Informal Relationships in the Workplace: Associations with Job Satisfaction, Organisational Commitment and Turnover Intentions

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Informal relationships between people within organisations can potentially either hinder or facilitate organisational functioning. The presence of informal relationships at work and the degree of cohesiveness perceived by individuals was investigated in two studies. The association between relationship factors and organisational outcomes such as job satisfaction, turnover intentions and organisational commitment were assessed. **Study 1:** Employees of a large Auckland hospital (NZ) (n=124) were surveyed using a pen and paper questionnaire. Results were analysed using path analysis and indicated that cohesiveness and opportunities for friendships were related to increased job satisfaction; leading to increased organisational commitment and decreased turnover intentions. The actual prevalence of friendships was primarily related to decreased turnover intentions. Overall there was good support for the proposed model. **Study 2:** To address some of the limitations of Study 1 (primarily sample size and homogeneity) a second study was conducted using an Internet based questionnaire; accessed both from within NZ and worldwide. A diverse sample of employees responded (n=412). Structural equation modelling indicated further support for most aspects of the model, suggesting that the findings are generalisable and the model is robust.

Numerous close friendships evolve from existing formal relationships in work places, and for many people, these relationships are maintained within the organisational setting. Yet, despite the frequency of dual friendship/work relationships, we know very little about how they function and how the blurring of relational boundaries might affect organisational functioning, the enjoyment of work, and perhaps even performance. Authors investigating workplace relationships comment on the dearth of literature in this area; there is relatively little theoretical or empirical work that has attempted to examine the behavioural or attitudinal consequences of informal relationships within the work context (Fritz, 1997; Riordan & Griffeth, 1995; Winstead, Derlega, Montgomery, & Pilkington, 1995; Zorn, 1995).

In the early nineteen-thirties, Elton Mayo (1933) brought the topic of workplace relationships to wide attention, when he wrote the first management book focusing on the social needs of employees. Mayo advocated the role of socio-emotional factors in determining employee behaviour, contending that the extent to which employees received social satisfaction in the workplace was the most powerful influence on productivity. Subsequently, Maslow’s (1954) classic theory of human motivation was published, which first described the “hierarchy of needs” contending that; as lower level needs (such as physiological and safety needs) are satisfied, higher level needs (such as social, esteem and self-actualisation needs) emerge as motivators. Needs have been shown to influence performance in certain jobs. For example, the opportunities to satisfy needs are still studied in organisational contexts, and are thought to be related to competence (Medcalf & Hausdorf, 1995), organisational commitment (Steers, 1977; Steers & Braunstein, 1976), job satisfaction and tendency to leave (Zinovieva, ten Horn, & Roe, 1993). Thus, although the simple hierarchy that Maslow envisioned does not adequately reflect the complexity of human motivation, the philosophy still has use (Bedeian & Wren, 2001).

Following this early attention to the topic however, the interest in workplace friendships waned. Although Hackman and colleagues developed the job characteristic term “friendship opportunities” in the early seventies (Hackman & Lawler, 1971; Hackman & Oldham, 1975), it was not really until the last decade that scholars have focused on the impact of workplace friendships once again (e.g., Markiewicz, Devine, & Kausilas, 2000; Nielsen, Jex, & Adams, 2000; Riordan & Griffeth, 1995; Winstead et al., 1995).

The focus of the current project is to examine the possible effects of informal workplace relationships, both on the well-being of employees, and on organisational outcomes such as job...
satisfaction, organisational commitment and intention to leave an organisation.

For the purposes of this investigation, informal interpersonal relationships other than romantic relationships will be examined. Some previous research has looked at romantic relationships between workmates (e.g. Anderson & Hunsaker, 1985; Quinn, 1977) but sufficient research exists to suggest that friendship and romantic relationships are distinct relational types, and should be investigated separately (Bridge & Baxter, 1992; Lamm & Wiesmann, 1997; Rubin, 1970). Although there is enormous literature on formal organisational dyads such as supervisor-subordinate and mentor/protégé (e.g. Kram & Isabella, 1985; Sias, 1995; Vecchio & Bullis, 2001) very little research has examined the role of friendships as they relate to organisational effectiveness (Dillard & Fritz, 1995). These studies will address the lack in the literature of research directly focusing on friendships, principally in a New Zealand context.

It is worth noting that none of the studies described here have been conducted in New Zealand, in fact little research in this area has been conducted outside the United States. The lack of research from countries other than the U.S.A. highlights the importance of examining the generalisability of prior research, looking at the impact of friendships at work in environments and countries other than America. This is a major contribution the current studies will make. Study 1 being solely within New Zealand and Study 2 drawing on responses from the world over.

What is it to be a friend?

Friendships are voluntary relationships that exist primarily for enjoyment and satisfaction, rather than for the fulfilment of a particular function or role (Sapadin, 1988). Adams and Biesner (1994) state that; "...in contrast to other forms of intimate relationships in our society, friendship is uniquely voluntary" (p. 163). Blood and legal ties designate relatives, colleagues are designated by one's employer or organisation, neighbours are designated by proximity but friends, particularly adult friends, are selected.

There is no formal ceremony to mark the beginning or end of a friendship, as there is for other relationships (such as marriage). Friendship relationships are voluntary and reciprocal; they are relationships which are seen as unique and special by the participants, and which enhance their lives. Further, a definition by Wright (1974) incorporates the context in which friendships occur. Wright defines friendship as a relationship involving voluntary interaction, in which "...the commitment of the individuals to one another usually takes precedence over their commitment to the contexts in which the interaction takes place."(p.94). This notion is important when conceptualising workplace relationships, as it implies that the boundaries of genuine friendships supersede the role boundaries that may exist in a particular organisational context.

Relationships in a Workplace Context

Kram and Isabella (1985) maintain that co-worker friendships are a valuable means of growth and support. Kram and Isabella also argue that the characteristic of reciprocity sets friendships somewhat apart from other work relationships, such as mentoring or superior-subordinate relationships. As stated in the previous section, friendship relationships are voluntary, reciprocal and equal. The more formally defined organisational relationships (superior-subordinate, mentor-protégé etc.) will likely lack these characteristics. Reciprocity is a particularly important issue in work relationships because the perception of receiving more help than one can return can result in negative feelings (such as guilt and indebtedness), as can the perception of giving more. Workplace relationships often have inequality built into the relationship, particularly when the friendship spans organisational hierarchical boundaries, with one member of the dyad better able to provide salient rewards. Lack of reciprocity is one aspect of workplace friendships that may set them apart from friendships in other contexts.

The importance of studying friendships at work

Although there are authors who hold that friendships at work are to be avoided (e.g., Eisenberg, 1994), most empirical studies highlight the positive outcomes of these relationships (Richer, Blanchard, & Vallender, 2002; Riordan & Griffeth, 1995). Informal social relations may offer significant and rewarding benefits to individuals. Workplace friendships can provide increased communication (Kramer, 1996), support (Buunk, Doosje, Liesebeth, Jans, & Hopstaken, 1993), trust, respect, co-operation, growth, development, energy and security that, in turn, influence work related attitudes and behaviours (Foote, 1985; Krackhardt & Stern, 1988; Riordan & Griffeth, 1995). As a result, friendships developed within the workplace represent a key element in the informal structure of an organisation. Friendships are potentially powerful structural units that can either hinder or facilitate organisational effectiveness. Conversely, the formal structure of an organisation can contribute to the development of friendships in the work environment through the grouping of units and departments (inasmuch as close proximity between individuals and a cohesive workgroup may lead to increased opportunities for friendship) (Riordan & Griffeth, 1995). Thus the relationship between aspects of the organisation and the presence of, or opportunities for, friendship is likely to be two-way.

A model of organisational relationships

Friendships related to cohesion

Cohesion is one of the measured variables in the current study; the cohesiveness of a work group or team is a salient aspect of many employees' experience of their workplace. Odden and Sias (1997) investigated outcomes of a cohesive work environment and found, among other things, that climates perceived as high in cohesion were related to larger proportions of collegial and special peer relationships. In the current study, opportunities for friendship are hypothesised to impact...
positively on the cohesiveness of the workgroup or team in that, if there is a generally friendlier environment, this will likely increase the cohesiveness of the group. Cohesiveness, in turn, is likely to impact on the perceived opportunities for friendship (a more highly cohesive team will probably result in more opportunities for friendship). The theoretical model is shown in Figure 1. There are six variables along with eight hypothesised regression paths and one correlation, indicated by arrows. The positive correlation between cohesion and friendship opportunities is shown in Figure 1 with a two-way arrow at the top of the diagram.

Friendships related to job satisfaction
There is empirical evidence that co-worker relations are an antecedent of job satisfaction. The earliest of these studies was by Hackman and Lawler (1971) who originally developed the job characteristic termed 'friendship opportunities'. In a more recent study, Markiewicz et al. (2000) found that the quality of close friendships was associated with both the career success and job satisfaction of employees. Riordan and Griffith (1995) examined the impact of friendship on workplace outcomes, their results indicated that friendship opportunities were associated with increases in job satisfaction, job involvement and organisational commitment, and with a significant decrease in intention to turnover. Riordan and Griffith's findings are supported in a more recent study by Nielsen, Jex and Adams (2000) who conducted two studies to develop and provide evidence for the construct validity of the workplace friendship scale used in the current study. Nielsen et al. reported a positive correlation between friendship opportunities, friendship prevalence and job satisfaction; furthermore they found that those experiencing friendship at work were less likely to want to leave their current jobs. These findings highlight the positive impact workplace friendships can have for employees within organisations, particularly in terms of their satisfaction with their jobs.

The degree to which friendship opportunities are antecedent to job satisfaction is a central focus of the current study, and is illustrated in Figure 1 with an arrow leading from friendship opportunities to job satisfaction. For the same reasons as friendship opportunities are related to satisfaction, the cohesion variable, a related construct, is also hypothesised to result in improved job satisfaction. This relationship is indicated in Figure 1 by an arrow leading from cohesion to job satisfaction.

Job satisfaction related to organisational commitment
Organisational commitment can be defined as the relative strength of an individual's identification with, and involvement in, an organisation (Levy, 2003). Organisational commitment is distinguished from job satisfaction in that organisational commitment is an affective response to the whole organisation, while job satisfaction is an affective response to specific aspects of the job (Williams & Hazer, 1986). The positive relationship between job satisfaction and organisational commitment is shown in Figure 1, reflecting literature which suggests that job satisfaction is a causal antecedent of commitment (Porter, Steers, Mowday, & Boulian, 1974; Riordan & Griffith, 1995; Williams & Hazer, 1986).

Friendships related to organisational commitment
As stated above, Riordan and Griffith (1995) found that friendship opportunities are associated with increases in organisational commitment. Other authors researching this area have linked organisational commitment to friendships (Ellingwood, 2001), workplace relationships (Sheldon, 1971) and supportive organisational climates (Chermis, 1991). In sum, the research suggests a positive relationship between a friendly work environment and organisational commitment.

The friendship/commitment relationship may be direct or mediated by satisfaction, which is thought to be a possible precursor to commitment (as discussed above). For example Riordan and Griffith (1995) found that employees' perceptions of friendship opportunities in the workplace had direct effects on job involvement and
job satisfaction, but indirect effects on organisational commitment and intention to leave (i.e. they found support for a mediated relationship between friendships and commitment/leaving intentions). Figure 1 shows the hypothesised mediated relationships between both friendship opportunities and cohesion, and organisational commitment.

Intention to leave

Much of the research in this area, while it does not dispute that commitment develops from satisfaction, indicates that both satisfaction and commitment contribute independently to the turnover process (Angle & Perry, 1981; Porter et al., 1974; Stumpf & Hartman, 1984; Tett & Meyer, 1993). Over the last two decades the development of predictive models of voluntary turnover has been an aim of many researchers in this area. Job satisfaction, organisational commitment, and intention to leave are among the most commonly proposed antecedents to turnover (Tett & Meyer, 1993). Satisfaction and commitment are invariably reported to be negatively related to turnover and intention to leave (e.g. Blau & Boal, 1989; Cohen, 1993; Cohen & Hudecek, 1993; Hackett & Lapierre, 2001; Irvine & Evans, 1995; Irvine & Meyer, 1996; Kaldenberg, Becker, & Zvonkovic, 1995; Lee, Carswell, & Allen, 2000; McEvoy & Cascio, 1987; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Mobley, 1977; Porter et al., 1974; Riordan & Griffeth, 1995; Steers, 1977; Tett & Meyer, 1993). Figure 1 shows the hypothesised negative relationships between turnover and both commitment and satisfaction.

Friendship prevalence

Another variable measured in the current study is friendship prevalence. Friendship prevalence is hypothesised to be a consequence of both friendship opportunities and cohesion. Logically, if there are increased opportunities for friendship, the prevalence of friendships should also increase, or alternatively, opportunities for friendship may be a necessary condition for actual friendships. In addition, as stated above, a highly cohesive team will be likely to be conducive to the formation of friendships. Thus Figure 1 shows arrows leading to friendship prevalence from both friendship opportunities and cohesion.

Friendship prevalence is not hypothesised to impact directly on job satisfaction or commitment however. Initially this may seem counterintuitive, given the evidence that friendship opportunities and cohesion have positive correlations with these outcome measures. However, the actual prevalence of friendship may not be related to satisfaction and commitment (as opportunities for friendship are) because it is probably necessary that the employee see the organisation as, in some way, responsible for the friendship. That is to say, employees may need to believe that the friendships are the consequence of the way the company is managed, and perhaps not easily achieved in another organisation (Meyer & Allen, 1991). In relation to the current study, this implies that having friendships at work and/or feeling that they work in a friendly environment will only improve commitment if the employee feels that the organisation is in some way responsible for the positive environment. A generally friendly environment is likely to be seen as something that the organisation has made available, while the actual friendships an individual has formed and maintained are probably more likely to be seen as something which the organisation is not directly responsible for.

In addition, it is often in times of adversity (when morale and satisfaction may be low) that strong friendships will form (Carr, 2003). For example, Sias and Jablin (1995) found that, when a supervisor or group leader was perceived to treat group members unfairly, group members became more cohesive and their communication relationships more intimate, suggesting that perceptions of low quality supervision and feelings of dissatisfaction may lead co-workers to form more close friendships. This implies that while, for some people, friendships may increase job satisfaction, for others, friendships may form as a result of dissatisfaction, thus 'cancelling out' any positive correlation between the two variables.

The prevalence of friendship should still have an effect on intention to leave however, both because the presence of negative relationships is a reason people seek to leave their organisation, and because strong friendships make it harder for people to leave. Social involvement is intrinsically rewarding, so that the decision to depart from the organisation (and leave these significant others) is made more difficult. Figure 1 illustrates the hypothesis that increased friendship prevalence will be antecedent to less intention to leave.

In addition, it is possible that factors such as organisational climate, stress, job type, personal needs and/or adversity might act to moderate some of the hypothesised relationships in the model. These factors are not within the scope of the current study however but are issues that may receive attention in the future.

STUDY 1

Two research questions, and related hypotheses arising from the development of the model described above are:

Research Question 1:

Do the opportunities for, and prevalence of, friendships within the workplace have an impact (either mediated or direct) on job satisfaction, organisational commitment and intention to turnover? The discussion on the effects of relationships in the workplace (above) is focused in the first set of hypotheses.

H1. Having more opportunities for friendship will have a direct positive relationship with job satisfaction.

H2. Having more opportunities for friendship will have a positive relationship with organisational commitment.

H3. The prevalence of friends at work will have a negative relationship with turnover intention.

Research Question 2:

Is the perceived level of cohesion related to opportunities for friendship, prevalence of friendship, job satisfaction and organisational
commitment? The discussion on the relationship between cohesion and these variables measured is focused in the second hypothesis.

H4: Cohesion will be positively related to opportunities for, and prevalence of, friendship in the workplace.

H5. Cohesion will have a direct positive relationship with job satisfaction.

H6. Cohesion will have a positive relationship with organisational commitment.

To test the model of organisational relationships, and address the two research questions described above, a questionnaire was administered to employees at a large Auckland hospital.

Method

Participants
In total 408 questionnaires were sent out through the internal mail system of an Auckland hospital. Of the 408 questionnaires sent, 124 were returned (a 30% response rate). Because participants were sampled from hospital employees, the majority of respondents were from predominantly female occupations; nurses and clerical staff made up 84.7% of the sample. As a result the sample was almost entirely female (95%). In addition, most were over the age of 40 (75.8%), the mean age was 44; most were of European decent (89.2%). Almost half (47.1%) had been working for the hospital for 5 years or longer.

Materials

1. Workplace Friendship Scale. To establish if friendship relationships are present in the workplace the Workplace Friendship Scale (Nielsen et al., 2000) was incorporated into the questionnaire. The scale measures two aspects of workplace friendship: (a) the opportunity for friendship (e.g., I have the opportunity to get to know my co-workers), and (b) the presence of friendship (e.g., I have formed strong friendships at work). There are twelve items, rated on a 5-point Likert scale from strongly disagree to strongly agree. Nielsen et al. (2000) assessed the internal consistency reliability of the scores of the two six-item sub-scales of the Workplace Friendship Scale. The internal consistency reliability estimates (Cronbach's alpha) for the scores were .84 and .89 for the 'opportunities for friendship' and 'prevalence of friendship' sub-scales respectively. In addition Nielsen et al.'s analysis supported the two-dimensional structure of the scale. Nielsen et al. also provided adequate evidence for the construct validity of the scale. Based on their results, it appears that the scale yields internally reliable scores and effectively measures two dimensions of workplace friendship.

2. Workgroup cohesion scale. Cohesion was measured using a nine-item workgroup cohesion scale rated on a 5-point Likert type scale from strongly disagree to strongly agree (e.g., Members of my team are very willing to share information with other team members about our work). Items measuring cohesion were selected from a 54 item Work Group Characteristics Measure developed by Campion et al. (1993). Only those items from the Work Group Characteristics Measure relating to cohesion were used in the current study. The items used are termed "process characteristics" by Campion et al. and are those relating to (1) Social Support, (2) Workload Sharing and (3) Communication/Co-operation within the work group. Campion et al. provided evidence that a composite of these items reliably predicted effectiveness (productivity and manager judgements of effectiveness, (p<.05)). In addition the subscales had adequate internal consistency reliability (α = .78, .84 and .81 respectively).

3. Organisational Commitment Questionnaire (OCQ). This is the most commonly used measure of employee's affective attachment to an organisation (Meyer & Allen, 1991). The OCQ is a 15-item scale, designed to assess acceptance of organisational values, desire to remain with the organisation and willingness to exert effort (e.g., I am proud the tell others I am part of this organisation). Items are rated on a 7-point Likert scale from strongly disagree to strongly agree. Morrow, Steers and Porter (1979) have provided strong evidence for the test-re-test reliability, convergent validity, internal consistency, and predictive validity of the OCQ, finding the overall measure of organisational commitment to be relatively stable over time (r = 0.53, 0.63 and 0.75 over 2-, 3- and 4-month periods), demonstrating test-re-test reliability. Morrow et al. calculated internal consistency using coefficient α, item analysis and factor analysis, finding coefficient α to be consistently high, ranging from .82 to .93 with a median of .90. Item analysis indicated that each item had a positive correlation with the total score for the OCQ, with the range being from .32 to .72. In addition, factor analysis resulted in a single factor solution. Internal consistency results suggest the 15 items of the OCQ are relatively homogeneous with respect to the underlying attitude construct they measure. Significant correlations were found between the OCQ scores and 'intention to remain with the organisation' across several studies, illustrating convergent validity. In addition, the OCQ was found to correlate significantly with scores from the Organisational Attachment Questionnaire (convergent validities across six diverse samples ranged from .63 to .74).

4. Job Satisfaction Scale (JSS). The JSS used was one part of a larger battery of eight scales devised by Warr, Cook and Wall (1979). Only the 15-item scale relating to job satisfaction was used for this study. Respondents indicate how satisfied or dissatisfied they feel with each of 15 aspects of their job (e.g. The recognition you get for good work). Items are rated on a 7-point Likert type scale from very dissatisfied to very satisfied. The JSS has been found to be reliable, Warr, Cook and Wall (1979) reported that the test re-test correlation coefficient of the JSS was .63. Although Warr et al all found, using cluster analysis, that items clustered together into intrinsic and extrinsic satisfaction subscales; factor analysis in the current study indicated that the items on the JSS generally loaded together as 1 factor, the coefficient α for the items remaining after factor analysis for the current study was .83, indicating that, for this sample, the items used are sufficiently homogeneous with respect to the construct they measure, to use as a single factor.
5. Measure of intention to leave.
Intention to leave was measured with three items theorised to be important precursors to turnover; thinking of quitting, intention to search for alternative employment, and intention to quit (Chang, 1999; Mobley, 1977; Mobley, Horner, & Hollingsworth, 1978) (e.g., I will probably quit my job in the next year). Answers to each item were recorded on a seven-point Likert scale from strongly disagree to strongly agree. Internal reliability of the 3 items was good (coefficient α = .82).

Procedure
Every fifth person on the payroll (listed alphabetically) received a questionnaire through the internal mail. The questionnaire comprised the scales described above, and opportunity to comment on the impact workplace friendships and negative relationships had had on their experience of work, with the aim of providing the researcher with a source of qualitative data to provide further insight to quantitative findings. A stamped envelope, addressed to the researcher, was included with each questionnaire for ease of return.

Results
Factor analysis
Prior to beginning the factor analysis and subsequent path analysis the data had to be ‘cleaned’, inversely worded items were reversed and missing items were imputed. Two respondents failed to complete the workgroup cohesion scale so were removed from further analysis, deletion of these cases resulted in a sample size of 122. In order to ensure the various subscales were internally coherent and measured conceptually and empirically distinct variables, factor analysis was performed with maximum likelihood extraction and direct oblimin rotation. Items that cross-loaded onto other scales and those with loadings less than .3 were removed. The loadings for the remaining items ranged from .31 to .97. The remaining items within each sub-scale loaded together as single factors, indicating each subscale measured a distinct variable. The remaining items in each subscale were tested for internal consistency reliability. The Cronbach's alpha reliability estimates of the resulting relationship quality scales; friendship opportunities, friendship prevalence, and cohesion subscales were acceptable, α's = .76, .86 and .82 respectively. The Cronbach's alpha reliability estimates of the resulting outcome measures; organisational commitment, job satisfaction and intention to leave subscales were also acceptable, α's = .87, .83 and .82 respectively. To further test the validity of the measures and to illustrate the relationships between them, Table 1 shows the correlations between the composite scores of the remaining items in each measure, all hypothesised correlations are significant and in the expected direction.

Path Analysis
Due to the relatively small sample size (122), and the fact that the variables examined in this study were identified using factor analysis and are measured with scales shown to have adequate validity and reliability, an 'observed variable' model was tested using path analysis. The observed variables analysed were composite scores of the items identified in each factor. In path analysis the relationships between the observed variables are measured directly and the significance (or lack thereof) of the relations between the variables can be ascertained. Path analysis was developed as a method for studying the direct and indirect effects of variables hypothesised as causes on variables hypothesised as effects. Path analysis is intended to shed light on the plausibility of causal models of relationships between variables, but it does not rule out alternate causal pathways.

Explanation of the relationships between variables in the proposed model
Figure 2 shows the standardised regression weights and the level of significance of the relationships shown. Dashed lines indicate that the regression between two variables is not significant; all solid regression paths are significant at p<.05. The path analysis of the proposed theoretical model (see Figure 2) indicates that there is no direct relationship between organisational commitment and either friendship opportunities or cohesion (indicated by the non-significant regression weights, shown in the model as dashed lines, between these variables). Instead, these relationships appear to be mediated by job satisfaction. The path friendship opportunities → job satisfaction → organisational commitment is significant, however, as is cohesion → job satisfaction → organisational commitment.

Table 1. Correlations between measured variables: Study 1

<table>
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<th></th>
<th>Organisational Commitment</th>
<th>Friendship Prevalence</th>
<th>Friendship Opportunities</th>
<th>Cohesion</th>
<th>Job Satisfaction</th>
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<td></td>
<td></td>
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<td>.36**</td>
<td>.37**</td>
<td></td>
<td></td>
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<tr>
<td>Cohesion</td>
<td>.23*</td>
<td>.32**</td>
<td>.31**</td>
<td></td>
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<tr>
<td>Job Satisfaction</td>
<td>.63**</td>
<td>.12</td>
<td>.36**</td>
<td>.37**</td>
<td></td>
</tr>
<tr>
<td>Intention to leave</td>
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<td>-.23*</td>
<td>-.19*</td>
<td>-.22*</td>
<td>-.47**</td>
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** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)
impact on leaving intention. In addition, job satisfaction is also shown to directly affect intention to leave (i.e., the satisfaction/intention to leave relationship is not fully mediated by organisational commitment).

Further, the analysis of the theoretical model indicates that cohesion and friendship opportunities each contribute individually to friendship prevalence. Thus it seems that perceptions of a cohesive work environment will be correlated with increased opportunities for friendship, and both, in turn, are related to more friendships at work (friendship prevalence).

The impact of friendship opportunities on intention to leave appears to be mediated by both friendship prevalence and job satisfaction. It is worth noting that, while the relationship between friendship prevalence and intention to leave is significant \( p < .05 \), the standardised regression weight is very small compared with others \( -.15 \) and should be viewed with some caution. The small regression weight notwithstanding, a positive relationship between friendship prevalence and intention to leave is in line with both the existing literature, and the qualitative data from respondents in this study.

**Discussion**

Overall the analysis provides support for the proposed model, results supporting a mediated relations model. The research questions are discussed below in relation to the analysis of the data collected for this study.

**Research Question 1**

Research question 1 focuses on the relationship between friendships and the outcome variables measured, it asks; ‘Do the opportunities for, and prevalence of friendships within the workplace have an impact (either mediated or direct) on job satisfaction, organisational commitment, and intention to leave?’ It was hypothesised that opportunities for friendships and informal relationships would have a significant effect on how satisfied people are with their jobs, that having more opportunities for friendship would increase organisational commitment (mediated by job satisfaction), and that the prevalence of friends at work would reduce turnover intentions.

The hypothesised relationships were supported by the data analysis and are illustrated in Figure 2 with the ‘friendship opportunities’ variable being antecedent to ‘job satisfaction’. In addition, although there was no direct relationship between friendship opportunities and organisational commitment, these variables were correlated at the simple bivariate level, indicating that the relationship is mediated by job satisfaction. The mediated relationship is shown in Figure 2 and suggests that having increased friendship opportunities at work will have an impact on organisational commitment only if an individual is satisfied with their job.

Both satisfaction and commitment subsequently impact on ‘intention to leave’. The significant regression weight from friendship opportunities to job satisfaction is also supported by qualitative data from respondents in the current study, for example:

> #103 Our friendly work environment has improved my job satisfaction.

The impact of friendship opportunities on intention to leave is also present but appears to be mediated by both friendship prevalence and job satisfaction. This makes sense, as it is unlikely that opportunities for friendship will affect respondents’ leaving intentions unless actual friendships are formed as a result. Similarly, opportunities for friendship will be unlikely to affect respondents’ leaving intentions unless they are associated with an increase in job satisfaction.

The ‘friendship prevalence’ variable was not hypothesised to impact directly on job satisfaction or commitment. The data, again, support this hypothesis. As previously stated, it is likely that prevalence of friends will be likely to stop people from leaving
their jobs but, as the formation of friendships is something that people feel that the organisation cannot be responsible for, it will not affect satisfaction or commitment. In addition, it is often in times of adversity that strong friendships will form. Qualitative data from the current study indicate that this was one of the ways that the organisation actually facilitated the friendships. For example:

#85 Poor work conditions mean we rely on each other more.

#90 We have been through a lot of changes in the workplace in the last 10 years, and we don’t feel that management has listened to our voices, we have only had each other to turn to and that has probably strengthened friendships and contacts with each other. The friendships have probably been one of the most positive outcomes of a poor employer.

The friendship prevalence variable is hypothesised to impact directly on intention to leave because having friendships gives employees an added incentive to remain in their jobs. Some respondents specifically mentioned friends at work as a reason they worked where they did, for example:

#24 I personally went back to work for this organisation because she (a special peer) still works here.

Social involvement is intrinsically rewarding (i.e., having friends is pleasant and fun), so that the decision to depart from the organisation is made more difficult. The data from the current study support the hypothesis that friendship prevalence will be negatively related to intention to leave, as there is a significant regression weight between these two variables. This is in line with both the existing literature and the qualitative data from respondents in this study, in which they wrote frequently of how friendships made their experience of work more pleasurable.

#39 Friendships make it [work] a happier place, with friendly people and I enjoy catching up with them each day.

#126 I feel the friendships at work make the shifts more enjoyable.

#125 Friendships at work make the experience of working in that environment all the more positive. I look forward to coming to work because I enjoy the camaraderie of the workplace.

#118 Makes work more pleasant, knowing there are people who are pleased to see you each day.

Research Question 2

Research question 2 focuses on the relationship between the perceived cohesiveness of a workplace, and other measured variables. It was hypothesised that cohesion will be positively related to both opportunities for, and the prevalence of, friendships in the workplace.

These hypotheses were supported by the analysis of the data. The regression weights to friendship prevalence from both friendship opportunities and cohesion are significant (p < .05). This finding is in line with previous research in this area. For example, Buunk et al. (1993) found that, if an individual perceives their working climate to be low in cohesion, it would be likely to hinder the formation of friendships. Oden and Sias (1997) found that climates perceived to be high in cohesion were related to more collegial and special peer relationships. In addition, in the answers to the qualitative questions, respondents often linked co-cooperativeness, communication and support (measures of cohesion) with friendships at work, for example:

#125 Friendships help us to work cooperatively with each other and support each other at times of stress.

#97 By all of us working as a team supporting one another during our very stressful times. Having a laugh and keeping our sense of humour. Being able to count on one another.

Working towards a common goal, too, was often mentioned as a way a cohesive environment facilitated friendships, for example:

#28 Constantly working with the same people, encountering the same frustrations and amusing incidents, and working together to solve problems creates a bond and insight into each others character which is respected and enjoyed.

#68 Working together on difficult cases where you achieve a good result despite the circumstances is a real buzz, and can make you feel closer to the people you work with.

Research question 2 also highlights the relationship between cohesion and job satisfaction. It was hypothesised that increased cohesion would lead to improvements in job satisfaction. This hypothesis was supported by the analysis of the model, with the regression weight for the relationship between cohesion and job satisfaction being significant.

It was also hypothesised that increased cohesion would lead to improvements in organisational commitment. The hypothesis was not supported by the analysis of the model, with the regression weight for the relationship between cohesion and organisational commitment being non-significant. The cohesion and organisational commitment variables were correlated at the simple bivariate level however, this suggests that the relationship between cohesion and organisational commitment is mediated by job satisfaction (just as the relationship between friendship opportunities and organisational commitment is mediated by job satisfaction). This is shown in Figure 2 and suggests that having a cohesive work environment will have an impact on organisational commitment only if an individual is satisfied with his/her job.

Satisfaction/commitment and turnover intentions

In addition, the analysis of the theoretical model supports the hypothesised relationship between job satisfaction, organisational commitment and turnover intentions, i.e., that satisfaction and commitment each contribute individually to intention to leave. This is in line with the ‘independent effects’ model proposed by Tett and Meyer (1993).

In sum, the results of Study 1 highlight the salience of workplace friendships to employees. The analysis supports the notion that friendship opportunities have an impact on employees’ job satisfaction, organisational commitment and intention to leave, and highlights the importance for management to
acknowledge and nurture the relationship structures that may exist within their organisation.

However, given that the sample is predominantly women, who are generally found to be more relationship focused than men (Andrew & Montague, 1998; Markiewicz et al., 2000; Winstead, 1986; Wright, 1988, 1991), it is perhaps not surprising that most respondents in the sample were found to have many relationships and also rated them as being a very important aspect of their work life. Another reason significant results may have been obtained is because research shows that nurses, as a group, have a higher than average need for affiliation, and that nursing is distinguished from other occupations primarily by affiliation opportunities (Medcof & Hausdorff, 1995). Possibly, individuals from other professions would have answered differently. Further research, surveying individuals from a wide range of occupations would go some way towards addressing this issue. In addition there was only a 30% return rate, which meant the sample size was relatively small (n = 122) possibly due to the length of the survey and the workload of the respondents. A second study, with a larger sample size will add statistical power to the research.

**STUDY 2**

Although the data obtained in Study 1 in general supported the proposed model, the small and homogeneous sample meant that it was not possible to evaluate the generalisability of the findings. In order to assess how robust the proposed model is across different contexts and to deal with some of the limitations of the first study, a second study was conducted. An on-line version of the questionnaire was created in which respondents could link (via email) to a secure site to submit their responses. This meant access to a wide diversity of respondents from an almost limitless variety of organisations, potentially improving the generalisability of the findings. In addition, the relative ease of data collection made it possible to collect data from a larger number of respondents.

**Method**

**Participants**

Data were collected from 412 individuals; the demographic data indicated that the respondents were very diverse, there was a wide range of ages and industries and 31% were male. Most respondents were from New Zealand (68%) with 13% being from the United States. Respondents ranged in age from 19 years to 64 years, with a mean age of 35. There was a great deal of variety in the industries/sectors respondents reported working in. The largest reported sector was tertiary education (universities and polytechnics, n = 92) followed by health care (including psychology, psychiatry and physiotherapy, n = 53). As there were no exclusion criteria (other than having a job) the variety in responses to the question asking what job type individuals had was almost as varied as the number of respondents. Respondents were from almost every type of profession, from medical doctors, to secretaries, to academics, to police.

**Materials and Procedure**

Data were gathered using a self-administered, Internet-based questionnaire, which included the same instruments and survey questions used in Study 1. Initially, 68 individuals (friends and acquaintances) were sent an email inviting them to complete an online questionnaire, which included a link to the data collection site [www.studentresearcher.com](http://www.studentresearcher.com). They were encouraged to pass it on to friends and colleagues. In addition two email lists, Emonet (a list of academics and practitioners in the field of emotions in organisations) and IOnet (a list of Industrial Organisational psychologists in New Zealand) were sent the email. Once 412 people had submitted their responses to a database through the Internet data-collection site, the data were downloaded and used.

**Results**

While, for study 1, an observed variable model was tested, the increased sample size allowed the data in the current study to be tested in a full structural equation model using both latent and observed variables.

**Measurement Models of the scales**

Prior to beginning the factor analysis and subsequent structural equation modelling (SEM) the data had to be ‘cleaned’, inversely worded items were reversed and missing items were imputed (there were very few missing values, probably due to the user-friendly Internet interface). The computer programme AMOS (Arbuckle, 1999) was used to create measurement models of the scales. If the fit indices did not indicate a good fit to the model, the modification indices and expected change statistics related to the covariances for each model were inspected for evidence of mis-specification associated with the pairings of items. If there was evidence that the model was misspecified, the ‘problem’ items (i.e., those which had overlapping content with other items) were removed in a post hoc analysis, and the models were respecified without the items, resulting in a much better fit of the models to the data. Both the cohesion scale and the satisfaction scale were found to have two distinct factors. The two factors in the satisfaction scale were, (1) satisfaction with interpersonal interactions and workplace, and (2) satisfaction with aspects of actual job performed; variety/fulfillment. The two satisfaction factors relate closely to the ‘extrinsic satisfaction’ and ‘intrinsic satisfaction’ clusters of items, identified by Warr et al. (1979). The two cohesion factors were, (1) social support and cooperation and (2) workload sharing. The workload sharing factor is identical to that described by Campion (1993), while the remaining items loaded together as a single factor, combining Campion’s ‘social support’ and ‘communication/co-operation’ factors. The intention to leave scale consisted of only three items so could not be analysed in this way, all three items of the intention to leave scale were specified as observed, endogenous items in the model.
Table 2. Fit Indices for the Measurement Models: Study 2

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of factors</th>
<th>$\chi^2$</th>
<th>df</th>
<th>PCFI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace friendship</td>
<td>2</td>
<td>39.40</td>
<td>13</td>
<td>.60</td>
<td>.97</td>
<td>.07</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>2</td>
<td>73.12</td>
<td>26</td>
<td>.70</td>
<td>.96</td>
<td>.06</td>
</tr>
<tr>
<td>Cohesion</td>
<td>2</td>
<td>59.79</td>
<td>19</td>
<td>.66</td>
<td>.97</td>
<td>.07</td>
</tr>
<tr>
<td>Organisational Commitment</td>
<td>1</td>
<td>153.70</td>
<td>54</td>
<td>.79</td>
<td>.96</td>
<td>.06</td>
</tr>
</tbody>
</table>

Assessment of model fit was based on multiple criteria, reflecting statistical, theoretical and practical considerations (Byrne, 2001). Pedhazur (1982) points out that there have been numerous articles, both criticizing existing indices and proposing new ones. Although there is little agreement about the value of various fit indices, Pedhazur states that there does seem to be unanimity that no single fit index should be relied upon; and that just as model formulation should be theory driven, so must theory and substantive considerations play a part in its evaluation, "...the test statistics and fit indices are very beneficial, but they are no replacement for sound judgement and substantive expertise." (Pedhazur, 1982, p.832).

The indices used in the current study were (a) the $\chi^2$ likelihood ratio statistic, (b) the Comparative Fit Index (CFI: Bentler, 1990), (c) the Parsimonious Normed Fit Index (PCFI: Mulaik et al., 1989), and (d) the Root Mean Square Error of Approximation (RMSEA: Browne & Cudeck, 1993).

The CFI is a revised version of the Bentler-Bonnet (Bentler & Bonett, 1980) normed fit index that adjusts for degrees of freedom. It ranges from zero to 1.00 and provides a measure of complete covariation in the data; a value >.90 indicates a psychometrically acceptable fit to the data (Byrne, 1994, 2001). The PCFI is calibrated from the CFI; it weighs the parsimony of the model against its use of the data in achieving goodness of fit. Mulaik et al. caution that PCFI values are often lower than what is generally considered acceptable on the basis of normed indices of fit; goodness of fit indices in the .90s accompanied by PCFI indices in the .50s are not unexpected. The RMSEA a very informative criteria in Structural Equation Modelling (SEM) (Byrne, 2001). Byrne states that, "The RMSEA takes into account the error of approximation and asks the question, 'How well would the model, with unknown but optimally chosen parameter values, fit the population covariance matrix if it were available?'" (p. 84). This index is sensitive to the complexity of the model; values less than .05 indicate excellent fit, and values less than .08 represent an adequate fit.

Table 3. Alpha levels of the sub-scales: Study 2

<table>
<thead>
<tr>
<th>Scale / Sub-Scale</th>
<th>$\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendship opportunities</td>
<td>.82</td>
</tr>
<tr>
<td>Friendship prevalence</td>
<td>.71</td>
</tr>
<tr>
<td>Job satisfaction (interpersonal / workplace)</td>
<td>.73</td>
</tr>
<tr>
<td>Job satisfaction (actual job)</td>
<td>.80</td>
</tr>
<tr>
<td>Cohesion (Social Support/Cooperation)</td>
<td>.83</td>
</tr>
<tr>
<td>Cohesion (workload sharing)</td>
<td>.81</td>
</tr>
<tr>
<td>Organisational Commitment Questionnaire</td>
<td>.91</td>
</tr>
<tr>
<td>Intention to leave scale</td>
<td>.87</td>
</tr>
</tbody>
</table>

Table 4. Correlations between measured variables: Study 2

<table>
<thead>
<tr>
<th>Friendship opportunities</th>
<th>Friendship prevalence</th>
<th>Satisfaction with interpersonal relations and workplace</th>
<th>Satisfaction with actual job performed</th>
<th>Organisational commitment</th>
<th>Social support and cooperation</th>
<th>Workload sharing (cohesion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendship prevalence</td>
<td>.46**</td>
<td>.42**</td>
<td>.33**</td>
<td>.38**</td>
<td>.50**</td>
<td>.15**</td>
</tr>
<tr>
<td>Satisfaction with interpersonal relations and workplace</td>
<td>.29**</td>
<td>.16**</td>
<td>.64**</td>
<td>.60**</td>
<td>.30**</td>
<td>.10*</td>
</tr>
<tr>
<td>Satisfaction with actual job performed</td>
<td>.52**</td>
<td>.64**</td>
<td>.51**</td>
<td>.38**</td>
<td>.51**</td>
<td>.40**</td>
</tr>
<tr>
<td>Organisational commitment</td>
<td>.60**</td>
<td>.60**</td>
<td>.38**</td>
<td>.39**</td>
<td>.22**</td>
<td>.22**</td>
</tr>
<tr>
<td>Social support and cooperation (cohesion)</td>
<td>.39**</td>
<td>.39**</td>
<td>.38**</td>
<td>.39**</td>
<td>.30**</td>
<td>.50**</td>
</tr>
<tr>
<td>Workload sharing (cohesion)</td>
<td>.15**</td>
<td>.10*</td>
<td>.40**</td>
<td>.40**</td>
<td>.47*</td>
<td>.47*</td>
</tr>
<tr>
<td>Intention to leave</td>
<td>-.22**</td>
<td>-.40**</td>
<td>-.40**</td>
<td>-.47*</td>
<td>-.55**</td>
<td>-.18**</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)
The fit indices for each measurement model are presented in Table 2; Table 3 shows the reliability alpha for each subscale. To further test the validity of the measures and to illustrate the relationships between them, Table 4 shows the correlations between the composite scores of the items in each measure, all correlations are significant and in the expected direction.

Once each measurement model showed good fit, the various latent variables (friendship opportunities and prevalence, the two job satisfaction factors, organisational commitment, the two cohesion factors and intention to leave), their associated observed endogenous items and the hypothesised relationships between them (derived both from previous literature, and from Study 1) were modelled and tested using SEM. Figure 3 shows the resulting model, specified using the data collected for this study, named Model 2. Figure 3 shows the latent variables (indicated by ovals), the significant correlations and the significant regression weights (six of the tested paths were found to be non-significant and were removed from the final model, see below). The standardised regression weights or correlation coefficients are shown alongside each path. All the paths shown are significant at the .05 level.

As in Study 1, the regression paths from both ‘friendship opportunities’ and ‘cohesion’ to ‘organisational commitment’ were non-significant; again ‘job satisfaction’ appears to mediate these relationships (which significantly correlated at the bivariate level). The path from ‘satisfaction with interpersonal aspects of the job’ to ‘intention to leave’ was also non-significant; suggesting that the relationship between these two variables is mediated by the second satisfaction factor (satisfaction with the job itself). In addition, the paths from ‘cohesion’ to ‘friendship prevalence’ and from ‘friendship prevalence’ to ‘intention to leave’ (significant in study 1) were found not to be significant in the current study (although, again, they were significantly correlated at the bivariate level). Removal of these six non-significant paths resulted in a significantly better fitting model ($\Delta \chi^2 = 95.47$). In the interest of parsimony Model 2 is shown without the non-significant paths, the indices of fit provided are those resulting from the model having been respecified without the non-significant parameters.

**Statistical significance of Model 2**

It is important to note that consistency of the model with the data does not constitute proof of a theory; instead it lends support to it (Pedhazur, 1982). It is possible for two competing models to be consistent with data; the decision as to which model is more tenable rests on the theory from which the causal model was generated, rather than the data itself. If there is an adequate goodness of fit it is possible to argue for the existence of the proposed relationships between variables. Because SEM takes a confirmatory rather than explanatory approach to data analysis it is well suited to the analysis of data for inferential purposes and therefore hypothesis testing. Byrne (2001) states that it is a popular method for non-experimental research, where methods for testing theories are not well developed and ethical considerations make it unfeasible to conduct experiments, thus it is an appropriate method for the analysis of the data in the current study.

Again the fit indices reported here
are the $\chi^2$ likelihood ratio statistic, the CFI, PCFI and the RMSEA, these are shown in Table 5. The CFI (.91) and the PCFI (.85) indicate the hypothesised model represents an adequate fit to the data, and is parsimonious. The RMSEA (.05) also meets the criteria for good fit.

It is worth noting that this second study included a considerable number of participants from outside NZ. When the model was tested using only NZ respondents ($n = 277$) the fit indices were almost identical (see Table 5), suggesting the model is valid for New Zealanders. In addition, when the data from those reporting being from NZ were compared with data gathered from overseas respondents ($n = 130$) in a multi group analysis testing for invariant pattern of causal structure (Byrne, 2001), the two were invariant $\Delta \chi^2 = 20.74$ (n.s.). The invariance of the model between the two groups suggests that findings are generalisable outside New Zealand.

Thus, taken together, the goodness of fit statistics reported for study two indicate that the proposed model is a good fit to the data. One interesting aspect of Model 2 is the satisfaction variable. Factor analysis supported a two-factor model of job satisfaction, one relating to individuals' satisfaction with aspects of their interpersonal interactions and work environment (e.g., their fellow workers, their boss, the physical work place) and one relating to satisfaction with aspects the actual jobs respondents performed (e.g., the amount of responsibility and the variety in an individual's work). While the two cohesion factors appear to be related to the other variables in the same way as one another, the satisfaction variables do not. The factor 'satisfaction with interpersonal aspects of the job and the workplace' appears to mediate the relationship between friendship/ cohesion factors and 'satisfaction with aspects of the actual job'. The mediated relationship implies that having increased opportunities for friendship will impact directly on employees' satisfaction with their workplace and the people they work with, but has no direct impact on their satisfaction with the actual job they do. This makes intuitive sense as satisfaction with aspects of work such as the variety in ones job and the opportunity to use your abilities, is unlikely to be affected by the number or quality of friends at work. Both aspects of satisfaction regress significantly on organisational commitment and, in turn, intention to leave. But the second satisfaction factor 'satisfaction with aspects of the actual job' appears to mediate the relationship between 'satisfaction with interpersonal aspects of the job and the workplace' and 'intention to leave'.

**Discussion**

**Summary of findings**

The aim of these studies was to investigate the relationship between workplace friendships and organisational outcome variables. The overall pattern in the relationships between the variables measured, suggests that friendships at work do have a significant influence on a range of organisational and personal factors. While Study 1 took place in one organisation, with the participants being almost entirely female, the respondents in Study 2 were from a large number of (predominantly Western) countries and were more evenly spread in terms of gender. Although there were few respondents from non-Western / non English-speaking countries, the theoretical model was developed with a Western population in mind, and has proven itself to be applicable in this context.

Most of the linkages between variables in Study 2 relate very closely to the findings in Study 1, demonstrating good support for the theoretical model, and indicating that the model proposed is robust. There were some differences between the findings from the two studies however. The main differences are: a) The cohesion and job satisfaction variables each have two distinct component factors in Study 2, while data from Study 1 support a single factor structure for each of these two variables; b) the path from 'cohesion' to 'friendship prevalence' is mediated by 'friendship opportunities' in Study 2, but is direct in Study 1; and c) the significant regression weight leading from 'friendship prevalence' to 'intention to leave'; found in Study 1, is not present in Study 2.

A possible explanation for the different impacts of friendship prevalence between the two studies is the very different samples: respondents in the first study were almost entirely New Zealand women, all of whom worked in health care, a group who are likely to place great value on their interpersonal relationships (Andrew & Montague, 1998; Aukett, Ritchie, & Mill, 1988; Winstead, 1986); respondents in the second study were more diverse, both professionally and ethnically, and 30% were male. Alternatively, it is possible that friendship prevalence, measured in this way, is simply not antecedent to the organisational outcomes measured in the current studies. However, given previous literature (e.g., Nielsen et al., 2000) and the qualitative data gathered (see study 1), it seems more likely that the items used to assess friendship prevalence, or the method of analysis, need modification; than that the prevalence of friends has no impact on employees' experience of work. Another explanation – perhaps more credible – is, as discussed earlier, that although organisations can provide opportunities for friendships, it is the employees themselves who make friends. Thus, actually having friends at work is not something easily attributed to the organisation, or associated with organisational outcomes, in the way that a generally friendlier workplace will be.

**Links to existing research**

Findings related to the role of friendships at work, from the current study, are largely consistent with previous literature. For example, in the

| Table 5. Fit Indices for Model 2: Study 2 |
|---------------|---------|---------|---------|---------|---------|---------|---------|
|               | $\chi^2$ | df     | PCFI    | CFI     | RMSEA   |
| Whole sample  | 1239.70  | 582    | .85     | .91     | .05     |
| NZ respondents only | 1022.31  | 582    | .84     | .91     | .05     |
early 1970’s, as part of the job redesign movement, Hackman and Lawler (1971) found significant positive relationships between friendship opportunities and job satisfaction, reflecting findings in the current study. More recent research, too, has found that friendship opportunities, and the quality of close friendships at work, are associated with job satisfaction (Markiewicz et al., 2000; Riordan & Griffith, 1995). In the current study, positive correlations found between group cohesion and friendship also reflect previous literature, in which these two variables have been found to be related (e.g., Nielsen et al., 2000; Odden & Sias, 1997). Nielsen et al. (2000) not only reported positive correlations between friendship opportunities, friendship prevalence and job satisfaction, but also found that those experiencing friendship at work were less likely to want to leave their current jobs. Support for Nielsen et al.’s finding in the current study is mixed, as the relationship between intention to leave and friendship opportunities was evident in study one, but not in study two.

Analysis of the data from these studies suggests that satisfaction is antecedent to commitment. The finding that commitment, in part, develops from satisfaction is consistent with previous literature, which has suggested that commitment takes longer to develop, and is more stable than satisfaction; and that an employee is unlikely to form strong organisational commitment if they are not satisfied with their job (Porter et al., 1974). Current findings also support the satisfaction-to-commitment relation proposed by Williams and Hazer (1986), who used structural equation modelling to reanalyse data from two previous studies (Bluedorn, 1982; Michaels & Spector, 1982). Williams and Hazer specifically examined the causal relationship between satisfaction and commitment. Their analysis supported a satisfaction-to-commitment relation, implying that satisfaction is antecedent to commitment in employees.

Much of the research focusing on satisfaction and commitment, while it does not dispute that commitment develops from satisfaction (as described above), indicates that both satisfaction and commitment contribute independently to the turnover intention process. This independent-effects model follows Porter et al.’s (1974) suggestion, based on their research in the U.S.A., that job satisfaction and organisational commitment, though related, are distinct constructs. Again, results from the current study are consistent with these previous findings, because both satisfaction and commitment each contributed independently towards intention to leave. Further evidence that both satisfaction and commitment contribute to intention to leave derives from a study in Tett and Meyer (1993). Tett and Meyer used path analysis to reanalyse data from 155 different studies. Their meta-analysis concluded that job satisfaction and affective commitment are indeed, independent contributors to turnover intention, supporting the independent-effects perspective. For more supporting evidence, see also Riordan and Griffith (1995).

**Conclusion**

The prevailing zeitgeist today is, arguably, that organisations must be socially responsive, not only providing a job and income for their employees, but also a reasonable quality of work life. In New Zealand’s increasingly secular society (of primarily nuclear families), there may be an increasing reliance on the workplace to give a sense of belonging that people formerly drew from their church, community, or extended family. This study sits within the quality of work life movement, focusing on the fulfilment of social needs in the workplace. Overall, the theoretical model was supported by the data collected from two studies. The diverse samples in this paper give generalisability to the findings, and support the notion that workplace relationships have direct, measurable effects on organisational outcomes – both in New Zealand, and to some extent, overseas. On the basis of these findings, it is not unreasonable to conclude that friendships at work will have a positive effect on employees’ experience of work. Research by Barsade (2002) suggests that a ripple effect, or emotional contagion of positive emotions, will, in the long run, improve cooperation, decrease conflict and increase perceived task performance. Thus, it is likely that the positive effects of workplace relationships will be quite far reaching – not only improving employees’ experience of work, but also having an effect on the “bottom line”, e.g. through enhanced organisational commitment, job satisfaction, and decreased intention to leave.

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