, reduced procrastination in job seeking, and enhanced career motivations and exploration (Quigley & Tymon, 2006; Senécal et al., 2001; Guay, Senécal, Gauthier & Fernet, 2003; Guay, 2005). Higher intrinsic rather

than extrinsic motivation has been found to aid learning, knowledge transfer learning and enhance management training effectiveness (Dsyvik & Kuvaas, 2008). Lin, Hung and Chan (2009) examined the use of extrinsic rewards on knowledge sharing and found that extrinsic rewards did not encourage knowledge sharing, however intrinsically motivated individuals were more likely to engage in this activity within organisation.

Intrinsic motivation has also been researched within the leadership literature (Bono & Judge, 2003; Ilies, Morgeson & Nahrgang 2005). Kuchinke, Cornachione, Oh and Kang (2010) in a study across three countries, found that an intrinsic work orientation was particularly useful for buffering stress for mid-level managers. Intrinsic motivation has been associated with positive leadership characteristics (Cartwright & Holmes, 2006; Ilies et al., 2005) and DiLello and Houghton (2006) viewed intrinsic motivation as key to self leadership, creativity and innovation. Richer and Vallerand (1995) found that the way supervisors interact with employees influences their own intrinsic to extrinsic motivation, while Bono and Judge (2003) found that leaders influence the self concordant goals (and hence autonomous goals) of employees. Furthermore, it was found that leadership goals influence the goals sought by employees, and that self concordant goals lead to increases in job satisfaction and organizational commitment in employees.

In summary, SDT holds a nuanced view on the interplay between intrinsic and extrinsic motivation as a within-person theory of motivation (Deci & Ryan, 2000). As such, Lord et al. (2010) suggested that greater understanding self regulation and motivation may be a key factor to modern organisational success. The literature suggests that superior performance and wellbeing results from greater autonomous motivation, especially intrinsic motivation. Although the literature suggests enhanced work and wellbeing outcomes, and specifically in relation to leadership efficacy (including employee (positive) outcomes) is promising, little research has focussed on the nature of a person's motivation towards work-

family outcomes, and specifically towards the newly emerged research focus on work-family enrichment.

WORK-FAMILY ENRICHMENT

Greenhaus and Powell (2006) suggested that the work family interface may produce positive outcomes for the individual. For example, the workplace can positively influence an employee's performance in their family role, and this is called work-family enrichment (WFE). Alternatively, positive experiences in the family role may increase employees coping strategies, resulting in increased efficiency and work productivity, and is termed family-work enrichment (FWE) (Wayne et al 2004). Development of enrichment has been spurred by the deficiencies of conflict theory which fails to recognize the capacity of work and family domains to have positive interdependencies (Greenhaus & Parasuraman 1999). Greenhaus and Powell (2006) suggested that there could be three fold benefits of enrichment leading to other positive outcomes. These benefits are (i) satisfaction with work and family roles leading to overall increases of satisfaction and well being - including physical and psychological health and relationship satisfaction (ii) the potential buffering of negative effects in one role through the compensatory effects achieved by way of involvement in both work and family roles, and (iii) positive outcomes in a role through enhanced positive experiences in the other role.

Drawing from established conflict research, the transferring of experiences between roles supports the notion that enrichment is bi-directional and distinct (Wayne, Randel & Stevens, 2006) and that experiences in work and family domains can provide an individual with resources which improves performance in the other domain (Grzywacz & Marks 2000) and satisfaction with work and family roles have been found to have additive effects on happiness, life satisfaction, and perceived quality of life (Greenhaus & Powell 2006).

Empirical findings also suggest that involvement in multiple roles can improve psychological and mental health by buffering negative effects such as reduced stress, and have additive and positive influences on relationships, family and life satisfaction (Wayne et al., 2006; Haar & Bardoel, 2008; Beutell & Wittig-Berman, 2008). Moreover, individuals who experience enrichment benefits from work and family may be better able to maximize multiple roles and demanding work and family environments (Boyar & Mosley, 2007). Researchers have demonstrated that both WFE and FWE have been found to be positively connected to individual's mental and physical health (Haar & Bardoel, 2008), family functioning (Grzywacz & Marks, 2000) as well as towards job outcomes such as high job satisfaction (Beutell & Wittig-Berman, 2008) and low turnover intention (Haar & Bardoel, 2008; Wayne et al., 2004, 2006). Nonetheless, studies of job motivations have yet to assess their influence on work-family and family-work enrichment, and the present study seeks to extend the literature by testing these relationships with job satisfaction.

JOB SATISFACTION

Locke (1969) defined job satisfaction as “the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values” (p. 316). A meta-analysis by Tait, Padgett and Baldwin (1989) found a strong correlation between job satisfaction and life satisfaction, and another meta-analysis (Thoresen, Kaplan, Barsky, Warren, & deChermont, 2003) found job satisfaction was related to higher positive affect and lower negative affect. Furthermore, other research has found that job satisfaction is positively associated with happiness (Michalos & Orlando, 2006; Weaver, 1978). As such, job satisfaction, while focusing on the workplace and specifically ones' job, is related to major types of positive outcomes.

Numerous factors have been well explored towards job satisfaction, for example within the personality traits literature, achievement motivation has been frequently related to employee work attitudes (Poulin, 1994). Grant (2008) found intrinsic motivation was significantly correlated to job satisfaction, while Elias, Smith and Barney (2011) found intrinsic and extrinsic motivations were both significantly related to job satisfaction. However, Lu (1999) found only intrinsic motivation significantly related to job satisfaction and extrinsic motivation was not. Huang and Van de Vliert (2003) in a study of almost 100,000 employees from 41 countries found both intrinsic motivations and extrinsic motivations predicted job satisfaction, although they stated “the relationship between intrinsic job characteristics and job satisfaction is stronger in richer countries, higher social security countries, more individualistic countries, and countries with a smaller power distance culture” (p. 172). Furthermore, they stated “while the relationship between extrinsic job characteristics and job satisfaction remained nearly constant across countries” (p. 174).

Related to SDT, Gagné and Deci (2005) asserted that high “intrinsic motivation, and full internalization of extrinsic motivation” (p. 346) is likely to enhance job satisfaction. They cite a number of studies that have found links between motivation and job satisfaction (e.g. Ilardi, Leone, Kasser & Ryan, 1993; Shirom, Westman & Melamed, 1999). They stated “overall, autonomous motivation is preferable in organizations because even with dull, boring jobs there is an advantage to autonomous motivation in terms of job satisfaction” (p. 347). Lam and Gurland (2008) tested a causal model of motivation and job outcomes, stating “consistent with self-determination theory (SDT) and with our hypotheses, we found that autonomy orientation positively predicted self-determined work motivation, which in turn predicted both job outcomes, namely job satisfaction” (p. 1114). However, one issue with this literature is the use of ‘global’ measures of intrinsic or extrinsic motivations, rather than narrowing down specifically to the six dimensions referred to in the SDT literature.

While the links between motivations and job satisfaction are established, there are also well established links between work-family dimensions and job satisfaction. In their meta-analysis, Kossek and Ozeki (1998) found the relationship between work-family conflict and job satisfaction was “strong and negative across all samples: People with high levels of conflict tend to be less satisfied with their jobs” (pp. 141-144). Allen, Herst, Bruck and Sutton (2000) reported in their meta-analysis that work-family conflict was highly related to job satisfaction, and consistently overview studies report that “job satisfaction is the most studied outcome in the work-family literature (Eby, Casper, Lockwood, Bordeaux & Brinley, 2005; Allen et al., 2000).

However, while job satisfaction has been well explored in work-family conflict literature, there has been much less study of job satisfaction from enrichment. The few studies have found WFE and FWE positively related to job satisfaction (Carlson, Kacmar, Wayne & Grywacz, 2006; Hanson, Hammer & Colton, 2006). However, while Hanson et al. (2006) found both dimensions of enrichment related to job satisfaction, Wayne, Musisca and Flesson (2004) found that only WFE positively related to job satisfaction. In their meta-analysis, McNall, Nicklin and Masuda (2010) tested the outcomes associated with work-family enrichment and found studies of job satisfaction were the most popular in the enrichment literature. Furthermore, they found both WFE and FWE “had a positive relationship with job satisfaction” (pp. 388-389).

Overall, the present study suggests that intrinsic motivations will be positively related to job satisfaction and work-family and family-work enrichment, due to the high relatedness between these dimensions. This is supported by Tremblay et al. (2009) who found the three individual dimensions of intrinsic motivation were positively related to job satisfaction. Furthermore, Tremblay et al. (2009) found introjected regulation was positively related to job satisfaction, while amotivation was negatively related. As such, we suggest the intrinsic

motivation dimensions and introjected regulation will be positively related to job satisfaction and enrichment, while external regulation and extrinsic motivation will be negatively related to job satisfaction and enrichment. Furthermore, given the proximity of these relationships we suggest that work-family enrichment will mediate the influence of motivation towards job satisfaction, as such, indicating that motivation influences job satisfaction working through enrichment.

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

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

Hypothesis 3: WFE and FWE will mediate the relationship between motivation dimensions and job satisfaction.

METHOD

Sample and Procedure

Data were collected from over 250 organizations, spread across a wide regional location in New Zealand. Supervisors and managers 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 (supervisor or manager). A total of 386 surveys (from 500) were returned for a response rate of 77.2%. Survey one included items relating to the six dimensions of aspirations, as well as demographic variables. Two weeks later survey two was administrated to the same participants (containing the job satisfaction measure). On average, the participants were 37.4 years old (SD=13), 58% were male, married (59%), parents (54%), and union members (12%). Respondents worked 39.7 hours per week (SD=13.4), had job tenure of 5.7 years (SD=6.6) and organizational tenure of 9 years (SD=9.3).

Measures

All reliability scores were above $\alpha = .70$ and are shown in table 2.

Outcome variable:

Job Satisfaction 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”.

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), “Because it has become a fundamental part of who I am” (Integrated Regulation), “Because this is the type of work I chose to do to attain a certain lifestyle” (Identified Regulation), “Because I want to be a “winner” in life” (Introjected Regulation), “For the income it provides me” (External Regulation), and “I don’t know why, we are provided with unrealistic working conditions” (Amotivation).

Mediator variables:

Work-family enrichment (WFE) and family-work enrichment (FWE) 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) and “Helps me acquire skills and this helps me be a better employee” (FWE).

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.

Insert Table 1 about here

Overall, the hypothesized measurement model fit the data best. 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.

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 variables are shown in Table 2.

Insert Table 2 about here

Table 2 shows that overall, the intrinsic dimensions of motivation are all significantly correlated with each other (all $p < .01$), and with WFE, FWE, and job satisfaction (all $p < .05$). Furthermore, the intrinsic motivation dimension is significantly correlated with amotivation ($r = -.10$, $p < .05$). Introjected regulation is significantly correlated with external regulation and amotivation, and WFE (all $p < .01$), while external regulation and amotivation are both significantly correlated with FWE and job satisfaction (all $p < .05$). Finally, WFE and FWE are significantly correlated with each other ($r = .49$, $p < .01$) and both with job satisfaction (both $p < .01$).

Regarding testing the relationships, three alternative structural models were tested, to determine the most optimal model based on the data. These were: (1) a direct effects model, where intrinsic and extrinsic motivations predicted WFE, FWE and job satisfaction; (2) a full mediation model, where intrinsic and extrinsic motivations predicted WFE and FWE, and in turn, these enrichment dimensions predicted job satisfaction; and (3) a partial mediation model, where intrinsic and extrinsic motivations predicted WFE, FWE and job satisfaction and WFE and FWE also predicted job satisfaction. The three structural models and comparisons between them 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). As such, model 3 (partial mediation model) is superior to the other models, and is shown in Figure 2.

Insert Figure 2 about here

Structural Models

Aligned with the recommendations of Grace and Bollen (2005), unstandardized regression coefficients are presented. Figure 2 shows 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. The direct effects towards job satisfaction came only from the extrinsic motivations: external regulation (path coefficient = -0.14, $p < 0.001$) and amotivation (path coefficient = -0.22, $p < 0.001$). 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. Overall, these findings support Hypotheses 1a and 1b but not 1c (intrinsic motivation dimensions did not directly predict job satisfaction). There is also support for hypotheses 2b and 2c, but not hypothesis 2a because extrinsic motivation dimensions did not directly predict WFE.

Table 3 also provides support for Hypothesis 3 and confirms the partial mediation effects of WFE and FWE on the direct effects of motivation on job satisfaction. Overall, the structural model shows that motivation accounts for small amounts of variance for WFE (15%) and FWE (12%), although larger amounts of variance for job satisfaction (30%). Furthermore, the partial mediation model shows the amounts of variance towards job satisfaction increased from 25% to 30% (a 5% increase).

DISCUSSION

The present study explored the relationships between various dimensions of motivation, enrichment and job satisfaction. While the intrinsic motivation dimensions were all significantly and positively correlated to WFE and FWE and job satisfaction, the final structural model showed that no intrinsic motivation dimension directly predicted job satisfaction, instead working indirectly through enrichment. Thus, autonomous motivation dimensions influenced job satisfaction indirectly through enrichment rather than as a direct predictor. This provides further development of the motivational dimensions (Tremblay et al., 2009) and supports including enrichment in studies testing motivation and job satisfaction. Importantly, and again supporting Tremblay et al. (2009), was the lack of uniformity amongst the extrinsic motivation dimensions. For example, introjected regulation was positively related to WFE only, while amotivation was negatively related to FWE and job satisfaction. Furthermore, external regulation was positively related to FWE but negatively with job satisfaction. As such, the extrinsic motivation dimensions are related in different ways and in some instances, conflict directions (i.e. external regulation) highlighting the complexities of these dimensions of motivation.

Importantly, these effects also highlight the need to explore and test multiple dimensions of motivation. Our results support Tremblay et al. (2009), in that all dimensions of extrinsic motivation should not be viewed as being negatively related to wellbeing outcomes. The present study finds support for the consistently detrimental influence of amotivation only. Furthermore, the structural model showed that extrinsic motivation dimensions did directly influence job satisfaction, with external regulation and amotivation being negatively related to job satisfaction. Thus, controlled motivation dimensions appear to influence job satisfaction directly. In addition, while external regulation also reduced family-work enrichment, introjected regulation was the only of the six motivation dimensions to not influence either enrichment or job satisfaction outcomes.

These findings support other enrichment studies (Carlson et al., 2006; Hanson et al., 2006), with enrichment bi-directionally influencing job satisfaction. Overall, the six motivation dimensions accounted for moderate amounts of variance towards FWE (12%) and WFE (15%), while enrichment and motivations accounted for a strong 30% of the variance towards job satisfaction. Importantly, we found strong support for a partial mediation model, which was far superior to a direct effects model. As such, studies exploring motivation dimensions as a predictor of job satisfaction need to provide greater attention to the potential influence of work-family enrichment. By excluding enrichment, studies might over state the direct impact of motivations on job satisfaction, especially intrinsic motivation dimensions. However, further testing is required to confirm these findings as generalized.

Research Implications

The CFA in SEM confirmed the six dimensional structures of motivations, supporting Tremblay et al. (2009), and these were found to be distinct from work-family and family-work enrichment and job satisfaction. Future studies might test motivations longitudinally to see whether motivations change over time for leaders, especially through the junior to senior leadership and onto the CEO position. Furthermore, testing other established antecedents of job satisfaction such as job demands and resources (e.g. Lewig & Dollard, 2003) and work-family conflict (e.g. Haar, 2008), may also provide a clearer understanding of where motivations may fit with job satisfaction and other outcomes. In addition, research needs to address the lack of studies focusing on CEO motivations, which needs to be explored to established similarities and differences between employees, leaders and CEOs, who might be seen as representing the highest levels of leadership.

Limitations

Overall, while the present study provides strong support for a relationship between motivation, enrichment and satisfaction, there are some 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. Clearly further exploration of this amongst other job types (e.g. blue collar workers) is desirable. Finally, 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.

Conclusion

Overall, the present study was centered on understanding the influence of motivation on job satisfaction via work-family enrichment, and this was largely supported. By testing these relationships on a large sample of leaders from numerous organizations in New Zealand it aids our confidence in generalizing these findings, at least amongst leaders. To our knowledge, no study has tested the influence of various motivation dimensions towards job satisfaction with work-family enrichment mediating these effects, and the present study provides a unique contribution in this regard. The implications are that the type of motivation an employee/leader has will ultimately influence their own wellbeing, and as such, organizations and leaders themselves, should strive towards crafting the job to enhance its intrinsic appeal. This way, the potential benefits will be more positive and advantageous for leaders, their families and their wider stakeholders.

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Table 1. Results of Confirmatory Factor Analysis for Study Measures

Model	Model Fit Indices					Model Differences			Details
	χ^2	df	CFI	RMSEA	SRMR	χ^2	Δ df	p	
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.	588.7	288	.95	.05	.06				
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.	1186.1	296	.84	.09	.07	597.4	8	.001	Model 2 to 1
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.	1968.5	314	.71	.12	.13	1379.8	26	.001	Model 3 to 1

Table 2. Correlations and Means of Study Variables

Variables	M	SD	1	2	3	4	5	6	7	8	9
Intrinsic Motivations:											
1. Intrinsic Motivation	3.7	.88	.87								
2. Integrated Regulation	3.4	.99	.56**	.84							
3. Identified Regulation	3.2	1.0	.49**	.57**	.81						
Extrinsic Motivations:											
4. Introjected Regulation	3.0	1.1	.35**	.37**	.44**	.82					
5. External Regulation	3.5	.96	-.01	.04	.20**	.25**	.81				
6. Amotivation	1.9	.91	-.10*	-.08	-.01	.26**	.08	.81			
Enrichment:											
7. WFE	3.3	.81	.28**	.30**	.30**	.15**	.05	-.04	.92		
8. FWE	3.8	.73	.25**	.12*	.12**	.05	.14**	-.12*	.49**	.91	
Job Outcome:											
9. Job Satisfaction	3.6	.70	.29**	.31**	.26**	.10	-.13*	-.23**	.29**	.22**	.79

N=386, *p< .05, **p< .01. Bold scores on the diagonal show reliability scores (Cronbach's alpha).

Table 3. Model Comparisons for Structural Models

Model	Model Fit Indices					χ^2	Δdf	p	Details
	χ^2	df	CFI	RMSEA	SRMR				
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 1 to 2

Figure 1. Motivation and Regulation Type (Gagné & Deci, 2005)

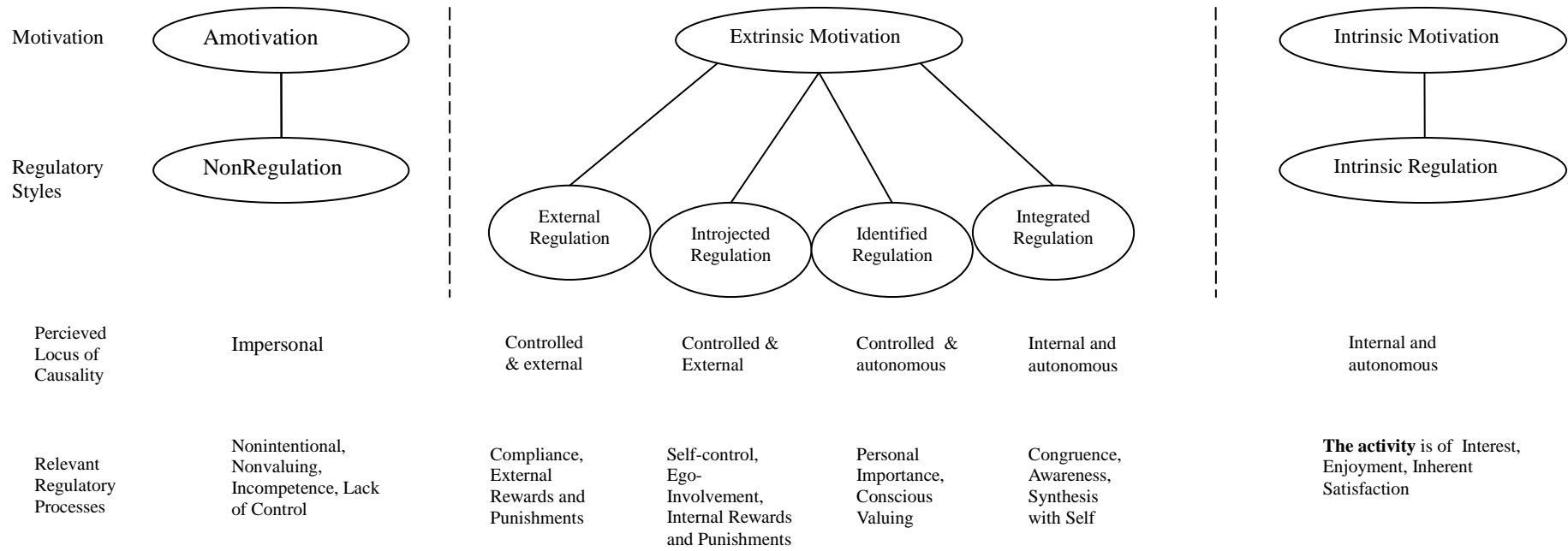


Figure 2. Final Structural Model (Partial Mediation Effects)

