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THE COMPLEXITY OF ABSENTEEISM AND TURNOVER INTENTION:

DIRECT, MEDIATION AND MODERATION EFFECTS

A thesis submitted in partial fulfilment of the requirements for the degree of Master of Applied Psychology

at the University of Waikato

by

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Abstract

Absenteeism and turnover in the workplace are complex phenomena that have implications for organisations and individuals alike. This study investigated the relationships of attitudinal factors with absenteeism and turnover intentions at a large healthcare organisation in the Bay of Plenty. A questionnaire completed by 407 employees had several measures such as job involvement, job satisfaction, organisational commitment (affective and continuance commitment), perceived organisational support, perceived supervisor support, work-to-family conflict, family-to-work conflict, team cohesion, regional identification and turnover intention. Absenteeism data were collected from personnel records.

The results indicated a probable association of job satisfaction, work-to-family conflict and perceived supervisor support with absenteeism, while turnover intention was associated with all predictors except continuance commitment. Perceived organisational support partially mediated the relationship between perceived supervisor support and turnover intention. No moderator effects were found for job involvement, perceived supervisor support and team cohesion on relationships between work-to-family conflict and affective commitment/job satisfaction and perceived organisational support and affective commitment respectively, however strong main effects were shown for job involvement and team cohesion.

The main finding is that organisations must understand how organisational and supervisor support increases job satisfaction and affective commitment and decreases work-to-family conflict, which lowers absenteeism and turnover intention. The detection of high levels of regional identification indicate the need to acknowledge this construct, particularly in relation to turnover intention.
Acknowledgements

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Above all, I could not have done this research without the support of my partner Neil Tyson whose suggestions and editing made this research far more valuable. I dedicate this research to my daughters Kahla and Santi for whom I hope will enjoy study and research as much as I do.
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Chapter One

Introduction

Absenteeism and turnover in the workplace are complex phenomena that can have significant implications for organisations and individuals alike (Mathieu & Kohler, 1990), with human resource professionals having cited absenteeism and turnover as major concerns (Wegge, Schmidt, Parkes, & Van Dick, 2007). Absenteeism and turnover are withdrawal behaviours that are defined as actions that place physical or psychological distance between employees and their place of work (Rosse & Hulin, 1985). Employers are affected by the unpredictable nature of these withdrawal behaviours through the disruption of work flow, provision of sick pay, organisation of replacement workers, and lost productivity (Gründemann, 1997). This thesis examines absenteeism and turnover intention in relation to job attitudes such as job satisfaction and organisational commitment, while also examining team cohesion and regional identification.

Mirvis and Lawler (1977) and Wanous (1980) have documented the high cost of absenteeism and turnover for organisations. Wegge, Schmidt, Parkes and Van Dick (2007) reported that absenteeism accounts for 4% of working time and costs the United Kingdom economy £10-12 billion annually. The American Bureau of Labour Statistics estimated that 4 million American workers were not reporting to work each week, with a 2.8% absence rate of working time recorded in 2005 (Bureau of Labor Statistics, 2006). McHugh (2002), in her Northern Ireland study on absenteeism in local government organisations, found absence rates ranging from 2.5% to 8.9%. In 1975 New Zealand industry absence rates
were recorded as 4.9% of working time (Department of Labour, 1975). No recent data are available.

Ho (1997) argued that the economic impact of absenteeism is mainly through decreased productivity, with employee absence often resulting in less experienced replacements. Employers also have to bear the cost of hiring substitute employees plus the indirect cost of lowered morale among other employees who are expected to cover for the absentee (Rickert, Duncan, & Ginter, 1995). The CCH Unscheduled Absence Survey, which is conducted yearly in the United States and measures the rate, cost and reasons associated with unscheduled absence, concluded that 66% of employees call in sick to deal with personal or family issues (ComPsych Corporation, 2007). Absenteeism is also one of the main reasons for dismissal (Cascio, 1995). Therefore, reducing absenteeism is to the benefit of organisations and employees.

Workplace turnover has become increasingly important in recent years as organisations face tight labour markets and skill shortages (Batt & Valcour, 2003) with companies that retain their most valued staff members, saving money while safeguarding their intellectual capital (Holtom, Mitchell, Lee, & Inderrieden, 2005). In the year to March 2006 the average quarterly turnover in New Zealand was 17.4% (Statistics New Zealand, 2007). The cost of replacing an employee has been estimated as 1.5 times their annual salary (Hoyle, 2008, February 1). Direct costs include recruitment, selection, and training of new employees, with indirect costs including inefficiencies in job changeover, vacant positions, and lost expertise (Jewel, 1998). High turnover can also have a negative impact on employee retention as it potentially can disrupt the group socialisation processes.
which in turn can lead to additional turnover (Numerof, Abrams, & Schank, 2002).

Not many organisations can or would want to reduce their turnover to zero. However, Cascio (2002) found that organisations voted top in the study of “100 Best Organisations to Work For” (the biggest survey of workplace opinion and employee engagement in the United States) reported a much lower turnover rate than comparable companies. These ‘top’ organisations also reported above average financial performance, with reduced turnover a significant contributor (Cascio, 1995).

Prior to leaving, employees go through a stage of evaluating their current job. Employee intention to quit is an important precursor of turnover (Griffeth, Hom, & Gaertner, 2000) with turnover intention found to be one of the best predictors of turnover (Hom, Caranikas-Walker, Prussia, & Griffeth, 1992).

A central component in the analysis of organisational behaviour like absenteeism and turnover intention is the psychological relationship between employees and the organisation (Van Knippenberg, Van Dick, & Tavares, 2007). Work attitudes have been important in understanding withdrawal behaviours and many studies have examined job satisfaction, organisational commitment and perceived supervisory support in relation to absenteeism and turnover intention (see for example Hackett, Bycio, & Guion, 1989; Sagie, 1998; Van Dierendonck, Le Blanc, & Van Breukelen, 2002) and these critical attitudes have been included in the present research.
Aim of the current research

Since the 1950s employee turnover intention and absenteeism have been the recipient of a large amount of theoretical and empirical deliberation (Griffeth et al., 2000; Mobley, Griffeth, Hand, & Meglino, 1979; Mowday, Steers, & Porter, 1982; Steel & Rentsch, 1995). A major focus has been on the relationships between absenteeism, turnover and turnover intention and employee attitudes to explain these costly phenomena. Absenteeism and turnover have been seen as simply a different manifestation of work withdrawal (G Johns, 2001) with Hanish and Hulin (1991) suggesting that these behaviours are attempts to adapt to negative conditions at work.

The healthcare industry, in particular, suffers universally from the consequences of absenteeism and turnover, having one of the highest turnover rates of any industry (Numerof et al., 2002; Waldman, Kelly, Arora, & Smith, 2004). Absenteeism in the New Zealand healthcare industry is correspondingly high (North et al., 2006). The impact of absenteeism on healthcare organisations is vast. For example, nurses make up a large part of the healthcare industry with nurse absenteeism impacting negatively on an organisation’s ability to provide quality patient care (Cohen & Golan, 2007). Other studies amongst additional occupational groups in the healthcare industry, such as support workers, doctors and managers, have also shown negative impacts on patient care as a result of absenteeism (Waldman et al., 2004).

In addition, the implications for turnover in the healthcare industry are also numerous, including professional disillusionment which in turn leads to employees exiting healthcare, pressure on staff shortages, and potential negative effects on patient care (Waldman et al., 2004). In spite of this, many healthcare
providers see turnover of nurses, doctors and support staff as a necessary and inevitable cost of doing business (Waldman et al., 2004).

The Bay of Plenty District Health Board (BOPDHB) is one of New Zealand’s 21 Health Boards providing primary and secondary healthcare to a large part of the Western Bay of Plenty. The BOPDHB has 2,700 full-time and part-time staff (retrieved August 4, 2008 from http://www.bopdhb.govt.nz/AboutBOPDHB.aspx). Absenteeism and turnover are of concern to the BOPDHB, which as a large healthcare provider relies on a healthy, stable workforce to provide consistent quality patient care (R. Perkins, personal communication, 19 December, 2007). The aim of the present research was to assist the BOPDHB to foster a healthy stable workforce by understanding the relationships between organisational and individual variables that potentially influence absenteeism and turnover intention at this organisation.

Scope of current research

In looking at absenteeism and turnover intention, work attitudes such as job involvement and job satisfaction were examined. Organisational commitment and support as well as supervisory support were taken into account, and finally, work family balance issues, team cohesion and regional identification were investigated in relation to absenteeism and turnover intention. Previous research has identified these variables as predictors of absenteeism and turnover intention and were deemed to be salient to the BOPDHB.

I now present a literature review. Firstly, criterion variables (absenteeism and turnover intention) will be discussed, after which I present the theoretical model used in this study.
Criterion variables

Absenteeism. Because many actions can lead to absenteeism, such as staying at home because of the flu, looking after a sick child or deciding to go to the beach for the day, the current literature often presents absenteeism as a dependent variable connected to a behavioural event (Martocchio & Jimeno, 2003). Hackett, Bycio and Guion (1989) proposed that workers have a choice to attend work or not on any given day. However, Nicholson (1977) argued this decision is not a conscious one but probably the result of habit (as cited in Hackett et al., 1989).

Absenteeism is defined in the literature in many ways, for example, in frequency of days lost, with distinctions also made between certified (scheduled) and uncertified (unscheduled) absence (Jewel, 1998) with only voluntary absences under the direct control of the employee (Sagie, 1998). When an employee is absent from work they knowingly or unintentionally express a negative attachment to their organisation (Hanisch & Hulin, 1991). However, research shows that little variation in reported correlations between absenteeism and satisfaction is credited to the type of measure used, such as voluntary or involuntary (Hackett & Guion, 1985).

Organisations often do not record the reasons for absence but many organisations acknowledge the use of sick leave for other purposes than originally intended, such as childcare or ‘mental health’ days (Hackett et al., 1989; Rickert et al., 1995). Saratoga (1998) argued that from a management perspective high levels of absenteeism are representative of dissatisfaction within an organisation, with absenteeism indicating low levels of job satisfaction or employees not feeling valued by the organisation. High absenteeism rates are often associated
with low morale, high stress levels, poor communication and poor relationships between staff and management (McHugh, 2002).

*Turnover intention.* Turnover intention is, according to Arnold and Feldman (1982), “the final cognitive variable immediately preceding and having a direct causal impact on turnover” (Carmeli, 2005, p. 181). Employees who have high levels of turnover intention see themselves leaving their organisation sooner rather than later (Mowday et al., 1982).

Turnover itself, on the other hand, is defined as a “voluntary separation of an individual from an organisation” (Cohen & Golan, 2007, p. 417), with research often focussed on the negative consequences of turnover. However, Holtom et al. (2005) and Blau and Boal (1987) argued that not all turnover is negative. In some cases organisations gain when low performers leave (functional turnover) but lose when their high performers leave (dysfunctional turnover). Holtom et al. suggest that since changing employers is now the norm, organisations must distinguish between avoidable and unavoidable turnover. Therefore to get the best result from their human resources organisations should focus on getting the best for longest from their good employees.

Research in turnover was directed for many years to job satisfaction induced turnover, with a focus on turnover intention as a direct antecedent of actual turnover (Carmeli, 2005). But while dissatisfaction can lead to forming the intention to leave, the final decision to leave is influenced by such factors as availability of other work or higher salary. Paton, Jackson and Johnston (2003) argued that “the fact that there exist factors that mediate between intention and actual behaviour signals the importance of assessing during research intention rather than always focussing on behaviour per se” (p. 133). Hom et al., (1992)
showed turnover intention and actual turnover are significantly related (corrected mean $r = .36$) and several meta analyses have shown that the proportion of shared variance between levels of satisfaction and turnover is 3.6%, with the proportion shared between intention to leave and actually leaving as high as 12% (Griffeth et al., 2000; Hom et al., 1992). Turnover intention was used as the criterion variable in the present study due to the above and also as the scope of this research did not permit collection of actual turnover data.

**Antecedents of absenteeism and turnover intention.** Despite differences between absenteeism and turnover intention, their antecedents seem to overlap (Blau & Boal, 1987). Employees unhappy with their work and/or their work circumstances will want to avoid their work by either coming in late, being absent, or by intending to leave. Mitra, Jenkins and Gupta (1992) argued that both absenteeism and turnover intention stem from an underlying motivation to “escape a dissatisfying job” (p. 418).

Research into absenteeism and turnover intention has therefore focused on work related attitudes like job dissatisfaction and low levels of organisational commitment (Hanisch & Hulin, 1991). However, Cohen and Golan (2007) argued that while job satisfaction has been shown to be one of the major determinants of absenteeism, turnover and turnover intention are predicted more by organisational commitment. A meta analysis by Mitra et al, (1992) showed a consistent positive relationship between absenteeism and turnover ranging from .29 to .36.

Although the literature reviewed is fairly consistent there is still a vast amount of variance that remains unexplained in the prediction of absenteeism and turnover intention. This present study looked at absenteeism and turnover
intention in relation to well established measures of job satisfaction and organisational commitment but expanded current research by looking at effects of team cohesion and regional identification to explain some of this variance. What follows is a description of the research model used in this study.

Research model

Figure 1.1 conceptualises the overall theoretical model utilised in the present study. Part 1 shows the hypothesised direct relationships between job involvement and job satisfaction, organisational commitment, perceived organisational and supervisor support, work-to-family and family-to-work-conflict, team cohesion, regional identification and absenteeism and turnover intention. Part 2 shows that continuance commitment and perceived organisational support may mediate the relationships between regional identification and perceived supervisor support respectively, and turnover intention. Finally, part 3 shows that job involvement, perceived supervisor support and team cohesion may moderate the association between work-to-family conflict and perceived organisational support with job satisfaction and affective commitment respectively. I will now discuss the different parts of the research model.

Direct effects

Job Satisfaction. Job satisfaction is described as an attitudinal variable which reflects how people feel about their job overall and the various aspects of their job (Spector, 2006). Employees who are less satisfied will be more frequently absent from work (Hackett, 1989), with the literature reviewed supporting a modest negative association between absenteeism and job satisfaction, such as \( r = -.15 \) shown in Scott & Taylor’s (1985) meta analysis on
job satisfaction and absenteeism. Other studies have shown stronger correlations. For instance in her study on job satisfaction and absenteeism on blue collar workers, Tharenou (1993) found correlations as high as $r = -.34$. However, Hackett and Guion (1985) argued that the various dimensions of job satisfaction accounted for less than 5% of the variance in absence and combining all measures of satisfaction and all measures of absences, the mean correlation between absence and attitudes was -.09 (SD = .13).

**Part 1. Direct effects**

![Diagram of research model]  

**Part 2. Mediation effects**

![Diagram of research model]  

**Part 3. Moderator effects**

![Diagram of research model]  

*Figure 1.1 Research model*

Kohler and Mathieu (1993) suggested that the small correlation between job satisfaction and absenteeism could be caused by employees being absent for many reasons, not just job dissatisfaction, while Wegge et al. (2007) argued that previous research ignored the interactive effects of attitudes like job satisfaction
with job involvement and organisational commitment. Nonetheless, Cohen and Golan (2007) showed job satisfaction as the most consistent determinant of absenteeism regardless of how absenteeism is measured. When employees are mostly satisfied with their job they will feel less inclined to be absent. This was supported by Spector (1997), who believed that job satisfaction plays a major role in the decision to be absent. In contrast, dissatisfied employees will resort to unscheduled absences in response to a dissatisfying job or job conditions (Spector, 2006).

Job satisfied employees will be motivated to stay in their current job. Spector (2006) argued that correlations between job satisfaction and turnover intention are high and can be used to show the outcome of satisfaction on behaviour, e.g. intent to stay, although most studies are of a predictive nature (that is assessing job satisfaction and then waiting some months or years to see who quits). Dissatisfied employees will respond to low job satisfaction with increased levels of turnover intent. They will seek to alter their negative work situation by looking (or thinking) about alternative employment. Dissatisfaction with work has a proven association with turnover intentions (Griffeth et al., 2000; Hom et al., 1992) as dissatisfied employees leave organisations more often.

Moreover, a study by Lu, Lin, Wu Hsieh and Chang (2002) on job satisfaction of hospital nurses showed that 38.4% of the variance in turnover intention was predicted by job satisfaction, although meta analysis by Griffeth et al. (2000) showed a somewhat lower correlation of \( r = .17 \). Based on these studies, the following is proposed:

\[ H1a. \quad \text{Job satisfaction will be negatively related to absenteeism.} \]
**H1b.** *Job satisfaction will be negatively related to turnover intention.*

*Job involvement.* Job involvement is defined as the degree of importance of a job to one’s self image and the degree of investment of self in a job (Lodahl & Kejner (1965) as cited in Mathieu & Kohler, 1990) with Kanungo (1982) having argued that jobs play a major role in defining people’s self concept. If employees feel their self image is connected to their job, they will seek to be highly involved in the job and will not resort to withdrawal behaviours such as absenteeism, with job involvement shown to have a modest relationship with absenteeism, $r = -.23$ (Harrison & Martocchio, 1998). On the other hand when job involvement is low, employees will be less motivated to attend work and absenteeism might therefore rise. Low job involvement has been clearly negatively linked to absenteeism (e.g. Blau, 1986; Farrell & Stamm, 1988; Shore, Newton, & Thornton, 1990).

Employees with high levels of job involvement will identify and care for their jobs and will want to continue their employment as the job is important to their self image. Baba and Jamal (1991), Huselid and Day (1991) and Shore et al. (1990) all clearly linked job involvement negatively to turnover intention. Low job involved employees therefore intend to seek alternative employment to satisfy their need for a positive self image. Farris (1971) showed that job involvement accounted for as much as 16 percent of variance explained in turnover (as cited in Blau & Boal, 1987). This leads to the proposed hypotheses:

**H2a.** *Job involvement will be negatively related to absenteeism.*

**H2b.** *Job involvement will be negatively related to turnover intention.*
Organisational commitment. Organisational commitment is another frequently researched attitudinal variable in the workplace. Models of employee absenteeism, turnover and turnover intention (Mobley et al., 1979; Steers & Rhodes, 1978) have included organisational commitment as an immediate antecedent of attendance and turnover intention (see also Brooke, 1986; Mathieu & Zajac, 1990).

Commitment to an organisation will lead to an enhanced feeling of responsibility in employees, which in turn will lead to less withdrawal behaviours as employees do not want to ‘damage’ the organisation. Steers and Rhodes (1978) saw organisational commitment as an influence on the motivation for an employee to attend work, which in turn affects their behaviour. Lum, Kervin, Clark, Reid, & Sirola (1998) found organisational commitment had the strongest and most direct impact on turnover intention and Tett and Meyer (1993) argued that organisational commitment contributed independently to the prediction of turnover intention.

Organisational commitment is defined as a multi faceted construct (affective, normative and continuance commitment) in which all components are associated with absenteeism and turnover (Somers, 1995). Affective commitment is characterised as the emotional attachment an employee has to his/her organisation, acceptance of the organisation’s values and willingness to stay within the organisation (Mowday et al., 1982). Normative commitment came from the idea there is a felt obligation to remain in an organisation and continuance (or calculative) commitment is based on the perceived costs associated with leaving the organisation (N. Allen & Meyer, 1990).
There has been critique of the three component model, for instance affective and normative commitment have been found to significantly correlate ($r = .63$), questioning the empirical distinction between these concepts (Solinger, van Olffen, & Roe, 2008) and some researchers regarded the normative dimension as redundant (Ko, Price and Mueller, 1997 as cited in Solinger et al., 2008). The distinction between affective commitment and continuance commitment is clearer, as it was found that their behavioural consequences are distinctly different (Luchak & Gellatly, 2007). This study therefore only investigated affective and continuance commitment in relation to the criterion variables.

Emotional attachment (affective commitment) to an organisation results from the perceived level of support the organisation gives to its employees, by treating them fairly and valuing their personal contributions (Luchak & Gellatly, 2007) and employees whose work experiences are in line with their expectations develop stronger affective commitment than employees who are less satisfied with their work experiences. In particular, affective commitment is important in public agencies as it has been shown to explain more than 27% of the variation in public employee commitment to their organisation (Reid, Riemenschneider, Allen, & Armstrong, 2008).

Employees who have high levels of emotional attachment tend to be more productive and will want to attend (e.g. absenteeism is seen as counter productive to the organisation and ultimately the individual itself). Gellatly’s (1995) study into individual and group norms relating to absenteeism found evidence that employees who report high affective commitment are less absent than employees who have low affective commitment. In contrast, employees with low affective commitment might not be concerned about the organisation’s wellbeing, which
can result in increased rates of absenteeism. A meta analysis by Mathieu and Zajac (1990) showed an average correlation of affective commitment of $r = -0.12$ with absenteeism (see also Eby, Freeman, Rush, & Lance, 1999). Somers (1995) found affective commitment to be the best predictor for absenteeism of all components of organisational commitment ($r = -0.15$).

Continuance commitment can be influenced by several factors, for example, cost of leaving or the availability of alternative employment. It increases when employees think suitable alternatives are not available (Meyer & Allen, 1991). However, the relationship between absenteeism and continuance commitment is by no means clear but employees high on continuance commitment might be motivated to take unscheduled leave as they are only motivated to stay based on calculative commitment. Luchak and Gellatly (2007) argued that employees who experience strong continuance commitment will feel the need to comply with the minimum job requirements, such as not being absent too often, while taking as much unscheduled leave as they can under the circumstances. A meta analysis by Meyer et al. (2002) found a positive but almost zero correlation ($r = 0.04$) between absenteeism and continuance commitment, however Meyer et al. argued that as commitment is a multi dimensional construct the correlation between any single component of commitment and work behaviours (for example absenteeism) will be moderated by the others. Despite this last comment, it is predicted in this study that:

$H3a$. Affective commitment will be negatively related to absenteeism.

$H3b$. Continuance commitment will be positively related to absenteeism.
Employees with high levels of affective commitment will be motivated to stay with an organisation. Meyer, Stanley, Herscovitch, & Topolnytsky (2002) found in their meta analysis of inter relations of facets of organisational commitment that affective commitment had the highest correlation with turnover intention (r = -.56) followed by normative commitment (r = -.33) and continuance commitment (r = -.18). In addition, employees with high levels of continuance commitment stay with an organisation not because of an intrinsic motivation to remain, but merely out of the perceived cost of leaving, or lack of alternatives. These employees do the minimum to remain in the organisation, however their membership is still seen as important as they perceive little other choice (Luchak & Gellatly, 2007) The aforementioned meta analysis by Meyer et al. (2002) showed a modest correlation between continuance commitment and turnover intention (r = -.18 ) but Griffeth et al. (2000) found correlations as high as r = -.38. Thus it is proposed in this research that:

\[ H4a. \quad \text{Affective commitment will be negatively related to turnover intention.} \]

\[ H4b. \quad \text{Continuance commitment will be negatively related to turnover intention.} \]

In addition, it is anticipated that the negative correlation between affective commitment and turnover intention will be stronger than between continuance commitment and turnover intention (in concurrence with Meyer et al., 2002). Employees motivation to stay is stronger based on emotional attachment than on perceived costs of leaving.

Regional identification or sense of place can play an important part in an employee’s wish to remain with an organisation. Employees can feel a strong
connection to their area based on connections with people or the land (Eisenhauer, Krannich, & Blahna, 2000). When these employees wish to change organisations, unless there are alternatives within the region, the sacrifice of leaving people or the region may be too great. These employees will develop higher levels of continuance commitment as alternatives are not perceived as beneficial to them (Goksenin & Edward, 2004) and they will want to remain in the organisation. Therefore it is expected that:

\[ H4c. \text{ Continuance commitment is positively related to regional identification.} \]

With affective and continuance commitment representing commitment from the employee to the organisation, it is important to take into account the organisation’s commitment to the employee. In the next section I discuss perceived organisational and supervisor support in relation to absenteeism and turnover intention.

**Perceived Organisational Support.** Perceived organisational support (POS) has emerged in the literature as another predictor of absenteeism and turnover intention. POS is based on the idea that employees develop generalised beliefs about the extent the employer is supportive and cares about their wellbeing in order to meet their socio-emotional needs and to assess the benefits of increased work effort (Eisenberger, Huntington, Hutchinson, & Sowa, 1986; Rhoades & Eisenberger, 2002).

Organisational support theory suggests that the development of POS is based on an employee’s idea that organisations have human characteristics (Eisenberger et al., 1986) and Levinson (1965) argued that employees view their
“favorable or unfavorable treatment as an indication that the organisation favors or disfavors them” (as cited in Rhoades & Eisenberger, 2002, p. 698).

The better the relationship between the employer and employee the more the employee will want to invest in the relationship. POS leads to feelings of obligation towards the organisation that in turn enhance an employee’s work behaviour. Eisenberger et al. (1986) argued that employees who perceive a high level of organisational support are more likely to help the organisation reach its objectives, increase their affective commitment and decrease stress and withdrawal behaviours such as lateness, absenteeism and turnover.

When employees are satisfied with the reciprocal arrangements in their relationship with their organisation, they will be motivated to continue this relationship and to be actively involved in their jobs. Eisenberger and colleagues (1986) found that the negative relationship between POS and absenteeism was strongest among “those employees endorsing a reciprocal exchange relationship with their organisation” (as cited in Eder & Eisenberger, 2008, p.64). In contrast, when employees perceive an imbalance in the relationship (i.e. they feel they put more in than their employer) they may display withdrawal behaviours such as absenteeism (Van Knippenberg et al., 2007). Studies show a negative relationship between POS and absenteeism (Eisenberger et al., 1986; Eisenberger, Stinglhamer, Vandenberghe, Sucharski, & Rhoades, 2002).

The relationship between POS and turnover intention is similar to the one above. When employees feel the organisation is supportive of them, they might reciprocate by intending to stay with their employer. POS and turnover intention are highly correlated (D. G. Allen, Shore, & Griffeth, 2003) and a meta analysis
by Rhoades & Eisenberger (2002) also showed support for the highly negative relationship between POS and turnover intention \((r = -.45)\). Thus it is proposed:

\[H5a. \text{ POS will be negatively related to absenteeism.}\]

\[H5b. \text{ POS will be negatively related to turnover intention.}\]

Research on the antecedents of perceived organisational support suggests that the foundations for POS are often managerial behaviour and organisational policies. When employees perceive that the organisation provides appropriate rewards and enrichment opportunities, they will regard their employer as more supportive, which can lead to increased affective commitment. Settoon et al. (1996) found that employees who feel supported by their employer “will attempt to repay their debt through affective commitment” (as cited in Vandenberghe, Bentein, & Stinglhamber, 2004, p. 49). Vandenberghe et al. (2004) found that POS contributed uniquely to affective commitment. Based on these studies, the following is proposed:

\[H5c. \text{ POS will be positively related to affective commitment.}\]

**Perceived Supervisor Support.** In the same way as POS, employees also develop general opinions as to the extent their supervisors value their contribution known as perceived supervisor support (PSS) (Kottke & Sharafinski, 1988). Settoon et al. (1996) and Wayne et al. (1997) both provided evidence that employees engage in “enduring exchanges with both the organisation and their immediate supervisor” (as cited in Stinglhamber & Vandenberghe, 2003, p. 253). This suggests that while employees see their supervisors as agents of the organisation, they may also develop distinct relationships with their supervisor (Stinglhamber & Vandenberghe, 2003).
When employees perceive supervisor support as positive and sufficient, they will in general be motivated to decrease withdrawal behaviour like absenteeism. Supervisor support might mean less pressure on work conditions, for example work-to family conflict might be decreased by supervisor support for flexible work hours which decreases the need for unscheduled absences. According to Gognon and Micheal (2004), supervisors who develop a partnership based on support, trust, information sharing, respect and reciprocal influence, will motivate employees to have positive job attitudes. This in turn can lead to the absence of negative withdrawal behaviours like unscheduled absenteeism.

When employees experience positive support from their supervisor, they are motivated to continue the relationship and stay within their current role. Employees who perceive low PSS will feel less inclined to engage in positive reciprocal arrangements which can lead to increased turnover intention. According to the organisational support theory, PSS should decrease turnover by increasing POS (Eisenberger et al., 2002; Rhoades & Eisenberger, 2002) however Maertz, Griffeth, Campbell and Allen (2007) found that PSS also had direct effects on turnover cognitions. In light of this, the following is proposed:

H6a. Perceived supervisor support will be negatively related to absenteeism.

H6b. Perceived supervisor support will be negatively related to turnover intention.

Perceived organisational support and the support employees perceive to get from their supervisors are highly related, as when the supervisor is recognised as supportive, employees will develop a positive view of the organisation (as they
see their supervisor as a representative of the organisation). Employees seem to view their supervisor’s positive or negative orientation towards them as evidence of the kind of organisational support they receive, with the relationship between the individual and the organisation often enacted through the relationship with supervisors (Van Knippenberg et al., 2007). Therefore it is expected that:

\[ H6c. \text{ PSS will be positively related to POS.} \]

Work-to-Family conflict and Family-to-Work conflict. However important paid employment might be for people, all employees have a life away from their workplace. For many people, especially in the 30-50 age range, non-work life is dominated by family (Landy & Conte, 2004) and with more families comprising two working parents, or single parent families, the issues of work-to-family conflict (WFC) and family-to-work conflict (FWC) have come to the forefront (Mesmer-Magnus & Viswesvaran, 2006).

Conflict between the work and family domains is “a form of inter role conflict in which engaging in one role interferes with engaging in another role” (Greenhaus & Beutell (1985) as cited in Hammer, Bauer, & Grandey, 2003, p.420). Previous research suggests that work family conflict is bi-directional. WFC, when work interferes with family life, and FWC, which represents the opposite when family life interferes with work (Frone, Russell, & Lynne Cooper, 1992) have been identified as two separate constructs (Frone & Yardley, 1996).

Ongoing conflict between work and family can result in many negative outcome for employees and organisations with absenteeism and turnover identified as potential outcomes. In many workplaces disruption to staffing is significant and can be a major cost (Boyar, Maertz, & Pearson, 2005). When
employees experience conflict between their work and family life or vice versa, they might resort to increased use of unscheduled absence as a way to alleviate the pressure of this conflict. Studies have shown that WFC and FWC are significant predictors of absenteeism amongst working parents (Goff, Mount, & Jamison, 1990). The relationship between WFC and FWC and absenteeism was also shown by Boyar, Maertz and Pearson (2005), who found that women experiencing high WFC had the highest incidence of absenteeism, and Hammer et al. (2003) who showed significant correlations between WFC, FWC and absenteeism. In contrast, employees who experience low or no WFC or FWC will obviously see little need for unscheduled absence. Based on this the following hypotheses are presented:

\[ H7a. \quad \text{Work to family conflict will be positively related to absenteeism.} \]

\[ H7b. \quad \text{Family to work conflict will be positively related to absenteeism.} \]

When employees experience low WFC or FWC they will not think of leaving their job/organisation on that account. In contrast, employees reporting high levels of WFC will consider leaving their organisation in search of alternatives offering more suitable work conditions (e.g. flexible work hours, in-house childcare). In their review of consequences associated with WFC, Allen, Herst, Bruck and Sutton (2000) showed that greater levels of WFC are associated with greater intention to leave the organisation (weighted mean correlation .29) and Bellavia and Frone (2005) argued that WFC relates to turnover intention as leaving a job could be a way to cope with the stress associated with WFC (as cited in Spector et al., 2007). Employees experiencing high levels of FWC might have lower levels of turnover intention compared to employees experiencing high levels of WFC, as their family circumstances will not change by changing jobs.
However, alternative work conditions might suit the family circumstances better. Grandey and Cropanzano (1999), in their study on work family conflict and strain, showed a positive relationship of FWC with turnover intention. Therefore, it is proposed that:

**H7c.** Work to family conflict (WFC) will be positively related to turnover intention.

**H7d.** Family to work conflict (FWC) will be positively related to turnover intention.

In addition, it was predicted that the positive correlation between WFC and turnover intention would be stronger than for FWC and turnover intention based on the rationale that employees will be more concerned with the influence of family life on work than the reverse (following research by Frone et al., 1992).

There are several factors that can contribute to the experience of WFC and FWC, such as having to work too many hours, a lack of flexible scheduling or family stress (Byron, 2005; Spector, 2006). The strain caused by the inter role conflict can lead to less job satisfied employees. Negative relationships between WFC, FWC and job satisfaction have been shown by Bruck, Allen and Spector (2002) who found $r = -.28$ and $r = -.24$ respectively. In light of this, the following is proposed:

**H7e.** WFC and FWC will be negatively related to job satisfaction.

Employees who struggle to manage both family and work demands could potentially decrease their affective commitment. The inter role conflict might result in negative affectivity towards the organisation (as they are perceived as
unsupportive) which will lead to decreased emotional attachment as other
organisations might become more attractive especially if they offer better
solutions to either WFC or FWC. Lyness and Thompson (1997) examined three
different types of commitment but only found affective commitment to be
negatively related to WFC (as cited in T. D. Allen et al., 2000) while others found
organisational commitment was negatively related to WFC and FWC (Netemeyer,
Boles, & McMurrian, 1996). Therefore it is expected that:

\[ \text{H7f: WFC and FWC will be negatively related to affective commitment.} \]

Team Cohesion. Most employees work with others. While they may have
their own work responsibilities, colleagues are an important part of the work
culture. Spector (2006) argued that the behaviour of employees is strongly
affected by the behaviour of other people at work. A work team is defined as a
specific workgroup in which the actions of the individuals are interdependent
(Spector, 2006) and each member has a specific role along with common tasks,
goals and objectives. Bollen and Hoyle (1990) defined perceived group cohesion
as “an individual’s sense of belonging to a particular group and his or her feelings
of morale associated with membership in the group” (p. 482).

Employees experiencing high team cohesion may not want to let other
team members down by using unscheduled absences which will create extra
pressure on the rest of the group. Sanders and Nauta’s (2004) research into social
cohesiveness and absenteeism showed that the more cohesive the team, the more
cooperative team members behaved towards each other, which would contribute
to low short-term absenteeism rates.
In a similar fashion, team cohesion might motivate team members to intend to stay with an organisation because they feel responsible towards other team members, with leaving associated with feelings of disloyalty to the team. Negative relationships between team cohesion and turnover intention were established in studies by Riketta and Van Dick (2005). Sheridan (1985) stated turnover intention arises from varying levels of job tension and group cohesion and argued the importance of group cohesion, especially in the first year of employment, leading to retention. Thus it is proposed that:

**H8a.** Team cohesion will be negatively related to absenteeism.

**H8b.** Team cohesion will be negatively related to turnover intention.

**Regional identification.** People live in certain places for a ‘good’ reason. Many people get attached to a particular region for reasons of sentiment (family, friends), economic (as this is where the work is) or even climate. For a long time, the notion of regional identity has been prevalent in geography, however the idea of attachment to one’s region is not well researched in other fields of social science.

Regional identity is defined by Paasi (2003) as “an interpretation of the process through which a region becomes institutionalised, a process consisting of the production of territorial boundaries, symbolism and institutions” (p. 478). Paasi also argued that regional identity exists as a form of social and cultural practice, with social psychology alluding to the motivational dimensions of the identity process. Regional identification or sense of place is a holistic concept which has two components (Eisenhauer et al., 2000). The first component is the interactions between place and family, friends, traditions and memories. The
second component revolves around sentiments involving the natural uniqueness of the area.

The Bay of Plenty has been identified by many people as a very desirable place to live. The 2006 Census reported a total Bay of Plenty resident population of 257,379 an increase of 7.5% from 2001 (Statistics New Zealand, 2008). The Bay of Plenty is the fifth-most populous region in New Zealand and is forecasted to grow faster than the national average with the population expected to increase to 277,900 by 2011 (Statistics New Zealand, 2008).

High levels of attachment to a region may prevent employees from leaving, however, low levels of regional identification will not necessarily relate to turnover intention as these employees could be high affective committed and therefore not wanting to leave the organisation. Yet, in their study on job embeddedness and voluntary turnover, Mitchell, Holtom, Lee, Sablynski and Erez (2001) argued that work attitudes only play a small part in overall employee retention and leaving. The authors pointed to ‘job embeddedness’ which comprises ‘links, fit and sacrifices’ that play a part when leaving a job to explain turnover intention. Employees have links to the physical environment they live in and will consider how well they fit into that environment (i.e. the weather, location etc), and leaving an attractive community can be hard (Mitchell et al., 2001). Anecdotal evidence suggests some employees remain at the BOPDHB as it is the only significant employer of their occupation in the district. To get a similar job with another employer would require leaving the region. Although the literature on regional identification, absenteeism and turnover intention is sparse, the following is predicted:
H9a. Regional identification will be negatively related to absenteeism.

H9b. Regional identification will be negatively related to turnover intention.

Mediated relationships.

Part two of the theoretical model (see Figure 1.1) displays the hypothesised mediation effects for this study. Mediators are defined as properties that influence the predictor or input variable in some way (Baron & Kenny, 1986) and any given variable can function as a mediator “to the extent that it accounts for the relation between the predictor and the criterion” (p. 1176). Figure 1.2 displays the mediation model by Baron and Kenny.

![Path diagram of mediation effects](image)

**Figure 1.2** Path diagram of mediation effects

Statistical procedures to test for significance of mediation will be discussed in the Results chapter. I now discuss the mediation hypotheses that explore the extent to which perceived organisational support (POS) accounts for the relationship between perceived supervisor support (PSS) and turnover intention, and the extent to which continuance commitment accounts for the relationship between regional identification and turnover intention. POS was chosen out of all the variables to be examined as a mediator variable as the BOPDHB is a large organisation in which employees might feel far removed from
the organisation as a whole and focus instead on the support they received from their supervisor. However, it is of interest what POS can contribute to turnover intention above PSS to enhance positive outcomes for the BOPDHB.

The second mediator variable, continuance commitment was selected as it was predicted to have a strong relationship with regional identification (as regional attachment would lead to continuance commitment) which could potentially influence turnover intention. It would be of interest to know if the influence of continuance commitment changes the effect of regional identification on turnover intention as the BOPDHB could then design specific policies to keep their valued staff and monitor performance accordingly.

Mediating effect of perceived organisational support. As discussed earlier, PSS is expected to be associated with POS and in addition POS is expected to be associated with turnover intention. Employees who perceive their supervisor as supportive and concerned with their wellbeing might also believe that the overall organisation is favourable towards them, which in turn motivates them to stay (Eisenberger et al., 2002). Malatesta (1995) believed POS would mediate the relationship between PSS and turnover intention (as cited in Eisenberger et al., 2002) as when PSS was low, employees could choose to switch to a new supervisor or minimise the contact with their supervisor, but when PSS and POS were both low, as when the supervisor is perceived to give low support, the employee will in turn perceive the organisation as unsupportive and the employee would feel no obligation to stay with the organisation. Evidence of this was found by Eisenberger et al. (2002) who concluded PSS had no statistical significant relationship with voluntary turnover beyond the mediating role of POS. This research will therefore replicate Eisenberger et al. and test the mediating role of
POS on the relationship of PSS and turnover intention so that strong PSS will lead to strong POS which in turn will decrease turnover intention. Therefore it is expected that:

\[ H10. \text{ Perceived organisational support will mediate the relationship between perceived supervisor support and turnover intention.} \]

Mediating effect of continuance commitment. A noted earlier it is predicted that employees that have a strong attachment to their region will perceive the cost of leaving an organisation too high and therefore are motivated to stay within their organisation. Mitchell et al. (2001) found that fit to the community and environment was a significant predictor of turnover intention, mediated by the perceived cost of leaving the organisation especially when alternatives were not available. The BOPDHB is for some employees the only significant employer in the region. In addition, continuance commitment is expected to be associated with turnover intention. Thus, regional identification leads to continuance commitment which in turn will be linked to turnover intention. Thus it is proposed that:

\[ H11. \text{ Continuance commitment will mediate the relationship between regional identification and turnover intention.} \]

Moderated relationships

Moderating variables affect the direction or strength of the relation between a predictor and criterion (Baron & Kenny, 1986) and more specifically will affect the zero order correlation between predictor and criterion. To test moderating variables (or buffers), the direct effects of the association between the predictors and criterion have to be known. The moderator model according to Baron and Kenny (1986) is presented in Figure 1.3.
For the purpose of this study the moderating or buffering effect of job involvement on the relationship between WFC and job satisfaction, and WFC and affective commitment respectively, was explored. In addition, this study looked at the buffering effect of perceived supervisor support on the relationship between WFC and job satisfaction, and finally, the moderating effect of team cohesion on the relationship between POS and affective commitment was explored. The relationships between WFC and job satisfaction, WFC and affective commitment, and between POS and affective commitment have been identified as predictive of absenteeism (see T. D. Allen et al., 2000; Boyar et al., 2005; Hammer et al., 2003; Wegge et al., 2007).

*Moderating effects of job involvement.* Research indicates that job involvement is a contributor to job satisfaction and affective commitment (T. D. Allen et al., 2000; Reid et al., 2008). Also, high job involved employees might put more emphasis on the importance of their job role than on their family role and in regard to the moderating or buffering effect, job involvement can protect an employee from the potential negative effects of WFC. Therefore the higher job involved employees are, the less WFC they will experience in comparison to low job involved employees. Research has shown potential influence of job involvement on WFC (Wiley, 1987). On the other hand, low job involved employees might be even less satisfied with their work conditions as they perceive the pressure of WFC even greater since their job is less important to their self
image. Wiley (1987) argued that when employees experience high levels of inter-role conflict (such as WFC) their work motivation (satisfaction and affective commitment) would decrease as WFC would “affect the individual’s sense of personal balance between roles” (p. 468). The relationship between WFC and job involvement, however, has shown mixed results (Wiley, 1987).

In relation to the present study the moderator hypothesis examined the extent to which job involvement moderated the relationships between WFC and job satisfaction, and between WFC and affective commitment. In other words, the higher job involved employees are, the less WFC they will experience and in turn they will experience higher levels of job satisfaction and affective commitment. Based on the above, the following hypotheses are presented:

\[ H12 \quad \text{Job involvement will moderate the relationship between work-to-family conflict and job satisfaction} \]

\[ H13 \quad \text{Job involvement will moderate the relationship between work-to-family conflict and affective commitment.} \]

**Moderating effect of perceived supervisor support (PSS).** When employees feel supported by their supervisor this will potentially increase their satisfaction with their job and lower their WFC. Supervisors play an important part in employee perception of job and workplace as they often structure the immediate work environment. Studies have shown a positive association between PSS and job satisfaction, finding high correlations of .41 and .56 respectively (Babin & Boles, 1996; Griffin, 2001) while a negative relationship with WFC was found by O’Driscoll et al, (2003). The buffering effect of PSS can be explained as a form of reciprocity for example when an employee has high WFC and the supervisor is
willing to provide flexible work hours to alleviate this role conflict, the employee in return will be satisfied with their job. This study examined the extent to which PSS moderates the relationship between WFC and job satisfaction. Consequently, the higher PSS is perceived, the less WFC is experienced which in turn leads to higher levels of job satisfaction. Therefore it is expected that:

\[ H14a. \text{ Perceived supervisor support will moderate the relationship between work-to-family conflict and job satisfaction.} \]

**Moderating effect of team cohesion.** Recent research has emphasised the value of distinguishing between multiple foci of employee commitment in the workplace such as individuals or groups (Vandenberghe et al., 2004). Employees perceiving high levels of team cohesion are more likely be emotionally attached to their organisation on the basis of wanting to remain a member of the team. In turn, these employees will potentially perceive the organisational support they receive as adequate as this is congruent with the wish to remain in the organisation (Eder & Eisenberger, 2008). This study examined the extent to which team cohesion moderated the relationship between POS and affective commitment. In other words, high team cohesion leads to high POS and in turn employees will report higher levels of affective commitment. Based on this, the following is proposed:

\[ H15. \text{ Team cohesion will moderate the relationship between perceived organisational support and affective commitment.} \]
Summary

The theoretical model proposed in Figure 1, part 1, was designed to investigate the direct relationships between job satisfaction, job involvement, organisational commitment, perceived organisational and supervisor support, work-to-family conflict and family-to-work conflict, team cohesion and regional identification with absenteeism and turnover intention of staff at the BOPDHB.

Part 2 of the model proposed to test the mediating effects of perceived organisational support on the relationship between perceived supervisor support and turnover intention as well as the mediating effect of continuance commitment on the relationship between regional identification and turnover intention.

Finally, part 3 of the model proposed to test the moderating effects of several variables (job involvement, perceived organisational support and team cohesion) on various predictor variable relationships associated with absenteeism.
Chapter Two

Method

Organisational context

The Bay of Plenty District Health Board (BOPDHB) is one of 21 Health Boards in New Zealand. The BOPDHB is responsible for funding and providing health and disability support services for 200,000 people living in the Bay of Plenty district, covering the population centres of Tauranga, Katikati, Te Puke, Whakatane, Kawerau and Opotiki. It has the second fastest population growth rate of all New Zealand’s district health boards.

Health and disability services are provided at hospitals in Tauranga (346 beds) and Whakatane (119 beds), with community services located around the Bay of Plenty. The BOPDHB also manages the funding and purchasing of health services for the region, including Maori health. The BOPDHB has 2,700 full-time and part-time staff, including 1,230 nurses and nurse care assistants and 210 specialists and doctors.

This research covered three departments within the BOPDHB: Mental Health and Addiction Services (N=281), Medical Services (N=359) and Regional Community Services (N=390). These departments were identified by the Human Resource department as appropriate to conduct an employee survey relating to absenteeism and turnover intention. Moreover, Medical Services was chosen to represent the hospital-based participants, with the other departments representing predominantly community-based services.
Mental Health and Addiction Services (MHAS) provides community-focused services for adults, adolescents and older people. These are supported by a 24-hour, seven-day-a-week acute/crisis service and acute admission inpatient services. Staff cover a wide range of occupations, including psychologists, registered psychiatric nurses, occupational therapists, social workers, consultant psychiatrists, case managers and administration support staff.

Medical Services (MS) provides medical care in all general areas. Tauranga Hospital has 94 general medical beds and 35 beds for health in ageing (rehabilitation patients). Whakatane Hospital has 29 medical beds. Staff include registered nurses, health care assistants, medical officers, registrars, consultants and administration support staff.

Regional Community Services (RCS) provides health promotion, public health nursing, district nursing, social work and home help. Staff are diverse, with RCS employing coordinators, registered nurses, social workers and administration support staff.

Participants

All employees from the three identified departments were invited to participate. Payroll data were used to identify all staff within the three departments, after which the questionnaire was distributed in hard copy form via the internal mail system. A self addressed stamped envelope was provided with each questionnaire for participants to return the questionnaire to the researcher at the University of Waikato. Participants were asked to complete the questionnaire within 7-10 days.
Overall, 1,030 surveys were sent to staff and 407 completed questionnaires returned, representing a response rate of 40%. Table 2.1 presents the number and percentage of respondents in each department. Fourteen respondents (3%) did not specify any department.

Table 2.1

<table>
<thead>
<tr>
<th>Department</th>
<th>Questionnaires distributed</th>
<th>Number of respondents</th>
<th>Response rate per department</th>
<th>Overall response rate</th>
</tr>
</thead>
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<tr>
<td>MHAS</td>
<td>281</td>
<td>122</td>
<td>43%</td>
<td>30%</td>
</tr>
<tr>
<td>MS</td>
<td>359</td>
<td>162</td>
<td>45%</td>
<td>40%</td>
</tr>
<tr>
<td>RCS</td>
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<td>109</td>
<td>28%</td>
<td>27%</td>
</tr>
<tr>
<td>Non specified</td>
<td>14</td>
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<td>3%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1030</td>
<td>407</td>
<td>40%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Note. MHAS = Mental Health and Addiction Services, MS = Medical Services, RCS = Regional Community Services*

The average age of respondents was 45, ranging from 20 to 69 years with the average age within the BOPDHB being 45 thus the current sample was representative of the overall population. Females comprised 84.5% (342) of the sample, males 15.5% (63). The BOPDHB staff gender split is 80.8% female and 19.2% male thus the sample was relatively representative of the overall staff population at the BOPDHB.

The average tenure in the organisation was 79 months (6.5 years) with overall staff data showing an average of 6.7 years. The average tenure in current job was 53 months (4.4 years), with BOPDHB reporting an average tenure in the current job of 6.7 years.
70% of participants identified themselves as New Zealand European/Pakeha while BOPDHB overall reports a much lower percentage (40%). 10% identified as Maori (BOPDHB overall 11%), 2% as Pacific Peoples (BOPDHB overall 0.8%), 2.5% as Asian (BOPDHB overall 2.6%) and 14.5% identified as ‘other’ (such as South African, Dutch or United Kingdom, BOPDHB overall 18.5%). Two respondents did not disclose ethnicity information and the BOPDHB’s not stated ethnicity was 27%.

43% (177) of participants had dependent children, with an average of two children. 77% (310) of employees were living with a spouse/partner, and 22% (90) were not living with a partner (seven respondents did not disclose their living arrangements).

**Instruments**

The data were collected by means of an anonymous questionnaire (Appendix B) while absenteeism data were provided by the BOPDHB in departmental aggregated form. The questionnaire contained quantitative measures of job involvement, job satisfaction, organisational commitment (affective and continuance commitment), organisational and supervisor support, work to family conflict, family to work conflict, team cohesion, regional identification, turnover intention and demographic information. Participants were asked to provide information identifying the department they worked for, their gender, age, ethnicity, job title, organisational and current job tenure, living arrangements (with/without spouse) and number of dependent children.

The cover letter and questionnaire are presented in Appendices A and B. The questionnaire was initially piloted on a small sample to ensure
appropriateness of the design. It was also presented to the managers of respective departments and the HR manager at the BOPDHB. No corrections were made.

Absenteeism data were obtained from personnel records and presented by department. This research used data from April to June 2008, as this quarter was most representative of the population at the time of questionnaire distribution. A more detailed description of the collection of absenteeism data will be provided later in this chapter.

Ethical approval for this study was granted by the Northern Y Regional Ethics Committee representing the Ministry of Health and the Research and Ethics Committee of the Psychology Department at the University of Waikato.

**Measures**

*Job involvement.* The job involvement measure was adapted from Kanungo’s (1982) nine item job involvement scale modified by Paterson and O'Driscoll (1990). The participants were asked to what extent they felt involved in their job. This measure comprised items such as “I am very much involved personally in my job” and “I consider my job central to my existence”. Respondents were asked to rate the items on a 7 point scale; 1 = strongly disagree to 7 = strongly agree. The Cronbach’s alpha for the scale in this sample was 0.79.

*Job satisfaction.* Job satisfaction was gauged using the O'Driscoll and Randall (1999) fifteen item facet job satisfaction scale. The scale consists of items asking participants how satisfied they are with various aspects of their job using a 7 point scale, 1 = very dissatisfied to 7 = very satisfied, while one item (23) measured global satisfaction. All items (except the global item) were compiled
into one overall satisfaction score for which the present sample showed a Cronbach’s alpha of 0.91. The global job satisfaction item and the overall job satisfaction items were highly correlated (r = .76).

Organisational commitment. Organisational commitment was assessed using a scale developed by Meyer and Allen (1997). Participants were asked to rate their feelings towards the organisation on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. The instrument contained six items reflecting affective commitment (e.g. “This organisation has a great deal of personal meaning to me”) and six items measuring continuance commitment (e.g. “Right now, staying with the organisation is a matter of necessity as much as desire”). Three of the six affective commitment items were reverse scored as they reflected low affective commitment. Internal consistency was established in this sample with Cronbach’s alpha for affective commitment (0.75) and continuance commitment (0.83).

Perceived organisational Support (POS). POS was measured using the shortened version of the Perceived Organisational Support scale designed by Eisenberger, Huntington, Hutchinson and Sowa (1986) which was adapted by Wayne, Shore and Liden (1997). It had nine items with two items reversed scored as they reflected low organisational support. Participants were asked to indicate the extent they felt supported by their organisation on a 7 point scale, 1 = strongly disagree to 7 = strongly agree. The sample showed internal consistency with Cronbach’s alpha being 0.71.

Perceived supervisor support (PSS). Perceived Supervisor Support was examined with Greenhaus, Parasuraman and Wormley’s (1990) Perceived...
Supervisor Support eight item scale in which participants were asked to reflect on the extent they were satisfied with the support they received from their supervisors/managers. A 7-point response scale 1 = strongly disagree to 7 = strongly agree was used. Cronbach’s alpha for PSS in this study was 0.95.

Work-to-family conflict (WFC) and family-to-work conflict (FWC). WFC and FWC were measured using five item scales designed by Frone and Yardley (1996). Participants were asked to what extent work influenced family life and vice versa. An example on the work-to-family conflict scale was “My job produces strain that makes it difficult to fulfil my family duties”, while the family-to-work scale contained items such as “The things I want to do at work don’t get done because of the demands of my family or spouse/partner”. Both WFC and FWC were assessed on a 7-point response scale, 1 = strongly disagree to 7 = strongly agree. Cronbach’s alphas in this study for WFC and FWC were 0.92 and 0.86 respectively.

Team cohesion. Team cohesion looked at the extent to which participants felt they belonged to the team they were working in. It was measured using Bollen and Hoyle’s (1990) Perceived Cohesion Scale for Small Groups. The measure comprises six items such as “I feel a sense of belonging in my team”, and was measured on a 7-point response scale, 1 = strongly disagree to 7 = strongly agree. Cronbach’s alpha for the present sample for team cohesion was 0.95.

Regional identification. Regional identification or sense of place is not a well defined concept. Several measures have been proposed and tried and this research followed Cross’s (2004) proposal to use the five item Place Attachment scale designed by Williams and Vaske (2003). The five items assessed the extent
to which participants felt attached to the Bay of Plenty region, e.g. “I feel very attached to this region” and “I intend to stay in this region for the rest of my life”. Responses were measured on a 7-point Likert scale where 1 = strongly disagree to 7 = strongly agree. Cronbach’s alpha for regional identity was 0.90 in this study.

**Turnover intention.** Turnover intentions were measured using three items adopted from O’Driscoll and Beehr (1994). The participants were asked how they felt about their present job compared with an alternative that they may be interested in or able to obtain. The measure’s three items were (1) “Thoughts about quitting my job cross my mind” measured on a six-point response scale from never to all the time, (2) “I plan to look for a new job within the next 12 months”, measured on a six point response scale strongly disagree to strongly agree; and (3) “How likely is it that, over the next year, you will actively look for a new job outside of this organisation”, measured on a six point response scale very unlikely to very likely. The Cronbach’s alpha for turnover intention in the present sample was 0.90.

**Absenteeism.** Absenteeism data were obtained from the BOPDHB personnel records. Total hours of sick leave per department were compared with the total number of employee hours worked in the participating departments. Sick leave hours as a percentage of employee hours worked for the April to June 2008 quarter were used in this research as the measure of absenteeism. The BOPDHB supplied the researcher with no other absenteeism data, specifically no individual staff absenteeism data was obtained.

It was decided not to use self reports as respondents tend to underestimate their absent days (Gary Johns, 1994). Moreover, questions about personal
absenteeism can bias other questions in a questionnaire (Sanders & Nauta, 2004) as they often relate to attitudes towards the organisation (Bennett & Robinson, 2000). Limitations of aggregated absenteeism data will be examined further in the Discussion chapter.

Procedure

The Mental Health and Addiction Services at the BOPDHB was approached with a general proposal for research into work attitudes among staff. The proposal was accepted with the BOPDHB interested in antecedents of absenteeism as a way to identify factors that influence absenteeism. Turnover intention was also identified as a criterion due to a close relationships with absenteeism and a hypothesis was proposed that staff at the BOPDHB might plan to stay with the organisation longer due to an attachment to the region.

The Human Resource department was approached to suggest other departments for inclusion in the study, after which the Medical Services and Regional Community Services were included. The Human Resource department agreed to distribute the questionnaires in labelled envelopes to each staff member in the identified departments. All staff received the questionnaires with a covering page detailing who was doing the study, what the study was about, and what was requested from them. Participants were also informed that their participation was entirely voluntary and their responses were to remain anonymous and treated in the strictest confidence. A prepaid envelope addressed to the researcher at the University was attached to each questionnaire. The aggregated results of the study were to be made available through respective departments once the research was completed.
Chapter Three

Results

The aim of this study was to examine the relationships between job attitudes, such as job satisfaction, job involvement and perceived organisational and supervisor support, that could potentially influence absenteeism and turnover intention rates. Moreover, absenteeism and turnover intention were analysed in relation to work-family-conflict and family-to-work conflict, team cohesion and attachment to the Bay of Plenty region. Additionally, this study investigated the extent to which perceived organisational support mediated the relationship between perceived supervisor support and turnover intention, while also examining the mediating effect of continuance commitment on the relationship between regional identification and turnover intention.

Potential effects of moderator variables on relationships between several antecedents of absenteeism were examined. Firstly, the moderating effects of job involvement and perceived supervisor support on the relationship between work-to-family conflict and job satisfaction, and secondly the moderating effect of job involvement on the relationship between work-to-family conflict and affective commitment. Finally, the moderating effect of team cohesion on perceived organisational support’s relation with affective commitment was investigated.

I will now discuss the outcomes of the statistical analyses which are divided into six main sections, a) factor analysis, b) descriptive statistics, c) Chi square analysis related to absenteeism, d) correlations and regressions, e) mediated regressions and f) moderated regressions.
**Factor analysis**

Exploratory factor analysis was conducted to ascertain the factor structure underlying the observed variables in the present sample. Factor loadings for all variables were examined with the cut off point for significant loadings set at .3 or greater. KMO statistics on all variables were >.6, confirming the reliability of the underlying structure. Scree plots for all variables are presented in Appendix C.

**Job involvement.** Three factors were extracted which accounted for 64% of the variance. The factor loadings ranged from -.64 to .77 however, on examination of the scree plot (Figure C.1), only one factor dominance was found. The single factor found loadings > .3 on all items except item 3 (I try not to invest too much energy in my job) which was thus removed from further analysis.

**Job satisfaction.** For the factor analysis of job satisfaction, item 23 was removed as this represented a global measure of job satisfaction while the others were reflective of facets of job satisfaction. Three eigenvalues >1 were extracted accounting for 62% of the variance and factor loadings ranged from .35 to .78. Examination of the scree plot (Figure C.2) found one dominant factor and all items showed factor loadings >.3.

**Affective commitment and continuance commitment.** Three factors were extracted which accounted for 63% of the variance. The factor loadings ranged from -.74 to .87. Examination of the scree plot (Figure C.3) found two dominant factors. Item 31 (It would be really hard for me to leave my organisation right now even if I wanted to) was found to have loadings >.3 on both factors and was thus removed from further analysis.
**Perceived organisational support.** One factor was extracted which accounted for 63% of the variance with factor loadings ranging from .52 to .88. The scree plot (Figure C.4) supported one dominant factor.

**Perceived supervisor support.** One factor was extracted which accounted for 74% of the variance with factor loadings ranging from .78 to .93. One dominant factor was also found when examining the scree plot (Figure C.5).

**Work-to-family conflict (WFC) and family-to-work conflict (FWC).** Two factors were extracted which accounted for 72% of the variance with factor loadings ranging from .10 to .90. Examination of the scree plot (Figure C.6) confirmed dominance of two factors. However, item 59 (The demands of my family or spouse/partner interfere with work related activities) showed loadings >.3 on both factors and was thus removed from further analysis.

**Team cohesion.** One factor was extracted which accounted for 80% of the variance with factor loadings ranging from .77 to .95. The scree plot (Figure C.7) also supported one dominant factor.

**Regional identification.** One factor was extracted which accounted for 71% of the variance with factor loadings ranging from .73 to .84. One dominant factor was also shown by the scree plot (Figure C.8).

**Turnover intention.** One factor was extracted which accounted for 84% of the variance with factor loadings ranging from .74 to .95. The scree plot (Figure C.9) also supported one dominant factor.
Descriptive statistics

The means, standard deviations, skew and Cronbach’s alphas are presented in Table 3.1. Overall, the mean showed moderate-to-high levels of job involvement (4.21) and job satisfaction (4.70) indicating participants were mostly involved and satisfied with their jobs. The mid point level means for affective commitment (3.56) and continuance commitment (3.81) indicate that overall participants had similar levels of emotional and calculative commitment to the organisation.

The overall mean for PSS showed moderate to high levels of support being experienced (4.22) while the mean for POS was found to be moderate (3.64). A related sample t-test showed significant differences between POS and PSS, t (404) = -8.42, p < .05, confirming that participants indeed experienced a higher level of PSS than POS. The difference in the means for WFC (3.40) and FWC (2.12) were also examined with a related sample t-test, t (405) = 16.89, p < .05, confirming that on average participants experience less FWC than WFC. Moderate to high levels of team cohesion (5.63) and regional identification (5.11) were shown and overall, participants had moderate levels of turnover intention (3.32).

Statistically significant skew indicating asymmetry in distributions was noted for two variables. With regard to FWC a moderate skew (.94) indicated low levels of FWC while team cohesion’s moderate to high skew -1.2 pointed to participants experiencing high levels of team cohesion. Both variables were transformed to potentially correct the departures of normality after which correlations were performed with the transformed and non transformed variables. The results showed minimal difference, thus the original variables were retained. Internal consistency of all variables in this study was established as being over the
Nunally’s (1978) minimal internal consistency threshold of .70 suggesting relative reliability of the scale scores for respondents in this study.

Table 3.1

*Descriptive statistics*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Skew</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job involvement (a)</td>
<td>4.21</td>
<td>1.13</td>
<td>-.10</td>
<td>.79</td>
</tr>
<tr>
<td>Job satisfaction (b)</td>
<td>4.70</td>
<td>1.19</td>
<td>-.47</td>
<td>.91</td>
</tr>
<tr>
<td>Affective commitment (a)</td>
<td>3.56</td>
<td>1.19</td>
<td>-.17</td>
<td>.75</td>
</tr>
<tr>
<td>Continuance commitment (a)</td>
<td>3.81</td>
<td>1.51</td>
<td>-.07</td>
<td>.83</td>
</tr>
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<td>Perceived organisational support (a)</td>
<td>3.64</td>
<td>1.44</td>
<td>-.02</td>
<td>.71</td>
</tr>
<tr>
<td>Perceived supervisor support (a)</td>
<td>4.22</td>
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<td>.95</td>
</tr>
<tr>
<td>Work-family-conflict (a)</td>
<td>3.40</td>
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<td>.92</td>
</tr>
<tr>
<td>Family-work conflict (a)</td>
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<td>.94</td>
<td>.86</td>
</tr>
<tr>
<td>Team cohesion (a)</td>
<td>5.63</td>
<td>1.40</td>
<td>-1.2</td>
<td>.95</td>
</tr>
<tr>
<td>Regional identification (a)</td>
<td>5.11</td>
<td>1.45</td>
<td>-.66</td>
<td>.90</td>
</tr>
<tr>
<td>Turnover intention (c)</td>
<td>3.32</td>
<td>1.58</td>
<td>.16</td>
<td>.90</td>
</tr>
</tbody>
</table>

*Note.* (a) variables measured on 7-point response scale (1= strongly agree 7= strongly disagree) (b) variable measured on 7-point response scale (1= very dissatisfied 7= very satisfied) (c) variable measured on 6 point response scale, 3 items. (1) 1= never to 6= all the time, (2) 1= strongly disagree to 6= strongly agree; and (3) 1= very unlikely to 6= very likely.

Absenteeism rates per department are presented in Table 3.2. Absenteeism rates provided by the BOPDHB for the April to June 2008 quarter were compiled by dividing the total hours of sick leave taken during the quarter by the total accrued employee hours worked in the same quarter for each department. Based on previous studies by McHugh (2002) and Wegge, Schmidt, Parkes and Van
Dick (2007) who reported absenteeism as a percentage of working time, the Mental Health and Addiction Services (MHAS) had a medium to low absenteeism average of 2.58% in the April to June 2008 quarter, while the Medical Services (MS) showed a lower average of 2.13% and finally, the Regional Community Services (RCS) absenteeism rates showed a medium to high average of 3.76%.

Table 3.2

Absenteeism hours per department for April to June quarter 2008

<table>
<thead>
<tr>
<th></th>
<th>MHAS</th>
<th>MS</th>
<th>RCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total absenteeism hours taken during quarter for all employees</td>
<td>3952</td>
<td>4585</td>
<td>7368</td>
</tr>
<tr>
<td>Total accrued employee hours during the quarter</td>
<td>146,264</td>
<td>184,706</td>
<td>210,010</td>
</tr>
<tr>
<td>Absence /accrued hours average %</td>
<td>2.58%</td>
<td>2.13%</td>
<td>3.76%</td>
</tr>
</tbody>
</table>

*Note. MHAS = Mental Health and Addiction Services, MS = Medical Services, RCS = Regional Community Services*

Chi square analysis

Chi square ($\chi^2$) analysis was conducted to ascertain the relationships between the predictor variables and absenteeism rates per department. Pearson’s $\chi^2$ square and significance levels are presented in Table 3.3. $\chi^2$ analysis is a non-parametric (indirect) technique for the analysis of the relationship between two variables when there are violations to the distribution, such as lack of variability. Contingency tables with low, medium and high scores on each predictor variable per department, is presented in Appendix D as Table D.1. The departmental scores for each variable were classified as ‘low’ when scores < 4, ‘medium’ when scores ranging 4-5 and ‘high’ when scores were > 6. Limitations of the absenteeism data will be further discussed in the Discussion chapter.
Table 3.3

Pearson Chi square values

<table>
<thead>
<tr>
<th></th>
<th>Jobsat</th>
<th>Jobinv</th>
<th>Afcom</th>
<th>Cocom</th>
<th>Orsup</th>
<th>Susup</th>
<th>Wfcon</th>
<th>Fwcon</th>
<th>Teame</th>
<th>Regin</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \chi^2 )</td>
<td>11.99*</td>
<td>5.72</td>
<td>1.63</td>
<td>4.25</td>
<td>15.32*</td>
<td>29.88*</td>
<td>3.93</td>
<td>7.77</td>
<td>10.85*</td>
<td>10.85*</td>
</tr>
</tbody>
</table>

Note. Jobsat = job satisfaction, Jobinv = job involvement, Afcom = affective commitment, Cocom = continuance commitment, Orsup = perceived organisational support, Susup = perceived supervisor support, Wfcon = work-to-family conflict, Fwcon = family-to-work conflict, Teame = team cohesion, Regin = regional identification

*p<0.05, df (4,1)

**Job satisfaction.** Job satisfaction was predicted to have a negative relationship with absenteeism (H1a), with least job satisfied employees showing the highest levels of absenteeism. Chi square analysis showed a significant Pearson’s chi square (\( \chi^2 = 11.99, p <.05 \)) indicating that there are differences between the three departments in the relation of job satisfaction and absenteeism rates. Medical Services (MS) showed the highest proportion of high job satisfied employees (17%) while they were also found to have the lowest absenteeism rates (2.13%). Moreover, most dissatisfied employees (35%) were found in the Regional Community Services (RCS) which also reported the highest absenteeism rate (3.76%). Therefore, the outcome of the \( \chi^2 \) analysis points to the possibility that job satisfaction was negatively related to absenteeism, thus supporting H1a.

**Job involvement.** H2a predicted that job involvement would be negatively related to absenteeism, in that employees least involved in their jobs showing highest levels of absenteeism. However, Pearson’s \( \chi^2 \) was non significant (\( \chi^2 = 5.72, p >.05 \)) indicating that there were no differences in levels of job involvement between the departments in relation to absenteeism rates. Additionally, the department with the highest absenteeism rate (RCS) did not have the highest
proportion of least involved employees (41%), as MHAD had more low involved employees (48%). MS showed the same percentage of least job involved employees as RCS (41%). Therefore, it was concluded that the probability for job involvement and absenteeism to be negatively related was low, thus not supporting H2a.

Affective and continuance commitment. Absenteeism and affective commitment were predicted to be negatively related to each other (H3a), with least emotionally attached employees showing the highest levels of absenteeism. However, $\chi^2$ analysis did not confirm this hypothesis ($\chi^2 = 1.63, p > .05$), indicating that the departments do not vary in terms of employees who were high, moderate or low on affective commitment to the BOPDHB. Additionally, RCS did not proportionally have the highest number of least affective committed employees (54%) as MHAD had a higher proportion at 62%. MS employees showed the lowest proportion of employees (56%) as least affective committed. Therefore, the probability for affective commitment and absenteeism to be negatively related was low and thus, H3a was not supported.

Continuance commitment and absenteeism were predicted to be positively related to absenteeism (H4a) with employees reporting high levels of continuance commitment also showing the highest levels of absenteeism. The $\chi^2$ was non significant ($\chi^2 = 4.25, p > .05$), indicating that there were no differences in terms of levels of continuance commitment between departments. Also, again, RCS with the highest rate of absenteeism did not proportionally show the highest proportion of high continuance committed employees (12%), as MHAD reported 15% of employees as being highly continuance committed. MS reported 9% of employees scoring low on continuance commitment. Thus the possibility for continuance
commitment and absenteeism to be positively related was low, therefore H3b was not supported in this study.

*Perceived organisational support (POS) and perceived supervisor support (PSS).* POS and absenteeism were predicted in H5a to be negatively related to absenteeism with employees reporting low levels of POS also showing the highest levels of absenteeism. The $\chi^2$ was significant ($\chi^2 = 15.32, p < .05$) indicating that there are differences between the three departments in terms of high, moderate or low levels of POS. However, MHAD whose absenteeism rate was 2.56% showed a slightly higher proportion of employees low on POS (61%) than RCS (60%) whose absenteeism rate is 3.76%, indicating a non linear relationship between POS and absenteeism. MS whose absenteeism rate was 2.13%, showed 45% of employees low on POS. It was therefore concluded that the probability for POS and absenteeism to be negatively related was low, thus not supporting H5a.

H6a predicted that PSS would be negatively related to absenteeism with employees reporting low levels of POS also showing the highest levels of absenteeism. A significant $\chi^2$ was found ($\chi^2 = 29.88, p < .05$), an indication of differences in levels of PSS between the departments. Additionally, RCS showed the highest proportion of respondents with low PSS (60%) compared to MHAS (34%) and MS (28%). RCS did of course also show the highest level of absenteeism (3.76%). Therefore, there was a possibility for PSS and absenteeism to be negatively related, thus supporting H6ac.

*Work-to-family conflict (WFC) and Family-to-work conflict (FWC).* H7a and H7b predicted WFC and FWC to be positively related to absenteeism with respondents reporting low levels of WFC and FWC also showing the lowest levels
of absenteeism. WFC showed a significant Pearson’s $\chi^2$ ($\chi^2 = 10.85$, $p < .05$), indicating significant differences in levels of WFC between departments. Moreover, MS showed the lowest absenteeism rate (2.13%) while also reporting the smallest proportion of respondents with low levels of WFC (48%). In addition, most respondents reporting low WFC were found within RCS which also showed the highest absenteeism rates. Therefore there was a probability the WFC was related to absenteeism, thus supporting H7a.

However, in relation to FWC a non significant $\chi^2$ was found ($\chi^2 = 3.93$, $p > .05$) indicating no significant differences were found in levels of FWC between the departments. In addition, it was found that RCS did not have the highest proportion of respondents with low FWC (87%) as MHAS was higher with 89%. Therefore, the possibility for FWC and departmental absenteeism to be positively related was low, thus not supporting H7b.

**Team cohesion.** Team cohesion was predicted to be negatively related to absenteeism with respondents reporting low levels of team cohesion also showing high levels of absenteeism. However, a non significant $\chi^2$ was found ($\chi^2 = 7.77$, $p > .05$) indicating no significant differences in levels of team cohesion were found between the departments. Therefore, there was no direct relationship between team cohesion and departmental absenteeism rates, thus H8a was not supported.

**Regional Identification.** H9a predicted that regional identification would be negatively related to absenteeism with respondents reporting low levels of regional identification also reporting high levels of absenteeism. A significant Persons $\chi^2$ was found ($\chi^2 = 10.85$, $p < .05$) indicating differences in regional identification between departments. However, it was found that the department with the highest absenteeism rate (RCS) did not proportionally have the highest
level of respondents with low regional identification levels (12%) as MS had 23% of respondents with low levels of regional identification. Therefore no linear relationship between regional identification and absenteeism was identified, and thus H9a was disconfirmed.

In summary the three departments were significantly different in relation to job satisfaction, perceived supervisor support and work-to-family conflict. Perceived organisational support and regional identification showed a possible non-linear relationship while job involvement, affective and continuance commitment, family-to-work conflict and team cohesion showed no significant difference between the three departments.

**Correlations and regressions**

**Correlations.** The results of Pearson Product Moment correlations between major variables and turnover intention are presented in Table 3.4. Facet job satisfaction and global job satisfaction were very highly correlated (.76) as expected. Perceived organisational support and perceived supervisor support, although presented as two variables were also highly correlated (.64). Now I will examine the correlations for the proposed turnover intention hypothesis in more depth, after which regressions will be discussed.

As expected from previous research, job satisfaction was negatively correlated with turnover intention (r = -.57, p < .01) as were job involvement (r = -.22, p < .01), affective commitment (r = -.44, p < .01), perceived organisational support (r = -.45, p < .01), perceived supervisor support (r = -.40, p < .01), team cohesion (r = -.42, p < .01) and regional identification (r = -.28, p < .01) thus supporting H1b, H2b, H4a, H5b, H6b, H8b and H9b. Work-to-family conflict and
family-to-work conflict were positively related to turnover intention ($r = .20, p < .01$ and $r = .09, p < .05$) therefore supporting H7c and H7d and confirming WFC’s stronger relationship with turnover intention compared to FWC.

The data showed no support for H4b which predicted that continuance commitment would be negatively related to turnover intention while the negative correlation between affective commitment and turnover intention proved to be stronger ($r = -.44$) than between continuance commitment and turnover intention ($r = -.08$).

H4c was supported as continuance commitment was positively related to regional identification ($r = .17, p < .01$). POS and affective commitment were highly correlated ($r = .60, p < .01$) supporting H5c and the data showed also support for H6c which predicted PSS to be positively related to POS ($r = .64, p < .01$). WFC was moderately negatively correlated to job satisfaction ($r = -.22, p < .01$) but a non significant correlation was found for FWC thus partially supporting H7e. Finally WFC was low negatively correlated to affective commitment ($r = -.08, p < .05$) and again a non significant relationship was found for FWC, resulting in partial support for H7f.

*Regression.* All predictor variables were regressed simultaneously to determine the relative contributions of the predictors to turnover intention. The outcomes of these regressions are shown in Table 3.5. Job satisfaction, continuance commitment, work-to-family conflict and regional identification were all significant predictors of turnover in the expected directions. However, the correlation table did not show any significant relationship between continuance commitment and turnover intention.
Table 3.4

*Correlations between major variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Jobin</th>
<th>Jobsat</th>
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<th>Cocom</th>
<th>Orsup</th>
<th>Susup</th>
<th>Wfcon</th>
<th>Fwcon</th>
<th>Teamc</th>
<th>Regin</th>
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<td>.71**</td>
<td>.44**</td>
<td>.002</td>
<td>.64**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wfcon</td>
<td>.18**</td>
<td>-.22**</td>
<td>-.08</td>
<td>.21**</td>
<td>-.18**</td>
<td>-.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fwcon</td>
<td>.08</td>
<td>-.03</td>
<td>-.01</td>
<td>.17**</td>
<td>-.01</td>
<td>.01</td>
<td>.41**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teamco</td>
<td>.21**</td>
<td>.66**</td>
<td>.45**</td>
<td>.01</td>
<td>.46**</td>
<td>.55**</td>
<td>-.10</td>
<td>-.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regin</td>
<td>.16**</td>
<td>.23**</td>
<td>.35**</td>
<td>.17**</td>
<td>.16**</td>
<td>.10**</td>
<td>-.04</td>
<td>-.08</td>
<td>.22**</td>
<td></td>
</tr>
<tr>
<td>Tuovint</td>
<td>-.22**</td>
<td>-.57**</td>
<td>-.44**</td>
<td>-.08</td>
<td>-.45**</td>
<td>-.40**</td>
<td>.20**</td>
<td>.09*</td>
<td>-.42**</td>
<td>-.28**</td>
</tr>
</tbody>
</table>

*Note. Jobin = job involvement, Jobsat = job satisfaction, Afcom = affective commitment, Cocom = continuance commitment, Orsup = perceived organisational support, Susup = perceived supervisor support, Wfcon = work-to-family conflict, Fwcon = family-to-work conflict, Teamc = team cohesion, Regin = regional identification, Tuovint = turnover intention.*

N=407

*p<0.01, **p<0.05

The significant result between these two factors in this regression was thought to be due to an enhancement effect in which the inter-relationship between the predictors increases the amount of significance (in comparison with correlations between two factors only). To test this hypothesis all variables were again simultaneously regressed on turnover intention but stepwise deletion of one variable at the time was performed to test the enhancement effect. The stepwise deletion resulted in continuance commitment being significantly related to
turnover intention but indeed only when interacting with one or more predictor variables. In combination all the predictors accounted for 36% of the variance in turnover intention. However, while there were four predictors significant in terms of effect size, only job satisfaction made a meaningful contribution ($\beta = -.37$).

Table 3.5

*Regression equation: Predictors of turnover intention*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$\beta$</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobsat</td>
<td>-.37</td>
<td>-5.13*</td>
</tr>
<tr>
<td>Jobinv</td>
<td>-.03</td>
<td>-.73</td>
</tr>
<tr>
<td>Afcom</td>
<td>-.11</td>
<td>-1.85</td>
</tr>
<tr>
<td>Cocom</td>
<td>-.10</td>
<td>-2.33*</td>
</tr>
<tr>
<td>Orsup</td>
<td>-.08</td>
<td>-1.28</td>
</tr>
<tr>
<td>Susup</td>
<td>.02</td>
<td>.24</td>
</tr>
<tr>
<td>Wfcon</td>
<td>.11</td>
<td>2.36*</td>
</tr>
<tr>
<td>Fwcon</td>
<td>.05</td>
<td>1.06</td>
</tr>
<tr>
<td>Teamc</td>
<td>-.06</td>
<td>-1.15</td>
</tr>
<tr>
<td>Regin</td>
<td>-.12</td>
<td>-2.74*</td>
</tr>
</tbody>
</table>

*Note. Jobsat = job satisfaction, Jobinv = job involvement, Afcom = affective commitment, Cocom = continuance commitment, Orsup = perceived organisational support, Susup = perceived supervisor support, Wfcon = work-to-family conflict, Fwcon = family-to-work conflict, Teamc = team cohesion, Regin = regional identification, * p< 0.05. Adjusted R Square .37; F = 24.57, df = 10*

*Mediated regressions*

In this study the mediated regressions approach by Baron & Kenny (1986) was utilised (see also Figure 1.2). Baron and Kenny proposed that mediation regression requires three equations to be calculated. In the first equation the mediator variable is regressed on the predictor variable, in the second the criterion...
variable is regressed onto the predictor variable. Finally, the criterion variable is simultaneously regressed with the predictor and mediator variables.

Furthermore, Baron and Kenny (1986) outline four conditions that must be met for a mediation effect to be demonstrated:

- **Condition 1.** The predictor variable must be significantly related to the mediator variable
- **Condition 2.** The predictor variable must be significantly related to the criterion variable
- **Condition 3.** The mediator variable must be significantly related to the criterion variable
- **Condition 4.** The effect of the predictor variable must be less in equation three than in equation two.

Baron and Kenny proposed that when all four conditions are met a mediation effect is present on the relationship between criterion and predictor. If the beta weight for the predictor is significant in equation two but not significant in equation three (when the mediator is controlled for), a full mediation effect is achieved. Partial mediation is present when the beta weight for the predictor in equation three is less than in equation two, but is still significant. If mediation was found, a Sobel test was conducted to examine the significance of the mediation effect.

_Perceived organisational support (POS)._ Hypothesis 10 predicted that POS would mediate the negative relationship between perceived supervisor
support (PSS) and turnover intention. Table 3.6 presents the findings of the three regression equations. In equation one PSS was regressed on POS and their relationship found to be significant. In equation two turnover intention was regressed on PSS and their relationship also found to be significant. In the third equation turnover intention was simultaneously regressed on PSS and POS. The relationship between turnover intention and PSS was still significant ($\beta = -.19$) as expected, but was considerably weaker than in equation two ($\beta = -.40$). Therefore, partial mediation has been reached thus partially supporting H10. The results of the Sobel test showed a significant mediation effect.

Table 3.6

*Mediated regressions testing hypothesis 10*

<table>
<thead>
<tr>
<th>Equation</th>
<th>Criterion</th>
<th>Predictor</th>
<th>$\beta$</th>
<th>$t$</th>
<th>Adjusted R square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perceived organisational support</td>
<td>Perceived supervisor support</td>
<td>.64</td>
<td>16.59*</td>
<td>.40</td>
</tr>
<tr>
<td>2</td>
<td>Turnover intention</td>
<td>Perceived supervisor support</td>
<td>-.40</td>
<td>-8.82*</td>
<td>.16</td>
</tr>
<tr>
<td>3</td>
<td>Turnover intention</td>
<td>Perceived supervisor support</td>
<td>-.19</td>
<td>-3.40*</td>
<td>.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perceived organisational support</td>
<td>-.33</td>
<td>-5.80*</td>
<td></td>
</tr>
</tbody>
</table>

Note. * $p < .01$. Sobel test $Z = -5.692$, $p = .02$*

*Continuance commitment.* Continuance commitment was predicted to mediate the relationship between regional identification and turnover intention (H11). Despite a moderate positive correlation between continuance commitment and regional identification ($r = .17$, $p < .01$), no significant correlation was found
between continuance commitment and turnover intention. The examination of the potential mediation effect was therefore not validated and H11 not supported.

**Moderated regressions**

Three predictor variables (job involvement, perceived supervisor support, and team cohesion) were expected to have moderating effects on the relationship between criteria that are antecedents of absenteeism. Hierarchical regression analysis were used to investigate moderating effects following Baron and Kenny (1986). In step 1 the criterion was regressed on the predictor and the moderator. In step 2, the criterion was regressed on the interaction term between predictor and moderator. The interaction term was created by multiplying the raw scores of the predictor with the raw scores of the moderator. I will now discuss the outcomes of the moderated regression analyses.

**Job involvement.** It was hypothesised in H12 that job involvement would moderate the relationship between work-to-family conflict (WFC) and job satisfaction, as well as moderate the relationship between WFC and affective commitment. Outcomes of the hierarchical regression are shown in Table 3.7 and 3.8 respectively.

In relation to H12, Table 3.7 showed in step 1 of the hierarchical regression both WFC ($\beta = .31$) and job involvement ($\beta = -.28$) to be significant. The result of step 2 was non significant, indicating that job involvement did not moderate the relationship between WFC and job satisfaction, thus not supporting H12. However, the main effect of job involvement was significant.
Table 3.7

**Moderator effect: Job involvement on the relationship between WFC and job satisfaction.**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Predictor</th>
<th>β</th>
<th>R² change</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>Step 1</td>
<td>WFC</td>
<td>-.28*</td>
<td>.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job involvement</td>
<td></td>
<td>.31*</td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>Step 2</td>
<td>WFC x Job involvement</td>
<td>-.29</td>
<td>.01</td>
</tr>
</tbody>
</table>

*Note. WFC = work-to-family conflict, p < .01*

The analysis for H13 is shown in Table 3.8 demonstrating that in step 1 of the hierarchical regression both WFC (β = -.16) and job involvement (β = .44) were significant. The second step showed a non significant result indicating that job involvement did not moderate the relationship between WFC and affective commitment, therefore not supporting H13.

Table 3.8

**Moderator effect: Job involvement on the relationship between WFC and affective commitment**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Predictor</th>
<th>β</th>
<th>R² change</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective commitment</td>
<td>Step 1</td>
<td>WFC</td>
<td>-.16*</td>
<td>.19</td>
</tr>
<tr>
<td></td>
<td>Job involvement</td>
<td></td>
<td>.44*</td>
<td></td>
</tr>
<tr>
<td>Affective commitment</td>
<td>Step 2</td>
<td>WFC x Job involvement</td>
<td>-.24</td>
<td>.003</td>
</tr>
</tbody>
</table>

*Note. WFC = work-to-family conflict, *p < .01*
**Perceived supervisor support.** Hypothesis 14 predicted for perceived supervisor support (PSS) to moderate the relationship between WFC and job satisfaction. In step 1 of the hierarchical regression both WFC ($\beta = -.15$) and PSS ($\beta = .70$) showed to be significant (see Table 3.9). The second step showed a non significant result indicating that PSS did not moderate the relationship between WFC and job satisfaction, thus not supporting H14. However, a significant main effect was found for PSS.

**Team cohesion.** In relation to H15, step 1 of the hierarchical regression found POS ($\beta = .51$) and team cohesion ($\beta = .22$) to be both significant (see Table 3.10). The second step showed a non significant result demonstrating that team cohesion did not moderate the relationship between POS and affective commitment, therefore not supporting H15. Nonetheless, a significant main effect was found for team cohesion.

Table 3.9

<table>
<thead>
<tr>
<th>Moderator effect: Perceived supervisor support on the relationship between WFC and job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criterion</td>
</tr>
<tr>
<td>Job satisfaction</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
</tr>
</tbody>
</table>

*Note. WFC = work-to-family conflict, PSS = perceived supervisor support, *p < .01
Table 3.10

*Moderator effect: Team cohesion on the relationship between perceived organisational support and affective commitment*

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Predictor</th>
<th>β</th>
<th>$R^2$ change</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction Step 1</td>
<td>POS</td>
<td>.51*</td>
<td>.22*</td>
<td>137.55</td>
</tr>
<tr>
<td>Team cohesion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction Step 2</td>
<td>POS x Team cohesion</td>
<td>.24</td>
<td>.002</td>
<td>92.09</td>
</tr>
</tbody>
</table>

*Note.* POS = perceived organisational support, *p < .01

**Summary**

This section has examined the indirect relationship between job involvement, job satisfaction, affective commitment, continuance commitment, perceived organisational support, perceived supervisor support, work-to-family conflict, family-to-work conflict, team cohesion and regional identification and absenteeism. Moreover this study examined the correlations between all predictor variables as above and turnover intention. It was inferred that there was a possibility for job satisfaction, perceived supervisor support and work-to-family conflict to be indirectly related to departmental absenteeism, while it was also found that turnover intention correlated with all predictor variables except continuance commitment.

In addition this study investigated the extent to which perceived organisational support mediated the relationship between perceived supervisor support and turnover intention, while also examining the mediation effect of continuance commitment on the association between regional identification and...
turnover intention. It was further found that perceived organisational support did mediate the relationship between perceived supervisor support and turnover intention. Implications of this finding will be discussed in the following chapter.

Furthermore, this study investigated the degree to which job involvement moderated the association between work-to-family conflict and job satisfaction and the moderating effect of job involvement on the relationship between work-to-family conflict and affective commitment, while also examining the moderating effect of perceived supervisor support on the association between work-to-family conflict and job satisfaction. Finally, this study looked at team cohesion as a potential moderator for the relationship between perceived organisational support and affective commitment. All results will be further discussed in Chapter 4.
Chapter 4

Discussion

The aim of this research was to investigate a model of absenteeism and turnover intention using a sample of health professionals in a New Zealand context. Absenteeism and turnover have been identified as major concerns in every kind of industry, with healthcare having one of the highest rates worldwide (Cohen & Golan, 2007; Waldman et al., 2004), which has vast financial and organisational implications. Despite a growing body of research, absenteeism and turnover intention are still variables with largely unexplained variance (Cohen & Golan, 2007; Jewel, 1998). This research contributed to the literature by adding team cohesion and regional identification to the previously researched variables such as job satisfaction and organisational commitment. Additionally, the mediating effects of perceived organisational support and continuance commitment were investigated as well as the moderating effects of job involvement, perceived supervisor support and team cohesion on various predictor variable relationships associated with absenteeism.

Overall the results seem to partially support the theoretical model. Departmental level absenteeism was potentially related to job satisfaction and perceived supervisor support, however no relationship was found with team cohesion. All predictor variables showed significant relationships with turnover intention except continuance commitment. High levels of regional identification and team cohesion were found. Perceived organisational support was found to partially mediate the relationship between perceived supervisor support and turnover intention, but no moderating effects were found. In this chapter I will
discuss the interpretation of the main findings and explore their implications. Suggestions for future research will be made and limitations of the research discussed. I will now discuss the outcomes of the direct relationships after which the outcomes of the mediating and moderating relationships will be examined.

Direct relationships

On average employees were moderate to highly satisfied with and involved in their jobs. They also showed moderate levels of affective and continuance commitment and reported to be moderate to highly supported by their supervisor, with support from the organisation found to be moderate. Experiences of work-to-family conflict (WFC) were moderate and employees experienced low family-to-work conflict (FWC). Furthermore employees experienced high team cohesion and regional identification while their intent to leave was moderate. This research did not rely on self reports to collect individual absenteeism data, nor did the researcher have access to personnel records, however, the available departmental data showed moderate levels of absenteeism in comparison to national and international statistics on absenteeism (as discussed in Chapter 1). The classification per department limited the analysis as only a non parametric technique could be utilised.

Absenteeism

It was predicted that absenteeism would be negatively related to job satisfaction, job involvement, affective commitment, perceived organisational support (POS), perceived supervisor support (PSS), team cohesion and regional identification, with a positive relationship to be found with continuance commitment, WFC and FWC. The results of this study (despite the limitations in
data collection and analysis) show a potential partial support for these hypotheses as there is a probability that job satisfaction and perceived supervisor support are negatively related, and WFC positively related to departmental absenteeism. However, job involvement, affective and continuance commitment, perceived organisational support, FWC and team cohesion, showed no significant link with departmental absenteeism.

This study was unable to examine the direct relationship between predictor variables and absenteeism, however, the indirect findings seem to support previous studies (Cohen & Golan, 2007; Hackett, 1989; Sagie, 1998; Scott & Taylor, 1985) which show job satisfaction to be a predictor of absenteeism (although correlations have been found moderate to low). It has to be noted that job satisfaction may significantly fluctuate over time as employee perception of their workplace can rapidly change depending on such factors as job tasks or job pressure. Also, PSS was significantly related to departmental absenteeism rates indicating that employees perceiving high PSS will be motivated to attend based on increased levels of commitment to the supervisor, and through this ultimately to the organisation (see also Gagnon & Michael, 2004; Stinglhamber & Vandenberghe, 2003). The hypothesis that WFC was positively related to departmental absenteeism was supported as respondents who reported that work was interfering with family life may reduce work (by for example being absent) as they are possibly unable to reduce their family roles (see Goff et al., 1990).

This study, however did not support previous research by Harrison and Martocchio (1998) and Shore, Newton and Thornton (1990) who found a negative association between job involvement and absenteeism. This might be due to the study’s indirect analysis of the relationship of variables with absenteeism.
Additionally, although the BOPDHB employees in this sample showed moderate to high job involvement, this might by itself not be enough to deter employees from unscheduled absence. Mathieu and Kohler (1990) found that job involvement interacted with organisational commitment in relation to absence while Wegge, Schmidt, Parkes and Van Dick (2007) showed that job involvement and job satisfaction interacted significantly in connection to absenteeism. They argued that absence behaviour need to be understood by investigating not only main effects but also interaction effects, in particular between job satisfaction and job involvement as the first relates to people’s perceptions of situational variables at work while the latter represents personality (Wegge et al., 2007). It seems that job involved employees who are low job satisfied will potentially show higher rates of absenteeism, however, absenteeism could potentially be low for job involved employees who are highly satisfied with their job.

Moreover, the present study indicated no significant relationship between affective commitment and departmental absenteeism and therefore did not support previous research by Somers (1995) and Mathieu and Kohler (1990). A possible explanation is that BOPDHB employees may not consider unscheduled absences to be detrimental to their emotional attachment, continued identification or involvement with the organisation. Working in the healthcare industry has been frequently associated with the experience of high levels of stress due to high and demanding workloads (Shapiro, Astin, Bishop, & Cordova, 2005; Wieclaw, Agerbo, Mortensen, & Bonde, 2006) and BOPDHB employees might simply use absence to cope with this workload-related stress.

Furthermore, continuance commitment was also found not significantly related to departmental absenteeism despite the rationale that employees might
utilise unscheduled absences as a coping mechanism since the cost of leaving is perceived to be too high. Luchak and Gellatly (2007) believed continuance committed employees compensate the perceived cost of leaving or lack of alternatives with unscheduled leave but not to such an extent that they risk a loss of income or ultimately loss of employment.

Despite several studies showing a negative relationship between POS and absenteeism (Eisenberger et al., 1986; Eisenberger et al., 2002), this hypothesis was not supported in the current study. This may be due to the overlap with perceived supervisor support (PSS). The correlation between POS and PSS was noted as high ($r = .64$) indicating that the distinction between POS and PSS is low and in fact employees might perceive the support they received from their supervisor as support from their organisation (also indicated by research of Van Knippenberg, Van Dick and Tavares (2007). In addition, PSS seemed to be a more salient factor than POS in relation to departmental absenteeism.

FWC was also found to be not significantly related to departmental absenteeism. The sample showed low levels of FWC indicating that employees experienced low interference from family life with work, hence no relationship with departmental absenteeism was found. While team cohesion studies by Sanders and Nauta (2004) found the more cohesive the team was, the more cooperative team members behaved towards each other, which lowered short term absenteeism rates, the current study found no support for the hypothesis predicting a negative association between team cohesion and absenteeism. A possible explanation is that even though employees might perceive high team cohesion, the group norm might be that it is acceptable to take unscheduled leave to cope with
the strain experienced from high workloads. If others engage in withdrawal behaviours, the temptation to do also is enhanced (Eder & Eisenberger, 2008).

Moreover, the hypothesised negative relationship between regional identification and absenteeism was also not supported. As noted this research was limited by the indirect analysis of the relationship between regional identification and departmental absenteeism. Also, employees may not take regional identification into account in relation to absenteeism as it ultimately leads to continuance commitment for which also no significant relationship was found.

In summary, it appears employees who are satisfied with their work and supervisor are less absent from work, while employees feeling the strain of WFC will be more absent as they cope with this conflict.

**Turnover intention**

It was predicted that job satisfaction, job involvement, affective and continuance commitment, POS, PSS, team cohesion and regional identification would be related negatively to turnover intention, whereas WFC and FWC would be positively related. The results of the present study show support for these hypotheses as only continuance commitment was found not to significantly predict turnover intention.

Job satisfaction was found to have a negative relationship with turnover intention in the present study in agreement with previous research (Griffeth et al., 2000; Lu et al., 2002), while also showing job satisfaction to have the highest correlation of all variables with turnover intention. Moreover, regression found job satisfaction was the strongest predictor of turnover intention in the present study. Lu et al. (2002) support this last result as their study also showed job
satisfaction to be the best predictor of turnover intention indicating employees who are job satisfied intend to stay with the organisation.

The present study also supported previous research that found clear negative links between job involvement and turnover intention (Baba & Jamal, 1991; Huselid & Day, 1991). Job involved employees will be motivated to stay as the job is important for their self image, therefore leaving might mean that this important need is not met. Also, affective commitment was found to be negatively related to turnover intention, supporting previous studies (Meyer et al., 2002). Emotionally attached employees who identify with the organisation intend to stay with the organisation.

The proposed negative relationship between POS and turnover intention was supported by the present study. Obviously employees at the BOPDHB who experience the support from the organisation as positive are more motivated to stay. Also, as POS is associated with affective commitment, instilling a sense of belonging to the organisation through supportive practices could deter employees from wanting to leave. PSS was found to be negatively related to turnover intention in the present study supporting the premise that employees who feel supported by their supervisor are more motivated to intend to remain with the organisation, which is expressed through increased levels of commitment to the supervisor and ultimately the organisation.

Support was also found for the significant positive relationship between WFC and FWC with turnover intention. Employees reporting high levels of WFC and/or FWC will look for alternative employment to alleviate this inter-role conflict as alternative employers may provide better work circumstances that
better accommodate their family-related needs. Moreover, a negative relationship was found between team cohesion and turnover intention supporting the proposed hypothesis in this study and previous research by Riketta and Van Dick (2005). High team cohesion amongst employees seems a motivating force to stay with an organisation.

Regional identification was related to turnover intention thus supporting the proposed hypothesis and previous research by Mitchell et al. (2001). Employees high on regional identification are motivated to stay with their organisation. As a result of the above outcomes, organisations placed in desirable locations will potentially have a higher proportion of staff with low levels of turnover intention due to their attachment to the region rather then to their job or employer. This might lead, as noted previously, to employees increasing their affective commitment based on rationalisations as opposed to emotional attachment or identification (Somers, 1995). It is noted that correlations between regional identification and affective commitment were higher ($r = .35$) than with continuance commitment ($r = .17$).

The prediction however, that continuance commitment would be negatively related to turnover intention, was not supported in the present study. This hypothesis was based on the idea that continuance committed employees are more likely to stay as they perceive a lack of alternatives and that if they left they may lose out on such things as pay, position or additional financial rewards offered by the organisation. A meta analysis by Griffeth et al (2000) showed a strong negative correlation between continuance commitment and turnover intention ($r = -.38$).
Despite this strong evidence it was surprising to find that the present study showed no support for the proposed hypothesis. Possible reasons for this might be that as continuance commitment was shown in this study to be positively related with job involvement, WFC, FWC and regional identification, employees might base their calculative commitment not solely on the actual cost of leaving or the availability of alternatives, but also include the strain they feel between work and family life (other organisations might not offer any better circumstances), the importance of work to their self image (working is more important than not working) and their attachment to the region (staying in the region is most important). Moreover, an augmentation effect was found as when continuance commitment was regressed simultaneously with all the other predictor variables in relation to turnover intention, the relationship proved to be significant.

Other studies have noted the influence of interactions between continuance and affective commitment in predicting turnover intention (Somers, 1995). The present study found slightly higher levels of continuance commitment compared to affective commitment but taken together these might form a ‘buffer’ against intending to leave. Employees who are moderately emotionally attached plus moderately perceiving the cost of leaving as too high (as in this sample) might form an even stronger attachment to the organisation as the two factors combined might increase their motivation to stay. Also, normative commitment might have played an important role in the present study as the sample showed an average tenure of 6.5 years and thus many employees might have received training or organisation-specific benefits that could enhance any feelings of an obligation to stay with the organisation. Mathieu and Zajac (1990) in their meta analysis on the antecedents, correlates and consequences of organisational commitment, argued
that the relationship between organisational commitment (affective, normative and continuance), behavioural intent and behaviour itself (for example in relation to turnover intention and turnover) is “not likely to be simple or direct” (p. 185). Moreover, they discussed the likelihood that these relationships might be moderated as well as mediated.

In addition, Luchak and Gellatly (2007) argued that following research by Meyer, Becker and Vandenberghe (2004) whom proposed that affective and continuance commitment are associated with different motivational mindsets, the linear models used in most previous research “seriously underestimate the effect size of continuance commitment relative to affective commitment” (p. 786). This implies that in reality the magnitude of continuance commitment on turnover intention might be greater than here proposed as when continuance commitment levels increase from low to moderate, employees will be motivated to adhere to the minimum requirement to keep their job (for example not being absent too often and performing well enough to stay employed) but beyond moderate levels, the effect of continuance commitment on behaviour will be low as employees are not motivated to exceed any minimum requirements.

In summary, it appears that employees settled in their region, who are involved and happy with their job and team, are more likely to stay with an organisation. Moreover, those who are also satisfied with the support they receive from the organisation and their supervisor (for example in relation to WFC and FWC) will be motivated to remain.
**Relationships between predictor variables**

The present study supported the prediction that continuance commitment would be positively related to regional identification based on the premise that when employees feel a strong connection to the area they reside in, they will perceive the sacrifices associated with leaving as too high. Goksenin and Edward (2004) also found that employees with strong regional identification would develop higher levels of continuance commitment.

Moreover, the present study predicted that WFC would be negatively related to job satisfaction and affective commitment based on the premise that employees who experience high levels of WFC will, as a result, not be as content with their job (as the job puts pressure on family life) and in turn decrease their emotional attachment to the organisation (as the organisation is perceived as unsupportive). A meta analysis by Allen et al. (2000) found a mean correlation of -.24 between WFC and job satisfaction and -.23 between WFC and affective commitment. The current study supported both these hypotheses, in other words respondents experiencing high WFC were not as satisfied and emotionally attached to their organisation.

In addition, the present study found support for the prediction that POS would be positively related to perceived supervisor support (PSS) and affective commitment based on the rationale that employees perceive the support they receive from their supervisor as indicative of support from the organisation, and when employees feel supported by their organisation they will reciprocate this arrangement by increasing affective commitment. Vandenberghe et al. (2004) found that POS contributed uniquely to affective commitment while the
relationship between the individual and the organisation is often enacted through
the relationship with supervisors (Van Knippenberg et al., 2007)

Finally, this study found a small positive correlation between regional
identification and continuance commitment \( (r = .17) \) which might lead to the
assumption that motivation to stay on the basis of regional identification plays a
role in continuance commitment.

Mediated relationships

**Mediating effect of perceived organisational support (POS).** It was
predicted in the present study that POS would mediate the relationship between
PSS and turnover intention based on the rationale that employees who perceive
their supervisor as supportive and valuing their contributions will, (according to
the organisational support theory) feel obliged to assist the organisation and to
increase their affective commitment. Both POS and PSS have shown the potential
to reduce turnover intention. However, a study by Eisenberger et al. (2002) found
that PSS had no statistical significant relationship with turnover intention beyond
the mediating role of POS.

This study partially supported the above hypothesis as when turnover
intention was simultaneously regressed on PSS and POS, the relationship between
turnover intention and PSS was still significant (contrary to Eisenberger et al.
(2002)), however the relationship was significantly weaker, implying that
employees who perceive low POS resulting from low PSS might increase their
turnover intention. The partial mediation effect that was revealed by this study
indicates that PSS still has a significant relationship beyond POS with turnover
intention, with not all PSS leading to POS. Employees might perceive the support
they get from their supervisor as satisfactory, while not believing that the organisation cares for them to the same degree as their supervisor does. This could be the case in large organisations (such as the BOPDHB) where employees may feel far removed from the ‘core’ of the organisation and thus put their trust in their supervisor.

**Mediating effect of continuance commitment.** It was hypothesised that continuance commitment would mediate the relationship between regional identification and turnover intention. However, continuance commitment was not significantly related to turnover intention which is a precondition for mediation to occur, therefore the potential mediating effect of continuance commitment was not examined.

**Moderated relationships**

The present study investigated the moderating or buffering effect of job involvement on the relationships between WFC and job satisfaction, and WFC and affective commitment. In addition, this study looked at the buffering effect of PSS on the relationship between WFC and job satisfaction, and finally the moderating effect of team cohesion was explored on the relationship between POS and affective commitment. As noted earlier, these variable relationships have been identified as predictive of absenteeism (see T. D. Allen et al., 2000; Boyar et al., 2005; Wegge et al., 2007).

**Moderating effects of job involvement.** Although the moderating effects of job involvement on the relationship between job stressors and health or between WFC and turnover have been studied, no empirical evidence of the potential moderating role of job involvement on the relationship between WFC and job...
satisfaction or affective commitment was found in the literature. However, this research made the prediction that job involvement would moderate the relationship between WFC and job satisfaction and affective commitment respectively, based on the rationale that employees who are high job involved might perceive their WFC as less important since the way they perceive themselves is related to a large extent to their employment situation, as opposed to their family life. Similarly low job involved employees might perceive the pressure of WFC intensifies as they struggle to fulfil both job and family roles, resulting in less satisfaction and affective commitment.

Despite this rationale, the present study did not support the proposed hypotheses as no moderating effects were found for job involvement. However, both regressions showed significant main effects for job involvement with WFC, job satisfaction and affective commitment. One possible explanation for the lack of moderator effect might be that WFC is an issue for employees whether they are high or low job involved. This study only found a small correlation between WFC and job involvement (r = .18) indicating a small direct relationship between the two variables. Subsequently the relationship of WFC with job satisfaction and affective commitment is unaffected.

**Moderating effect of perceived supervisor support (PSS).** Not many studies have looked at PSS as a moderator between attitudinal variables with most of those relating PSS to POS (e.g. Eisenberger et al., 2002). However this research predicted that PSS would moderate the relationship between WFC and job satisfaction on the basis that a supportive supervisor could alleviate the pressures felt by WFC which could result in higher job satisfaction. This research however did not support the hypothesis as no moderator effect was shown for PSS.
(although significant main effects were found). Possible reasons for this outcome might lie in the fact that supervisors can only be supportive if the organisation as a whole is supportive of the employee. Initiatives to alleviate WFC will have to be written into the organisation’s overall policies and procedures for it to be an effective tool to combat WFC.

Moderating effect of team cohesion. No previous studies were found that examined the moderating effect of team cohesion on the relationship between POS and affective commitment. This study based the above hypothesis on the premise that when team cohesion is high, team members are expected to have congruent views on organisational support, and irrespective if they view this positively or negatively, will want to remain with the organisation (as to remain part of the team). This study however, surprisingly did not support this hypothesis as no moderator effect was found for team cohesion, although significant main effect were found for both affective commitment and POS.

A possible reason for this result might be the team cohesion’s moderate to high negative skew (-1.2) and high mean (5.63) which limited the analysis of the moderator effect however, the standard deviation (1.40) did not point to lack of variability in the sample. Additionally, instead of increasing POS, high team cohesion could potentially lower POS as via group norms a whole team can become negatively orientated to an organisation (Eder & Eisenberger, 2008).

Practical implications

This research has several implications for organisations and their managers. The findings contribute to the absenteeism and turnover intention literature, especially by providing evidence from a New Zealand healthcare
context. As mentioned in the introduction, organisations face ever increasing challenges from absenteeism and turnover intention. Healthcare organisations in particular face the challenge of managing absenteeism and retaining staff in order to provide quality care. The aim of the present research was to understand the relationship between attitudinal variables that potentially influence staff absenteeism and turnover intention at the BOPDHB. The practical implications of these results are discussed below.

This research implied that job satisfaction, PSS and WFC are important attitudinal variables related to absenteeism, and that job involvement, affective commitment, POS, PSS, WFC, FWC, team cohesion, regional identification, and in particular job satisfaction, are significant variables associated with turnover intention. In relation to job satisfaction it is suggested that organisational managers foster job satisfaction through situational and dispositional related interventions. Situational interventions are captured in the Hackman and Oldham (1976) concept of job enrichment in which task significance, task identity, skill variety, autonomy and feedback are identified and a job high on all of these five variables is known to be enriched which increases job satisfaction (Jimmieson & Terry, 2003). Additionally, participation in decision making, promotion and increase in salary have been identified as potential important precursors of job satisfaction (Wegge et al., 2007). Dispositional factors can include aspects internal to the individual such as locus of control, negative or positive affectivity or type A behaviour (Spector, 1997) and human resource managers can choose to use validated selection tools to select future employees.

Also, even though Moynihan and Pandey (2007) found that managers have low influence over job involvement, organisations can choose to recruit
employees who score high on this individual attribute and promote them accordingly. The results from the current research imply that organisational managers might need to ensure that staff they employ are highly job involved while creating work conditions which foster high job involvement. Moynihan and Pandey (2007) suggest that “variables that foster and maintain job involvement are not related to actual job characteristics or organisation” (p. 823) but lie in recruitment and promotion. Other researchers, however, suggest to complement the recruitment process with work conditions which foster high job involvement such as in company training (Wegge et al., 2007).

In relation to affective commitment the implications from these results are that organisational management needs to foster affective commitment in order to retain staff. Gellatly (1995) suggests organisations can achieve this goal by, for instance, placing emphasis on supervisor support, job challenge or participation in decision making. In addition, employees who are continuance committed on the basis of their connection to the region will need their performance monitored closely as they will on average show lower job performance than their affective committed counterparts (Meyer & Allen, 1997).

Organisations must also ensure their employees feel supported by the organisation through interventions such as fair treatment, favourable rewards and job conditions (Rhoades & Eisenberger, 2002) to create an optimum working environment where employees are motivated to stay through increased levels of affective commitment. Van Knippenberg et al. (2007) suggested that to combat any intention to withdraw from the job, organisations must invest in the exchange relationship with their employee (especially when levels of organisational identification are low).
In relation to PSS the implications for organisations are that the importance of supervisor support should not be underestimated in the management of absenteeism. Organisations must ensure managers and supervisors are appropriately trained to provide adequate support to staff. Gagnon and Michael (2004) argued that supervisors or managers with strong leadership and motivational skills are essential to achieve the desired behaviours and attitudes in staff. In addition, in the current globalisation of markets in which acquisitions and takeovers are part of the norm, it may be hard for an employee to identify with their employer and increasingly employees will identify with their immediate supervisor who is viewed as an agent of the organisation (Stinglhamber & Vandenberghe, 2003).

Implications from this research in relation to WFC and FWC are that organisations must ensure appropriate support to employees who experience WFC and FWC to deter them from taking unscheduled absences and intending to leave. Interventions to combat negative outcomes of WFC and FWC have been identified by Frone (2003) as flexible work arrangements such as flexitime, compressed workweek, and job sharing, plus child care assistance and family friendly cultures through supportive supervisors (plus co-workers) and a reduction of negative career consequences when utilising family friendly benefits.

Additionally, organisations need to facilitate the formation of cohesive teams to combat turnover intention utilising interventions such as assisting teams to build identity (as in purpose and goal clarity), focus on similarities among team members (members feel more cohesive when they focus on similarities), put a positive spin on team performance (teams are more cohesive when they succeed), and reward team performance (Thompson, 2002).
Finally, organisations based in desirable locations with employees reporting high levels of regional attachment need to ensure that these employees are also being encouraged to be job satisfied and affective committed to counteract the possibility of increased levels of continuance commitment and lower performance.

*Strengths of the research*

The current study has a number of strengths, including the complexity of the theoretical model which included team cohesion and regional identification as potential predictor variables of absenteeism and turnover intention in the healthcare industry. No previous studies examined the relationship between regional identification and absenteeism and turnover intention. Additionally, this research provided an opportunity to broaden existing knowledge of the mediating effect of perceived organisational support and continuance commitment on turnover intention and the moderating effects of job involvement, perceived supervisor support and team cohesion on relationships between variables known to predict absenteeism.

A further strength of the present study is the extension of knowledge on absenteeism and turnover intention in a New Zealand context. As mentioned earlier empirical research into absenteeism is particularly limited in New Zealand. Increased knowledge on the potential predictors of absenteeism and turnover intention is beneficial to many organisations as they will be increasingly able to develop policies to combat the negative impact of absenteeism and turnover intention.
Limitations of the research

The current study had a number of limitations. Firstly, the limitations in the collection of absenteeism data (outside of the control of the researcher) resulted in limited analysis and only inferences can be made relating to the findings. Absenteeism is “an inherently challenging variable to measure by any means” (Johns, 1994, p. 587) with limitations on the collection of absenteeism data extensively discussed in the literature (Bennett & Robinson, 2000; Johns, 1994; Mathieu & Kohler, 1990; Sagie, 1998; Sanders & Nauta, 2004). Self report data is often preferred as this will maintain respondents anonymity, however objective data (personnel records) have been used in conjunction with self reports to lead to more accurate data collection.

Moreover, to link organisational data to individual responses, personal identities need to be disclosed to the researcher. Organisations and participants often resist disclosure of organisational data. Management can refuse access to personnel records on the basis of privacy as they view the absenteeism records as representing a form of medical record. Also, participants often do no want to disclose their identity. Johns’ (1994) review of self reported absence data revealed that although “identification rates vary considerably, they generally result in a substantial reduction in sample size” (p. 581). Additionally, this research made no distinction between frequency of days lost because of voluntary or involuntary absences which is an important distinction due to potentially different antecedents (Jewel, 1998).

Additionally, this research was based on self reports, thus responses may have been influenced by common method variance when “ratings of two construct are generated by a single source, the artifactual covariance is said to be due to
single-source bias” (Avolio, Yammirino, & Bass, 1991). The present study found high skew in family-to-work conflict and team cohesion and it is possible that the self report measures could have elevated the level of skew. However, to measure these variables individuals need to be asked their personal opinions as these variables can be experienced quite differently in different individuals.

As a result of the cross sectional approach taken in this study it is not possible to infer a causal relationship across time. Also, the validity was limited by the fact that 84.5% of the sample was female and there is uncertainty if the findings can be generalised to males.

The study focussed on the BOPDHB only and therefore the findings are specific to the BOPDHB and cannot be generalised to other organisations. However, as the respondents came from several departments and occupational groups, I do suggest the findings can be relevant to other similar organisations.

In addition, analysis was not extended to investigate if there was a significant difference between participants based on stress levels. It is conceivable that employees perceiving high levels of stress will experience higher rates of absenteeism and turnover intention, particularly as the healthcare industry is prone to high strain due to high and demanding workloads (Shapiro et al., 2005; Wieclaw et al., 2006).

Finally, the use of the wording ‘supervisor’ was found to be ambiguous as some respondents reported to have a clinical supervisor and a staff manager. This confusion might have influenced the outcomes.
Future research

This research contributed to absenteeism and turnover intention literature by testing a comprehensive model in a New Zealand context. I suggest to replicate and further investigate the theoretical model without limitations posed on the collection of absenteeism data in this study. Organisations and employees need to understand that to change any potential predictors of absenteeism there needs to be additional in-depth research conducted to extend the knowledge base on absenteeism, especially within the New Zealand context. This will be beneficial to employees and organisations alike. The model could be enhanced by adding personality factors such as positive or negative affectivity or mood and indications of stress levels as these are identified as potential predictor variables in previous research (Fisher, 2000; Herrbach, 2006; Shapiro et al., 2005), as well as examining the differences in gender and full time or part time work status.

I also suggest to increase the empirical knowledge of interaction effects of job attitudes especially in relation to absenteeism as examination of interaction effects (such as job involvement and job satisfaction) will increase our understanding of absence behaviour. Other attitudinal variables such as team cohesion and regional identification also need more empirical consideration in relation to absenteeism and turnover intention. The potential influences have been shown in the present study, however these findings need to be replicated to be validated.

Finally, I suggest the actual turnover rate in the healthcare industry needs to be examined as intention to leave might only account for a proportion of actual turnover. Despite turnover intention being an immediate antecedent of turnover
(Hom et al., 1992), it would be beneficial to know if those employees with high levels of turnover intention actually leave healthcare organisations.

Conclusion

The overall aim of the present research was to understand the relationships between attitudinal variables that potentially influence absenteeism and turnover intention. It was found that there is a probability that job satisfaction, perceived supervisor support and work-to-family conflict are related to absenteeism while all variables except continuance commitment showed significant correlations with turnover intention. High levels of regional identification and team cohesion were found in the sample. Additionally, perceived organisational support was found to partially mediate the relationship between perceived supervisor support and turnover intention, however, no moderator effects were found in this study.

Thus, organisations should foster policies that increase job satisfaction, enhance organisational and supervisor support, and develop programmes to alleviate work-to-family conflict as these initiatives have the potential to combat the negative impact of absenteeism and turnover intention. In general, high job involved employees and cohesive teams are an asset in relation to the management of absenteeism and turnover intention while regional identification needs to be acknowledged, especially in relation to turnover intention.
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Appendix A

Employee Questionnaire Cover Letter
Employee Survey

Bay of Plenty District Health Board

Dear colleague,
My name is Ciska Vogelzang and I am a Masters student in Organisational Psychology at the University of Waikato. I have a strong interest in organisational support and commitment.

By participating in this survey you will help your employer design policies and procedures to improve your work environment. The Bay of Plenty District Health Board fully supports this research and they will receive a summary report based on aggregated data.

This survey looks at various topics related to absenteeism and commitment. Participation is entirely voluntary, you are not required to complete this survey. However, by taking 15-20 minutes to fill in the survey you will help make my research more meaningful, and ensure the data best represents what is occurring in your workplace.

Once completed the survey can be posted in the free post envelope provided.

No individual information will be disclosed to the BOPDHB. All data will be treated by me in the strictest confidence. Please do not record your name on the survey.

This study has been reviewed by the Human Research Ethics Committee at the University of Waikato and the Northern Y Regional Ethics Committee. The results of this study will be made available to you through your respective departments when completed.

Thank you for your willingness to participate. Please return the survey within 7-10 days.

Kind Regards,

Ciska Vogelzang
Appendix B

Employee questionnaire
Job involvement

I would like to ask you to indicate the extent that each of the following statements reflects how involved you feel in your job? Please use this scale to answer the following questions by circling the appropriate response

<p>| | | | | | | |</p>
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<td>7</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Slightly Disagree</td>
<td>Neither Disagree or Agree</td>
<td>Slightly Agree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

1. I am very much involved personally in my job

2. I have very strong ties with my present job which would be very difficult to break

3. I try not to invest too much energy in my job

4. A lot of my interests are centred around my job

5. I like to be absorbed in my job most of the time

6. Overall, I do not feel very committed to my job

7. I consider my job to be very central to my existence

8. Many of my personal life goals are job orientated

9. To me, my job is only a small part of who I am
Job satisfaction
Now I would like to ask you how satisfied you are with various aspects of your present job. Please circle the number which best indicates how you feel about each of following aspects of your work.

<table>
<thead>
<tr>
<th>Job aspect</th>
<th>Degree of satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Financial rewards (pay, fringe benefits)</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>11. My workload</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>12. Opportunities for promotion/advancement</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>13. Relations with my co-workers</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>14. The way my boss handles his/her subordinates</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>15. Physical working conditions</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>16. Variety in my work</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>17. The competence of my supervisor</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>18. Amount of challenge in my job</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>19. Support from others</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>20. Opportunities to use my skills and abilities</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>21. The praise I get from doing a good job</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>22. The way organisational policies are put into practice</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>23. My job as a whole</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>24. Amount of freedom to decide how to do my work</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>
Feelings about the organisation

Now I would like you to comment on the feelings you hold towards your organisation, the Bay of Plenty District Health Board (BOPDHB). Please indicate here the extent that each of the following statements reflects your feelings in relation to your organisation by circling the most appropriate response.

<table>
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<tbody>
<tr>
<td>25. I would be very happy to spend the rest of my career with this organisation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>26. I really feel if this organisation’s problems are my own</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>27. I do not feel like “part of the family” at my organisation</td>
<td>1</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>28. I do not feel “emotionally attached” to this organisation</td>
<td>1</td>
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<td>3</td>
<td>4</td>
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<td>6</td>
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<tr>
<td>29. This organisation has a great deal of personal meaning to me</td>
<td>1</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
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<tr>
<td>30. I do not feel a strong sense of belonging to my organisation</td>
<td>1</td>
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<td>4</td>
<td>5</td>
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<tr>
<td>31. It would be very hard for me to leave my organisation right now, even if I wanted to</td>
<td>1</td>
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<td>3</td>
<td>4</td>
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<tr>
<td>32. Too much in my life would be disrupted if I decided I wanted to leave my organisation right now</td>
<td>1</td>
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<tr>
<td>33. Right now staying with my organisation is a matter of necessity as much as desire</td>
<td>1</td>
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<td>7</td>
</tr>
<tr>
<td>34. I feel that I have too few options to consider leaving this organisation</td>
<td>1</td>
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<td>6</td>
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<tr>
<td>35. One of the few serious consequences of leaving this organisation would be the scarcity of available alternatives</td>
<td>1</td>
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<td>3</td>
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<tr>
<td>36. One of the major reasons I continue to work for this organisation is that leaving would require considerable personal sacrifice—another organisation may not match the overall benefits that I have here</td>
<td>1</td>
<td>2</td>
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<td>7</td>
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</table>
Organisational and supervisor support

Listed below is a series of statements that represent possible feelings you might have about the support your organisation, and your current supervisor/manager are giving you. Please indicate the degree of your agreement or disagreement with each statement.

<table>
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<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.</td>
<td>The organisation strongly considers my goals and values</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>38.</td>
<td>Help is available from the organisation when I have a problem</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>39.</td>
<td>The organisation really cares about my well being</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>40.</td>
<td>The organisation is willing to extend itself in order to help me perform my job to the best of my ability</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>41.</td>
<td>Even if I did the best job possible, the organisation would fail to notice</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>42.</td>
<td>The organisation cares about my general satisfaction at work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
</tr>
<tr>
<td>43.</td>
<td>The organisation shows very little concern for me</td>
<td>1</td>
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<td>6</td>
</tr>
<tr>
<td>44.</td>
<td>The organisation cares about my opinions</td>
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<td>4</td>
<td>5</td>
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<tr>
<td>45.</td>
<td>The organisation takes pride in my accomplishments at work</td>
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<td>2</td>
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<tr>
<td>46.</td>
<td>My supervisor cares about whether or not I achieve my goals</td>
<td>1</td>
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<tr>
<td>47.</td>
<td>My supervisor keeps me informed about different career opportunities for me in my organisation</td>
<td>1</td>
<td>2</td>
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<td>6</td>
</tr>
<tr>
<td>48.</td>
<td>My supervisor makes sure I get the credit when I accomplish something substantial on the job</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>49.</td>
<td>My supervisor gives me helpful feedback about my performance</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>50.</td>
<td>My supervisor gives me helpful advice about improving my performance when I need it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>51.</td>
<td>My supervisor supports my attempts to acquire additional training or education to further my career</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>52.</td>
<td>My supervisor provides assignments that give me the opportunity to develop and strengthen my skills</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>53.</td>
<td>My supervisor assigns me special projects that increase my visibility in the organisation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Interactions between work and family
Sometimes being involved in one area of life can influence other areas. Some possible influences are outlined below. Please indicate the extent that each of the statements below reflects how you feel about your job and family.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>54.</td>
<td>The demands of my work interfere with my home and family life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>55.</td>
<td>The amount of time my job takes up makes it difficult to fulfil family responsibilities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>56.</td>
<td>Things I want to do at home do not get done because of the demands my job puts on me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>57.</td>
<td>My job produces strain that makes it difficult to fulfil family duties</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>58.</td>
<td>Due to work-related duties, I have to make changes to my plans for family activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>59.</td>
<td>The demands of my family or spouse/partner interfere with work-related activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>60.</td>
<td>I have to put off doing things at work because of demands on my time at home</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>61.</td>
<td>Things I want to do at work don't get done because of the demands of my family or spouse/partner</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>62.</td>
<td>My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks, and working overtime</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>63.</td>
<td>Family-related strain interferes with my ability to perform job-related duties</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Teamwork

Now I would like to ask you some questions about your feelings regarding being part of your team. Please indicate the degree of your agreement or disagreement with each statement.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Slightly Disagree</td>
<td>Neither Disagree or Agree</td>
<td>Slightly Agree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

. I feel a sense of belonging in my team 1 2 3 4 5 6 7
. I feel that I am a member of my team 1 2 3 4 5 6 7
. I see myself as part of my team 1 2 3 4 5 6 7
. I am enthusiastic about my team 1 2 3 4 5 6 7
. I am happy to be part of the team 1 2 3 4 5 6 7
. My team is one of the best in my organisation 1 2 3 4 5 6 7

Where I live

Sometimes living in an area can be important to people. Please indicate the extent that each of the statements below reflects how you feel about living in the Bay of Plenty region.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Slightly Disagree</td>
<td>Neither Disagree or Agree</td>
<td>Slightly Agree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

. I feel very attached to this region 1 2 3 4 5 6 7
. I intend to stay in this region for the rest of my life 1 2 3 4 5 6 7
. If I could live anywhere in the world I would live here 1 2 3 4 5 6 7

73. This place is very special to me 1 2 3 4 5 6 7
74. If I ever had to leave this region, I would feel very sorry 1 2 3 4 5 6 7
Intentions to seek alternative employment

I would like to ask you now how you feel about your present job, compared with alternative jobs that you may be interested in or able to obtain.

Please circle one of the responses under each question to indicate how you feel.

75. Thoughts about quitting this job cross my mind.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very often</td>
<td>All the time</td>
</tr>
</tbody>
</table>

76. I plan to look for a new job within the next 12 months.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Slightly Disagree</td>
<td>Slightly Agree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

77. How likely is it that, over the next year, you will actively look for a new job outside of this organisation?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Unlikely</td>
<td>Moderately Unlikely</td>
<td>Somewhat Unlikely</td>
<td>Somewhat Likely</td>
<td>Moderately Likely</td>
<td>Very Likely</td>
</tr>
</tbody>
</table>
Now I would like to ask you some questions about yourself. This will enable me to describe the group sample accurately. Again, you have my assurance that the survey is strictly confidential. Please do not record your name.

1. Which department do you work for? ________________________________

2. Are you
   □ Male       □ Female

3. How old are you: ________________

4. Ethnicity (tick as many as appropriate)
   □ NZ European/ Pakeha
   □ Maori
   □ Pacific people
   □ Asian
   □ Other_____________________(please indicate)

5. How long have you worked for this organisation:
   ____________Years   ____________Months

6. What is your current job title?
   ____________________________________________________________________

7. How long have you worked in your current job?
   ____________Years   ____________Months

8. Choose one of the following options:
   □ Living with a spouse/partner
   □ Not living with a spouse/partner

9. How many dependent children do you have? __________________________

Thank you for your participation.
Please return the questionnaire in the envelope provided.
Appendix C

Scree plots
Figure C.1 Scree plot: job involvement

Figure C.2 Scree plot: job satisfaction
Figure C.3 Scree plot: affective and continuance commitment

Figure C.4 Scree plot: perceived organisational support
Figure C.5 Scree plot: perceived supervisor support

Figure C.6 Scree plot: work-to-family and family-to-work conflict
Figure C.7 Scree plot: team cohesion

Figure C.8 Scree plot: regional identification
Figure C.9 Scree plot: turnover intention
Appendix D

Contingency tables for predictor variables per department
Table D.1

Contingency tables for predictor variables per department

<table>
<thead>
<tr>
<th>Department</th>
<th>Scores</th>
<th>Jobsat %</th>
<th>Jobinv %</th>
<th>Afcom %</th>
<th>Cocom %</th>
<th>Orsup %</th>
<th>Susup %</th>
<th>Wfcon %</th>
<th>Fwcon %</th>
<th>Teamc %</th>
<th>Regin %</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHAS</td>
<td>&lt;4</td>
<td>36 30%</td>
<td>59 48%</td>
<td>76 62%</td>
<td>54 44%</td>
<td>75 61%</td>
<td>42 34%</td>
<td>75 60%</td>
<td>109 89%</td>
<td>16 13%</td>
<td>20 16%</td>
</tr>
<tr>
<td></td>
<td>4&lt; &lt;6</td>
<td>70 57%</td>
<td>59 48%</td>
<td>44 36%</td>
<td>50 41%</td>
<td>44 36%</td>
<td>54 44%</td>
<td>33 27%</td>
<td>11 9%</td>
<td>50 41%</td>
<td>65 53%</td>
</tr>
<tr>
<td></td>
<td>6&lt;</td>
<td>16 13%</td>
<td>2 2%</td>
<td>2 2%</td>
<td>18 15%</td>
<td>3 2%</td>
<td>25 20%</td>
<td>14 11%</td>
<td>1 1%</td>
<td>56 46%</td>
<td>37 30%</td>
</tr>
<tr>
<td>MS</td>
<td>&lt;4</td>
<td>28 17%</td>
<td>67 41%</td>
<td>91 56%</td>
<td>87 54%</td>
<td>73 45%</td>
<td>46 28%</td>
<td>77 48%</td>
<td>137 85%</td>
<td>13 8%</td>
<td>38 23%</td>
</tr>
<tr>
<td></td>
<td>4&lt; &lt;6</td>
<td>106 65%</td>
<td>84 52%</td>
<td>68 42%</td>
<td>60 37%</td>
<td>83 51%</td>
<td>83 51%</td>
<td>68 42%</td>
<td>25 15%</td>
<td>55 34%</td>
<td>75 46%</td>
</tr>
<tr>
<td></td>
<td>6&lt;</td>
<td>28 17%</td>
<td>11 7%</td>
<td>3 2%</td>
<td>15 9%</td>
<td>6 4%</td>
<td>33 20%</td>
<td>17 10%</td>
<td>0 0%</td>
<td>94 58%</td>
<td>49 30%</td>
</tr>
<tr>
<td>RCS</td>
<td>&lt;4</td>
<td>38 35%</td>
<td>45 41%</td>
<td>59 54%</td>
<td>48 44%</td>
<td>66 61%</td>
<td>65 60%</td>
<td>65 61%</td>
<td>95 87%</td>
<td>17 16%</td>
<td>14 13%</td>
</tr>
<tr>
<td></td>
<td>4&lt; &lt;6</td>
<td>55 50%</td>
<td>55 50%</td>
<td>47 43%</td>
<td>47 43%</td>
<td>34 31%</td>
<td>27 25%</td>
<td>39 36%</td>
<td>13 12%</td>
<td>32 29%</td>
<td>46 42%</td>
</tr>
<tr>
<td></td>
<td>6&lt;</td>
<td>16 15%</td>
<td>8 7%</td>
<td>2 2%</td>
<td>13 12%</td>
<td>8 7%</td>
<td>16 15%</td>
<td>5 5%</td>
<td>1 1%</td>
<td>60 55%</td>
<td>49 45%</td>
</tr>
</tbody>
</table>

*Note.* Jobsat = job satisfaction, Jobinv = job involvement, Afcom = affective commitment, Cocom = continuance commitment, Orsup = perceived organisational support, Susup = perceived supervisor support, Wfcon = work-to-family conflict, Fwcon = family-to-work conflict, Teamc = team cohesion, Regin=regional identification

MHAS = Mental Health and Addiction Services, MS = Medical Services, RCS = Regional Community Services

Scores: low = < 4, medium = 4 <= 6, high = 6 <