Predictors of Job Strain and Intention to Quit in a Reorganised Sector of the Australian Workforce

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Summary

This study examined the role of working conditions in predicting the psychological health, job satisfaction, organisational commitment and intention to quit of employees working in an industry sector that had undergone large-scale organisational change. The working conditions were assessed using an augmented job strain model - whereby job demand, job control and social support had been augmented by industry-specific stressors - and the psychological contract model. The results of regression analyses indicate that social support was predictive of all of the outcome measures. Job control and the honouring of psychological contracts were both predictive of job satisfaction and commitment. Furthermore, job satisfaction and organisational commitment were found to mediate the relationship between working conditions and intention to quit. Collectively, these findings suggest that strategies aimed at combating the negative effects of organisational change could be enhanced by addressing several variables represented in the models – particularly social support, job control and psychological contracts.
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There is a significant body of literature that deals with change in organisations. Writers advocate a range of approaches from systems interventions to people centred facilitation. Senior (Senior 1997) refers to these as hard and soft systems. She describes the former as staged processes of logical intervention in which data are gathered and analysed to provide the basis for project managed implementation of solutions. In the case of soft systems, attention is directed to emotional issues that may help or hinder change. Emotions give rise to soft or ‘messy’ situations best dealt with by the more people centred Organisational Development (OD) approaches (French, Bell & Zawacki 2005).

While organisational change can lead to positive long-term outcomes, there is widespread acknowledgement that organisational restructuring, downsizing, process improvement programs and other forms of significant organisational change engenders a range of negative responses. The adverse effects of organisational change include increased uncertainty, declining levels of job satisfaction, increased job stress, increased risk of long-term sickness absence and hospital admissions, heightened intention to quit and increased voluntary turnover (Korunka, Scharitzer, Carayons & Sainfort 2003; Bordia, Hunt, Paulsen, Tourish & DiFonzo 2004; Morrell, Loan-Clark & Wilkinson 2004; Westerlund, Ferrie, Hagberg, Jeding, Oxenstierna & Theorell 2004). These reactions have far-reaching implications for individual wellbeing and organisational effectiveness and ultimately threaten to undermine any efficiency gains that the organisations expected to achieve as a result of the change program (Noblet, Teo, Rodwell & McWilliams 2004).

Despite the enormous costs associated with organisational change, many of the theories and research on organisational change focus on the hard, systems-oriented approach and have largely ignored how individuals react or cope with change (Judge, Thorson, Pucik & Welbourne 1999; Wanberg & Banas 2000). Several authors have been particularly critical of the quality-driven reorganisation programs that emphasise the organisational benefits of these initiatives - process improvement, greater customer satisfaction, enhanced cycle times and improved performance - but are relatively quiet about how these initiatives effect employees (Connor 1997; Moon & Swaffin-Smith 1998). The tendency to manage organisational change from a technical or structural viewpoint has meant that there is comparatively little information on how to manage the human element (Arendt, Landis & Meister 1995; Korunka, Scharitzer et al. 2003). The aim of the present study was, in part, to address this imbalance and focus on the human side of organisational change. In particular, the authors sought to identify those conditions that need to be addressed in order to build healthier and more satisfying workplaces in a sector that had experienced significant and ongoing change. The study consisted of employees working in the Australian-based disability employment industry and the following section will provide a brief summary of the types of changes that have taken place in this sector. The second part of the introduction will then focus on the theoretical models underpinning this investigation.

Disability Employment Sector

The disability employment sector in Australia formally came into existence in 1987 with the passage of the Disability Services Act. Since that time, the sector has undergone almost continuous moderate to profound change. It has grown in scale, undergone several government-driven policy changes, expanded from an intellectual disability focus to include clients with the full range of disabling conditions, and experienced lengthy periods of tight financial control. Most recently, dating from the latter part of 2004, the entire sector has been
relocated from its place as a program within the Department of Family and Community Services to the Department of Employment and Workplace Relations. This most recent change well and truly defines the sector as operating within the government's labour market program rather than its social welfare program. With this change comes an increased emphasis on achieving targets and increased competition amongst providers. Likewise, there is concern among many providers that attention to client support will be compromised.

The aim of the most recent restructure is to bring people with a disability more into the mainstream labour market and to open up the non-specialist program, Job Network, to those clients as well. There are widespread reports that staff within disability open employment services (DOES) are unsure of their future due to possible closures or acquisitions of outlets, concerns over yet more reporting and accountability procedures, expanding workloads that are already high, and loss of a personalised service. Turnover within the sector has been more than 27% over the past two financial years, almost twice the Australian all-industries average (Graffam, Noblet, Crosbie & Lavelle 2005). In addition to these conditions, some Job Network providers have been heavily attempting to recruit staff from DOES in order to improve their own competitive ‘edge’. Anecdotally, a key decision-making body in the sector has expressed concerns regarding the morale of staff and fears that the deleterious effects of the latest round of restructuring will ultimately threaten any efficiency/productivity/quality gains that could be achieved through the reforms (Association for Competitive Employment, meeting 1 March 2005). The disability employment sector plays a vital role in helping people with disabilities to gain and maintain employment. The adverse outcomes of significant organisational change not only impact on the wellbeing and satisfaction of employees working in this sector, but also represent major barrier to the sector’s capacity to provide a critical community service.

The remainder of this introduction will focus on the theoretical frameworks guiding the present study. A unique combination of theories will be employed to identify those conditions that need to be addressed in order to enhance the satisfaction and commitment of employees working in the disability employment sector. These theories include the Job Strain Model (JSM) and the Psychological Contract Model (PCM). Each of these models represents a rich body of literature that is expected to provide valuable insights into the conditions that need to be managed in a sector that has experienced wholesale transformational change.

**The Job Strain Model**

The Job Strain Model (JSM) is regarded as one of the most dominant work-stress models in the field of occupational health psychology (De Lange, Taris, Kompier, Houtman & Bongers 2004). Karasek’s (1979) original JSM used a two dimensional design involving job demands and job control to predict the amount of unresolved stress, known as strain, the individual was under, which, in turn, predicted stress-related psychological and physical illness. The original JSM has since been expanded to include social support following studies demonstrating the moderating effects of social support on job strain (Karasek & Theorell 1990). The JSM proposes that the strain felt by the employee increases when the demands of a situation exceed the levels of job control and social support available to the individual (Karasek, Baker, Marxer, Ahlborn & Theorell 1981). High strain jobs therefore represent those situations where the demands are not matched by adequate levels of decision-making authority and/or support from supervisors and colleagues. The interactive relationship between demand, control and support is referred to as the isolated strain (or ‘isostain’) hypothesis and both this and the direct effects of individual JSM variables have been extensively tested (see van der Doef & Maes 1999 for a review). Whilst there has been mixed support for demand-control-support interactions, research has consistently demonstrated that
the component variables are predictive of health and performance outcomes (e.g., Stansfeld, Head & Marmot 2000; Bond & Bunce 2003; De Lange, Taris et al. 2004).

Although the JSM has been found to offer key insights into the work-strain relationship, generic models have been criticized for focusing too heavily on a narrow range of generalized work characteristics while ignoring more situation-specific variables (Sparks & Cooper 1999). These views are supported by recent studies indicating that combined generic and situation-specific models accounted for significantly larger proportions of strain than if the generic model was used alone (Beehr, Jex, Stacy & Murray 2000; Noblet, Rodwell & McWilliams 2003). On the basis of this research, the present study will investigate both the generic variables contained within the JSM and stressors that are specific to the sector under investigation. Augmenting the JSM with more situation-specific stressors will maximize opportunities for identifying work characteristics that are particularly influential in the strain experienced by people working in the disability employment sector.

The Psychological Contract Model

At the heart of the employee-employer relationship is a set of unwritten agreements about what one party expects to give and receive from the other (Robinson 1996; Robinson & Morrison 2000). These agreements are collectively referred to as a psychological contract and are based on a perceived understanding of what was promised to them by the other party. An individual’s perceptions of their reciprocal obligations are often generated very early in the employer-employee relationship and can cover a range of issues including promotional opportunities, training and development and the level of decision-making responsibility that the employee will receive (Turnley & Feldman 2000). Furthermore, these perceptions may be based on explicit promises (e.g., a recruiter promises a new employee that he or she will receive a promotion after three years) or can be more implicit (e.g., a recruiter mentions that people generally get promoted in this organisation after three years)(Robinson & Morrison 2000). While psychological contracts refer to the reciprocal obligations of both individual employees and their employers, much of the literature in this area has focused on the employee’s understanding of the promises made. In particular, studies involving psychological contracts have examined the frequency and impact of situations when organisations have failed to adequately fulfil their obligations. This research has generally found that psychological contract breaches are relatively common (e.g., Robinson & Rousseau 1994) and that these violations are associated with a range of negative outcomes including reduced employees’ trust, higher levels of job dissatisfaction, reduced commitment to the organisation, declining levels of in-role and extra-role performance and increased employee turnover (Robinson & Morrison 1995; Robinson 1996).

There were three primary reasons why psychological contract theory was used to help identify the situations and conditions that are predictive of employee-level outcomes in the present study. Firstly, transformational change programs such as those undertaken within the disability employment sector have been found to leave many employees feeling less secure in their job, displaying less loyalty to the organisation and placing less faith in their employer’s promises to them (Mirvis & Kanter 1992; Altman & Post 1996). These findings suggest that employees become much more conscious of previously agreed obligations when significant organisational change is occurring and hence the psychological contract literature is likely to offer worthwhile explanations for the relatively high levels of turnover currently experienced within the disability employment sector. The second reason why we decided to focus on psychological contract theory was that contract violations are associated with many of the adverse outcomes currently experienced by people working in this sector, in particular, reduced job satisfaction, declining levels of organisational commitment and increased
Intentions to find alternative employment (Robinson, Kraatz & Rousseau 1994; Robinson 1996). There are therefore strong indications that a significant proportion of these effects may be closely linked to breaches in psychological contract.

The final reason for selecting psychological contract theory was that the concept draws on a very different body of literature to that on which the JSM is based. Whist the latter can be seen to be an extension of the person-environment fit theory, whereby the level of fit between the demands of the environment and the capacities of the individual influences the attitudinal and behavioural outcomes, psychological contract theory stems from the social exchange literature (Blau 1964; Adams 1965). Despite the rich body of literature that pre-dates the JSM and the psychological contract theories, the authors have been unable to identify research that has incorporated both models in the same study. The unique combination of models underpinning the present research will not only increase the likelihood of identifying conditions or circumstances that are making significant contributions to employee-level outcomes, but the study will also provide new insights into the comparative influence of the two theory bases.

Outcome Measures

Four outcome measures will be examined in the present study; psychological health, job satisfaction, organisational commitment and intention to quit. The first two variables, psychological health and job satisfaction, are frequently used to measure job strain and are considered key dimensions of individual wellbeing (Warr 1990). Psychological health is a context-free measure of wellbeing and refers to the feelings people have irrespective of any particular setting. In contrast, job satisfaction captures the feelings people have about themselves in relation to their job and is used to measure job-specific well-being. Incorporating both these measures provides a more detailed assessment of the relationship between the working conditions and situations covered in this study and an individual’s overall level of wellbeing.

Organisational commitment and intention to quit are often used to measure the organisational impact of adverse working conditions. Organisational commitment is generally defined as an attachment to the organisation (Testa 2001) and is seen as a more stable and long-term attitude than job satisfaction, although both impact on performance (e.g. Tett & Meyer 1993; Testa 2001). Organisational commitment and job satisfaction are also strongly linked to intention to quit. For example, Allen and Meyer (1996) reviewed numerous studies demonstrating a negative correlation between commitment to the organisation and turnover intentions. Likewise, other research has found that job satisfaction has a negative impact on quit intentions (Netemeyer, Burton & Johnson 1995; Tate, Whatley & Chugston 1997). The relationship between attitudes such as job satisfaction and organisational commitment and intention to seek alternative employment has important practical implications. Intention to quit is a major precursor to actual turnover and, given that employee turnover can cost an organisation 90-200% of the average annual salary of the positions affected (Cascio 2000), steps need to be taken to identify key antecedents to quit intentions. The aforementioned research shows that job satisfaction and organisational commitment have an inverse relationship with intention to quit and hence the present study incorporates two variables that can give managers more warning that actual turnover is likely to occur.

Studies demonstrating a direct relationship between employee attitudes (such as job satisfaction and organisational commitment) and intention to quit support the view that there is an indirect relationship between working conditions (such as those described in the JSM) and quit intentions. That is, the studies by Allen and Meyer (1996) and Tate et al. (1997) indicate that the work-intention to quit relationship is mediated by key attitudes, in particular,
job satisfaction and job commitment. The present study will therefore assess the direct relationship between the JSM and psychological contract variables and three of the outcome measures, namely psychological health, job satisfaction and organisational commitment. Additional analyses will then be undertaken to examine the extent to which job satisfaction and organisational commitment mediate the relationship between work and turnover intentions.

**METHOD**

Sample

The participants in this study were staff employed in Australian-based organisations operating in the disability employment sector. All employees working in the sector were invited to take part in the survey. A copy of the questionnaire, along with a letter from the peak industry body explaining the aim and content of the survey, was distributed to employees. Once staff had completed their questionnaire, they were asked to seal it in a stamped, self-addressed envelope and return it to the authors. This was an anonymous survey and, hence, respondents were not required to record their name or any other information that may reveal their identity on the questionnaire.

A total of 514 completed questionnaires were received from employees working in this sector. To summarise the demographic characteristics of the sample, the majority of participants were female (64%). The age of respondents was evenly spread among the five age categories with the most common range being the 41-50 years group (30%). Most (80%) of the participants were employed on a full-time basis and almost two-thirds (62%) were working in direct service positions. Well over half of the respondents (58%) had been working in the disability employment sector for more than four years, whilst almost the same proportion (55%) had been employed with their current organisation for three years or less.

Measures

The questionnaire used in this study was divided into three sections. The first section included three self-report scales that were designed to measure the dependent variables, psychological health, job satisfaction, organisational commitment and intention to quit. The scales covered in the second section assessed the independent variables and these included job control, job demand, social support, the extent to which promises have been kept and situation-specific stressors. In the third section, respondents were requested to provide demographic information, including gender, age (range only), the section in which they worked, job status (i.e., fulltime, part-time, etc.), length of time employed in current organisation and experience working in disability employment sector (range only).

**Psychological Health.** The GHQ-12 consists of two sets of six items that are designed to measure self-perceived psychological health (Goldberg & Williams 1988). The first set of items deals with healthy functioning (e.g., been able to concentrate) and the second set deals with abnormal functioning (e.g., losing self-confidence). Participants were asked to complete a four-point scale ranging from “not at all” (scored as zero) to “much more than usual” (scored as three). Higher scores indicated higher levels of perceived health. The scale had a Cronbach’s alpha of 0.89.

**Job satisfaction.** Job satisfaction was measured using a 15-item scale developed by Warr and colleagues (1979). This scale was designed to measure the satisfaction-dissatisfaction felt by participants in relation to various aspects of work (for example,
physical conditions, management, salary and job security). Minor changes were made to the terms used in the scale to ensure it reflected the language used by study participants. Participants responded on a seven-point scale ranging from “very satisfied” to “very dissatisfied” (i.e., the higher the score, the higher the dissatisfaction). The scale had a Cronbach’s alpha of 0.92.

**Organisational commitment.** This variable was measured using six items from Porter, Steers, Mowday and Boulian’s (1974) scale. An example item is, “I am willing to put in a great deal of effort beyond that normally expected in order to help this organisation be successful.” Each item was rated on a five-point scale ranging from ‘1’ strongly disagree to ‘5’ Strongly agree. The scale had a Cronbach’s alpha of 0.89.

**Intention to quit.** This measure captured two types of quit intentions, the intention to search for alternative employment and the actual intention to quit (Arnold & Feldman 1982). Intention to search for a new position was measured by the responses to the question, “How likely is that you will actively look for a different organisation in the next year?” Intention to change positions was assessed by the question, “Do you intend to change the organisation in which you are now employed?” Participants were asked to record their responses on a 7-point Likert scale “highly unlikely” to “highly likely”. The scale had a Cronbach’s alpha of 0.90.

**Unmet promises.** A global measure of perceived contract breach was used to measure the extent to which employees felt that the organisation had fulfilled its promises. The measure contained five items, with responses on a 1-5 scale ranging from “strongly disagree” to “strongly agree”. Examples of the items included in this scale include ‘I have not received anything promised to me in exchange for my contributions’ and ‘Almost all the promises made by my employer during recruitment have been kept thus far’ (reverse scored). The scale had a Cronbach’s alpha of 0.91.

**Job demand.** The Quantitative Workload scale was used to measure job demands (Caplan, Cobb, French, Harrison & Pinneau 1980). This is an 11-item scale that encompassed both psychological and physical job demands. Participants were asked to respond on a five-point scale ranging from “rarely” to “very often”. The scale had a Cronbach’s alpha of 0.89.

**Job Control.** Participant perceptions of the amount of control they experienced at work were measured using Karasek’s (1985) nine-item decision latitude scale. Participants were asked to respond on a five-point scale ranging from “strongly disagree” to “strongly agree” (i.e., the higher the score, the higher the level of agreement). The scale had a Cronbach’s alpha of 0.76.

**Social support.** Support from supervisors, co-workers and subordinates was measured using the 10 work-based items from Etzion’s (1984) social support scale. Participants were asked to indicate the extent that various support features are present at work. Participants recorded their responses on a five-point scale ranging from ‘always present’ to ‘never present’. The Cronbach’s alpha for the work scale was 0.91.

**Industry-specific stressors.** Participants were asked to respond to a 29-item industry-specific stressors scale that required them to indicate the extent that each of the conditions listed was a source of stress in their job. A five-point scale ranging from ‘not at all’ to ‘major source of stress’ was used. The organisation-specific stressor items were based on the results of a qualitative study involving a cross-section of staff working in the disability employment sector. In this study, two semi-structured focus groups were undertaken to identify the sources of stress experienced by participants. The results revealed 29 separate stressors that were experienced by participants. This list of stressors was later analysed using exploratory factor analysis techniques. This analysis produced a three-factor solution and each of these latent factors are presented in the following section.
RESULTS

All statistical analyses were undertaken using SPSS 12.0 for Windows. Pre-analysis screening revealed there were no patterns identified in the missing data and the missing data was treated using listwise deletion (Roth 1994).

Exploratory factor analysis

Exploratory factor analysis (EFA) was first undertaken to detect the factors or dimensions underlying the industry-specific sources of stress items. The Kaiser-Myer-Olkin Measure of Sampling Adequacy (.92) and Bartlett's Test of Sphericity ($\chi^2_{210} = 5554.703, p < .001$) both indicated the factorability of the correlation matrix (Hair, Anderson, Tatham & Black 1998). The EFA consisted of the Maximum Likelihood extraction method with direct oblimin rotation. Three criteria were used for retaining items in the subsequent analyses; (1) each had a primary loading of greater than .40, (2) each item had secondary loadings of less than .30 (i.e., was free of complex loadings), and (3) each displayed item total correlations of at least .25 (Floyd & Widaman 1995). Using these criteria, eight items were removed and the remaining 21 rotated.

The final EFA revealed a solution consisting of three factors that explained 59% of the total variance. The first factor, hereafter labelled "Treatment Stressors" had an eigenvalue of 8.61 and accounted for 41% of the total variance. Factor two was named "Workload Stressors" had an eigenvalue of 1.96 and captured 9% of the variance and the third factor, "Physical Stressors" had an eigenvalue of 1.85 and accounted for 8% of the variance. To prepare the factors for further analysis, the items within each of the three factors were added together to create the three scales - Treatment Stressors, Workload Stressors and Physical Stressors. All three resulting scales exhibited adequate reliability scores ranging from .74 to .90. The factor loadings, eigenvalues, explained variance and the internal reliability for each factor are presented in Table 1.

Bivariate correlations

Table 2 lists the descriptive statistics and correlations for each of the study variables. The correlations were conducted to highlight the pattern of relationships between the generic conditions represented in the JSM (i.e., job demand, job control and work-based support), the extent to which promises were kept and the three stressor factors. A key feature of Table 2 is the large number of significant correlations between the predictor variables and the target measures. Job control, social support, the promises measure and two of the organisation-specific factors - treatment stressors and workload stressors - were all correlated with the four target variables (psychological health, job satisfaction, organisational commitment and intention to quit). The direction of these relationships was also in the expected direction. For example, control, support and promises were all negatively correlated with intention to quit. Likewise, two of the three organisation-specific stressors were inversely correlated with three of the outcome measures - psychological health, job satisfaction and organisational commitment - but positively related to intention to quit. A final noteworthy point evident in Table 2 is the strong, inverse relationships between the outcome variables - job satisfaction, organisational commitment and psychological health - and the intention to quit scores. While this finding supports the hypothesis that satisfaction mediates the relationship between psycho-social working conditions and propensity to quit, multiple regression will be used to examine this hypothesis more closely.
Predictor of Job Strain and Intention to Quit

Multiple Regression Analysis

Multiple regression analysis was first used to measure the direct relationship between the generic work characteristics, the industry-specific stressors and the three intermediate outcome measures (job satisfaction, commitment and psychological health).

Prior to undertaking the regression, the assumptions were tested using the checklist developed by Tabachnick and Fiddell (1996). The evaluation of assumptions, particularly when investigating collinearity and multicollinearity, indicated that the data was robust to the assumptions of normality, linearity and homoscedasticity of residuals inherent to the multiple regression analyses (Tabachnick & Fiddell 1996).

A four-step hierarchical regression was performed for each of the target variables: psychological health, job satisfaction and organisational commitment. The demographic variables were entered first to control for any confounding effect that age and length of employment may have on the work-strain relationship. The results of the regression analyses revealed that the demographic variables made a negligible contribution to the level of explained variance in all three outcome measures and were omitted from the regression results (Table 3). The JSM variables - job demand, job control, and work support - were entered in the second step so as to ascertain their main effects on the outcome measures. The promises measure was entered in Step 3, followed by the industry-specific stressors in Step 4.

Initially, the JSM’s interactive terms (i.e., demand x control, demand x support (work), control x support and job demand x job control x social support) were added to the regression analysis, after the individual components of the model had been entered (Dwyer & Ganster 1991). However these interactive variables were later omitted due to the generally high level of multicollinearity they created (Hair, Anderson et al. 1998). The results of the regression analyses also revealed that the multiplicative terms contributed little to the overall predictive capacity of the model and none were found to be predictive of the outcome measures.

The results of the multiple regression analysis in Table 3 indicate that only social support was predictive of all three outcome variables, although in the case of job commitment, the effect size was relatively small. Job control was predictive of job satisfaction and commitment, as was the extent to which promises were kept. Both the treatment and workload stressors were inversely related to psychological health (i.e., as concern regarding the treatment and workload stressors increased, psychological health decreased). In terms of the relative contribution of the three sets of independent variables, the components of the JSM accounted for 76 percent of the explained variance in psychological health, 82 percent of the explained variance in job satisfaction and 75% of the explained variance in organisational commitment. These results indicate that job demand, job control and social support collectively accounted for a substantially large proportion of the wellbeing and commitment experienced by participants. Together with the predictive value of social support and, to a lesser extent, job control, these results indicate that the components of the JSM should be a key area of focus when devising strategies to enhance employee wellbeing and commitment. The overall equation for psychological health in Table 3 was significant (R^2_adj = 0.253, F (7, 383) = 19.845, p < 0.001). The overall equation was also significant for the outcome measures of job satisfaction (R^2_adj = 0.746, F (7, 370) = 159.126, p < 0.001), and organisational commitment (R^2_adj = 0.371, F (7, 391) = 34.531, p < 0.001).

A second set of multiple regressions were undertaken to test the role of job satisfaction and organisational commitment in mediating the relationship between working conditions and intention to quit. Following Baron and Kenney (1986), the criteria for mediation by job satisfaction and organisational commitment were taken to be (a) a substantial reduction of the beta weight of an initially significant independent variable (in this case, the individual components of the DCS, the extent to which promises had been met and
the three stressor factors) after the inclusion of the potential mediators (job satisfaction and organisational commitment), and (b) a significant beta coefficient for those mediators in the final equation. The literature does not specify what is meant by a 'substantial reduction' and we therefore set a requirement that the contribution of one of the work characteristics should become non-significant following the entry of the potential moderators in the equation.

The beta coefficients resulting from the second set of regression analyses are listed in Table 4. Prior to entering job satisfaction and commitment into the regression (i.e., Step 1), several of the independent variables - job control, social support, promises and the treatment stressors - were predictive of intention to quit. However once satisfaction and commitment were added (i.e., Step 2), these independent variables were no longer significant. Instead, the satisfaction and commitment variables became predictive of intention to quit. These results show strong support for the role of job satisfaction and organisational commitment in mediating the relationship between working conditions and intention to quit.

**DISCUSSION**

The purpose of this study was to identify the working conditions that should be addressed in order to build healthier and more satisfying workplaces in a sector that has undergone large-scale, organisational change. Overall, the results of the first multiple regression analysis indicate that the conditions represented in the augmented JSM (whereby the generic components of the JSM had been augmented by more situation-specific stressors) as well as the psychological contract model, captured significant proportions of the variance in both the context-free (i.e., psychological health) and context-specific (i.e., job satisfaction) measures of wellbeing and commitment to the organisation. Furthermore, the second regression analysis indicated that job satisfaction and job commitment mediated the relationship between working conditions and intention to quit. Together, these findings suggest that strategies aimed at combating the negative effects of large-scale organisational change could be enhanced by addressing several variables represented in the models - particularly social support, job control, promises and sector-specific stressors. The mediating effects of job satisfaction and organisational commitment also suggest that these strategies would benefit both employees, through enhanced psychological health and job satisfaction, and the organisation via improved employee commitment and reduced intention to quit.

**The influence of the job strain and psychological contract models**

The individual components of the JSM figured prominently in the regression results, capturing large portions of variance in psychological health, job satisfaction and organisational commitment. The predictive capacity of social support at work support was particularly evident when regressed against the two measures of wellbeing (i.e., job satisfaction and psychological wellbeing) and adds weight to a growing number of studies that have shown strong associations between the advice, assistance and feedback received from colleagues and supervisors and employee wellbeing (e.g., Leong, Furnham & Cooper 1996; Swanson & Power 2001; De Lange, Taris et al. 2004). At a practical level, these findings suggest that an important way of building healthier and more satisfying working environments is to closely monitor the support needs of employees and ensure they have the guidance, feedback and assistance required to meet performance expectations. This strategy is particularly important in an organisation or unit that has experienced significant organisational change and where employees are likely to be unsure or anxious about a range of matters, including work goals, job content and future role in the organisation (Balogun & Johnson 2004).
The positive relationship between job control and the outcome measures, particularly job satisfaction and organisational commitment, also parallels previous research. Several experimental and longitudinal studies have strengthened the view that control is an important causal determinant of a number of important outcomes including mental health, job satisfaction, absence behaviour and work performance (Bosma, Marmot, Hemingway, Nicholson, Brunner & Stansfeld 1997; Smulders & Nijhuis 1999; Terry & Jimmieson 1999; Bond & Bunce 2003). Together, this research indicates that having a say in what happens in the workplace helps employees to generate greater ownership over their work, to prevent or reduce the stress associated with organisational change and, overall, to achieve higher levels of satisfaction and commitment. The strong links between job control and positive employee-level outcomes also reinforces the relevance of high commitment HR strategies, which are characterised by employee involvement (Gould-Williams 2004), and heighten the need for managers to develop change agent roles that are based on "involvement and commitment" rather than "command and control" (Caldwell 2003, p.135).

The results of the survey generally indicate that the psychological contract model is a useful tool for examining employee strain in a sector dominated by large-scale reform. While the level of variance attributed to promise fulfilment was considerably smaller than the JSM variables, the \( R^2 \) was still significant for satisfaction and commitment. Furthermore, the extent to which promises were fulfilled was predictive of these outcome variables and, when coupled with other studies linking psychological contract violations with key employee attitudes (e.g., Robinson 1996; Kickul, Lester & Belgio 2004), there is strong evidence to suggest that strategies aimed at minimising contract breaches will enhance employee satisfaction and commitment. Employees' awareness of their psychological contracts becomes more acute during periods of organisational change, largely because there is a greater risk that prior obligations will be violated, and hence perceived breaches are more common during periods of significant change (Robinson 1996; Turnley & Feldman 2000). In terms of organisations operating in the disability employment field, where change has been imposed on an entire sector over a long period, managers face the challenge of continually renegotiating and altering psychological agreements to meet the changing circumstances (Altman & Post 1996). Organisations need to ensure that they do not make unrealistic promises and that both employer and employee have a clear and consistent understanding of what each party will give and receive in the employment relationship. Nevertheless, contract violations are often unavoidable and the organisational justice literature suggests that where breaches are necessary, organisations need to ensure that the procedures leading to the breach are fair and transparent, and that employees are treated in a respectful and just way (e.g., Colquitt, Conlon, Wesson, Porter & Ng 2001; Elovainio, Kivimaki & Vahtera 2002; Kickul, Lester & Finkl 2002).

The strategies required to minimise contract violations raise the possibility that the job strain and psychological contract models are much more closely related than their disparate theoretical backgrounds would suggest. In practice, strategies aimed at enhancing social support and job control may provide opportunities for clarifying, monitoring or managing mutual obligations. For example, the introduction of more supportive people management practices, such as regular feedback sessions and well-integrated staff appraisal programs, may provide valuable opportunities for identifying and clarifying employees' needs and expectations. Likewise, more participatory leadership styles that foster higher levels of job control could provide employees with greater opportunities to raise concerns about changing or unmet obligations. While interactions between components of the job strain and psychological contract models are intuitively appealing, a goal of future research would be to examine these relationships more closely. Much of the research examining the processes
through which psychological contract breaches impact on employee behaviours is fairly recent (e.g., Turnley & Feldman 2000) and hence further JSM-PCM research could add considerable value to our understanding of how breaches occur and what can be done to minimise the frequency and/or the impact of contract violations.

The other set of working conditions examined in this study were those reflected in the sector-specific stressors. The more situation specific factors accounted for significant levels of variance in psychological health and job satisfaction. In addition, the factor ‘treatment stressors’ was a strong predictor for each of these same outcome variables. These results reflect the importance of the issues covered in the more situation-specific conditions and support augmenting generic models of job strain with more situation-specific variables.

The mediating influence of satisfaction and commitment

Another aim of the present study was to test whether job satisfaction and organisational commitment mediated the relationship between working conditions and intention to quit. The results of the second regression analysis revealed strong support for the mediation hypothesis and, together with the outcomes from the first regression, have flagged several organisational-based avenues for addressing withdrawal behaviours such as intention to quit. Adverse working conditions including inadequate job control, poor social support and key workplace stressors, are not only associated with declining levels of job satisfaction and organisational commitment, but the mediating influence of these two attitudinal variables indicates that adverse conditions are also likely to contribute to increased quit intentions.

Intention to quit is an important precursor to actual staff turnover, and strategies that target poor working environments may be instrumental in enhancing both employee satisfaction and staff retention.

Support for the mediation hypothesis has important practical implications. Firstly, the results suggest that declining levels of satisfaction and commitment are a strong indicator that the employee is going to seek alternative employment. Managers can therefore use these measures to assess the climate of the organisation and, if significant reductions in satisfaction and commitment are identified, they are better placed to prevent actual labour turnover from occurring. The costs of labour turnover are substantial and, hence, strategies aimed at addressing the conditions that contributed to declining satisfaction and commitment are likely to prevent significant financial losses. Another important implication of the mediating role of satisfaction and commitment is that both employees and employers can benefit from strategies aimed at improving these conditions. Job satisfaction is an integral part of employee wellbeing, and boosting employee satisfaction levels is therefore an effective health-enhancement exercise. From the organisation’s perspective, both job satisfaction and organisational commitment are closely linked to quit intentions. Together with other research showing that both variables are associated with in-role and extra-role performance (e.g., Williams & Anderson 1991; Ostroff 1992; Riketta 2002), efforts to remedy poor working conditions and boost higher levels of satisfaction and commitment are likely to benefit organisational functioning and to reduce the regrettable turnover of staff.

Limitations

Two major limitations need to be kept in mind when interpreting our study. While the cross-sectional design provides important insights into the relationship between the study variables, the ability to develop firm conclusions regarding these relationships would be strengthened by longitudinal research. The second limitation relates to the reliance on the subjective views of the participants and the subsequent concern this raises about common method variance. This concern applies more to the dependent, rather than the independent variables, wherein
additional objective measures of the outcome variables would have enhanced the validity of the findings. However, some reassurance is gained from research that has shown a high correlation between expert ratings of job conditions and subjective assessments (Karasek, Baker et al. 1981; Spector 1992), and the support that has been shown for the use of self-report measures of the outcome variables, especially commitment (Goffin & Gellatly 2000).

Conclusion

The current organisational climate generally is characterised by the trend towards globalisation, increasingly competitive world markets, reductions in state-owned facilities and services and a strong focus on short-term profits. This trend is placing enormous pressure on organisations and their members and, without well-informed, needs-based interventions, the negative effects of these pressures could undermine the very benefits that the reforms were designed to achieve. This study has provided some useful insights into those areas where the satisfaction and commitment of employees, who work in a sector that has experienced ongoing and significant reforms over the past decade-and-a-half, could be improved. The results of regression analyses indicate that the working conditions job control, social support, psychological contract fulfilment and treatment stressors were closely linked to the outcome measures. These conditions are all amenable to change and, as a result, offer valuable opportunities for boosting the health, satisfaction and commitment of employees working in this sector. At the same time, job satisfaction and organisational commitment were found to mediate the relationship between adverse working conditions and intention to quit. Therefore, improvements to working environments could not only result in a more satisfied and committed workforce, but could also lead to improved employee retention.
REFERENCES


Table 1: Exploratory factor analysis of the sources of stress items

<table>
<thead>
<tr>
<th>Source of stress</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Disagreements/conflict with senior management</td>
<td>.830</td>
</tr>
<tr>
<td>Lack of recognition for good work</td>
<td>.805</td>
</tr>
<tr>
<td>Lack of feedback on how you're performing</td>
<td>.776</td>
</tr>
<tr>
<td>Unfair treatment from more senior staff</td>
<td>.763</td>
</tr>
<tr>
<td>Not having any say in what happens in your organisation</td>
<td>.722</td>
</tr>
<tr>
<td>Unclear expectations</td>
<td>.682</td>
</tr>
<tr>
<td>Lack of advice and guidance from more senior staff</td>
<td>.653</td>
</tr>
<tr>
<td>Lack of opportunity to take on more senior roles</td>
<td>.552</td>
</tr>
<tr>
<td>Staff appraisal program</td>
<td>.539</td>
</tr>
<tr>
<td>Inadequate consultation re organisational or technological</td>
<td>.464</td>
</tr>
<tr>
<td>change</td>
<td></td>
</tr>
<tr>
<td>Having your work closely monitored</td>
<td>.438</td>
</tr>
<tr>
<td>Not receiving enough training and development</td>
<td>.418</td>
</tr>
<tr>
<td>Heavy workloads</td>
<td>-.073</td>
</tr>
<tr>
<td>Not having enough time to do job as well as you would like</td>
<td>-.058</td>
</tr>
<tr>
<td>Lack of human resources to accomplish tasks</td>
<td>.081</td>
</tr>
<tr>
<td>Balancing the competing demands of management and clients</td>
<td>.118</td>
</tr>
<tr>
<td>Unrealistic performance targets</td>
<td>.277</td>
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<tr>
<td>Poor lighting</td>
<td>.015</td>
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<tr>
<td>Inadequate workspace</td>
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<tr>
<td>Working in noisy areas</td>
<td>-.053</td>
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<tr>
<td>Poor temperature controlled environment</td>
<td>.092</td>
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<tr>
<td>Predictor of Job Strain and Intention to Quit</td>
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<td>---------------------------------------------</td>
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<tr>
<td><strong>Eigenvalue for factor</strong></td>
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<td><strong>Explained variance</strong></td>
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<tr>
<td><strong>Cronbach’s alpha for factor</strong></td>
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## Table 2: Descriptive Statistics and Correlations among study variables

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<tr>
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<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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<td>2. Job satisfaction</td>
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<td>3. Commitment</td>
<td>23.93</td>
<td>4.22</td>
<td>.188</td>
<td>.653</td>
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<td>4. Intention to quit</td>
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<td>3.64</td>
<td>-.318</td>
<td>-.472</td>
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<td>5. Promises</td>
<td>18.59</td>
<td>3.99</td>
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<td>.644</td>
<td>.458</td>
<td>-.389</td>
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<td>6. Job Demand</td>
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<td>-.075</td>
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<td>7. Job control</td>
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<td>9. Treatment stressors</td>
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<td>-.429</td>
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<td>.363</td>
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<td>-.634</td>
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<td>10. Workload stressors</td>
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<td>-.225</td>
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<td>.452</td>
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Note. *p < .05; **p < .01, ***p < .001
Table 3: Summary of Hierarchical Regression Analyses for Variables Predicting Psychological Health, Job Satisfaction and Organisational Commitment

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Psychological Health</th>
<th>Job Satisfaction</th>
<th>Organisational Commitment</th>
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<tr>
<td></td>
<td>$B$</td>
<td>$SE_B$</td>
<td>$\beta$</td>
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<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
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<tr>
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<td>0.05</td>
<td>0.01</td>
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<tr>
<td>Job control</td>
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<td>0.07</td>
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</tr>
<tr>
<td>Support work</td>
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<td>0.03</td>
<td>0.21*</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
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<td>Promises</td>
<td>-0.11</td>
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<td><strong>Step 3</strong></td>
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<tr>
<td>Treatment stressors</td>
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<td>Workload stressors</td>
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<td>0.08</td>
<td>-0.19*</td>
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<tr>
<td>Physical stressors</td>
<td>0.14</td>
<td>0.10</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$
Table 4: Hierarchical regression analyses for variables predicting intention to quit.

<table>
<thead>
<tr>
<th>(Step) Work condition</th>
<th>Intention to Quit</th>
<th>β</th>
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<tbody>
<tr>
<td>(1) Job demand</td>
<td></td>
<td>0.05</td>
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<tr>
<td>(1) Job control</td>
<td></td>
<td>-0.13**</td>
</tr>
<tr>
<td>(1) Support</td>
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<td>-0.16**</td>
</tr>
<tr>
<td>(1) Promises</td>
<td></td>
<td>-0.22***</td>
</tr>
<tr>
<td>(1) Treatment stressors</td>
<td></td>
<td>0.24**</td>
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<tr>
<td>(1) Workload stressors</td>
<td></td>
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<tr>
<td>(1) Physical stressors</td>
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<td>-0.08</td>
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<tr>
<td>(2) Job demand</td>
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<tr>
<td>(2) Job control</td>
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<tr>
<td>(2) Support</td>
<td></td>
<td>-0.04</td>
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<tr>
<td>(2) Promises</td>
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<td>-0.07</td>
</tr>
<tr>
<td>(2) Treatment stressors</td>
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<td>0.13</td>
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<tr>
<td>(2) Workload stressors</td>
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<td>-0.06</td>
</tr>
<tr>
<td>(2) Physical stressors</td>
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<td>-0.08</td>
</tr>
<tr>
<td>(2) Job satisfaction</td>
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<td>-0.33***</td>
</tr>
<tr>
<td>(2) Job commitment</td>
<td></td>
<td>-0.16**</td>
</tr>
</tbody>
</table>

Note. * p < .05; ** p < .01; *** p < .001