Contents Page: NZJER, 2010, 35(2)

Editorial: Occupational Stress and Employee Well Being

MARK LE FEVRE

Welcome to this special issue of the *New Zealand Journal of Employment Relations*. Occupational stress, its causes, its consequences, and how both might be reduced continue to be issues of concern to both employers and employees. The eight contributions in this issue cover the area of occupational stress, linked with employee health and well-being, from multiple perspectives and, perhaps, indicate some potential ways to reduce the inevitable impact of the workplace on health and well being.

The primarily theoretical papers from Sisley, and from Sisley, Henning, Hawken, and Moir, offer somewhat revised views of occupational stress. Sisley introduces the idea of autonomous motivation, and possible methods to increase this as a new approach to the amelioration of occupational stress, emphasizing the role of eustress as distinct from distress in linking employee well being and motivation in the workplace. Sisley, Hening, Hawken, and Moir, suggest a revised approach to the assessment and monitoring of stress that may help in the assessment of the effectiveness of stress management interventions in reducing stress in individuals. Le Fevre and Kolt investigate what it is that workers mean when they say "I'm stressed" in order to establish some shared core ideas between so called "lay" representations of stress and the definitions and descriptions commonly used in the academic literature. These papers help to establish a current theory base against which the other papers in this issue can be set.

Hannif, Lamm, and Vo, and Hunt, Rassmussen, and Lamm, both look at aspects of employee well being and stress in the call center industry. While Hunt, Rassmussen, and Lamm find, contrary to most of the papers that have looked at this industry, that employees, in general, enjoy their call center work and believe it provides a career enhancing opportunity, both papers also find a distinct disjunction between the perceptions of staff and management as far as occupational stress is concerned in both its frequency of occurrence and its severity. This difference in perception has obvious potential negative consequences as far as the practice of stress management in the work setting is concerned. Hayman's paper examines the effects of flexible work scheduling and telecommuting on occupational stress and well being. The findings in Hayman's paper have clear resonance with the earlier theoretical papers and many of the employee comments reported in the two call center based papers.

The two final contributions both fall into the review category though from rather different aspects. George and Le Fevre review the evidence for the effectiveness of current stress management intervention (SMI) practice and find that, though there has been some improvement in the method and reporting of SMIs, many of the concerns expressed in earlier reviews of SMI practice remain unanswered. Finally McDonnell provides an interesting commentary on the interpretation of occupational stress in the context of workers' compensation systems and the problems which stem from this.

It is tempting to draw a number of conclusions from this collection of papers, all looking at different aspects of occupational stress yet also sharing some surprising consistencies. I leave you, however, to read these works yourself and come to your own conclusions as to what should, and perhaps more importantly, what practicably can, be done to reduce the frequency, severity, and impact of stress in the workplace. Perhaps I might permit myself one final comment. Stress, like beauty, seems to exist in the eye (and mind) of the beholder, perceptions are the key, and there may lay the key to the mystery of what to do about stress.

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A Conceptual Model of Workplace Stress:
The issue of accumulation and recovery and the health professional

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Abstract

Given that interventions for workplace stress have been shown to be effective, and behaviour change can be sustained over time (Veach, Rahe, Tolles and Newhall, 2003), a model that can serve to monitor the medium and long-term effects of both stressors and stress-management interventions should prove useful. After reviewing some familiar concepts in the stress arena, this paper presents such a model, building on existing work (Diehl and Hay, 2010; Ray, 2008; Selye, 1970, 1976; Zubin and Spring, 1977) and it is thought that this adapted model will be useful for management personnel, counsellors, educators, employees, and researchers.

Introduction

To create a frame of reference, the paper begins by presenting some common definitions, causes and consequences of workplace stress and then reviews some existing workplace models. A model that is used by the primary author is presented and, finally, its proposed effectiveness for workplace practice and research is considered. To create a focus for the model, specific examples will be taken from the health professional literature as this is an area that has been highlighted as an environment ripe for stress (Cutler, Alspector, Harding, Wright and Graham, 2006, Deckard, Meterko and Field,1994; Henning, Hawken and Hill, 2009; Hooper, Craig, Janvrin, Wetsel and Reimels, 2010; West, Huschka, Novotny, Sloan, Kolars, Habermann and Shanafelt, 2006). The main purpose of this paper is to create a frame of reference for the concept of stress as it relates to the workplace environment, and specifically the occupational work environment encountered by health professionals. As such, one specific focus of the stress model is its link with the concept of the arousal (Bryant, Harvey, Guthrie and Moulds, 2000), as this is particularly pertinent to the health environment which is often highly charged creating high levels of arousal (Bakker and Demerouti, 2007; Rick, Acton, and Payne, 1988; Ryan, 2010).

Definition of workplace stress

Life in the workplace undoubtedly presents particular challenges and opportunities that can generate different types of stressors, and workplace stress can be defined and described in numerous ways. In an earlier review article, Baker (1985) postulated that many definitions of stress were framed by psycho-physiological explanations around a conflicting relationship

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between individuals and their environment. This perspective considered the demands of the environment in relation to the resource capabilities of the individual. Such models tended to view stress in terms of a dynamic process between physiological, psychological, and behavioural entities that are cognitively interpreted by the individual (Rahe, 1999). As such, stress is defined in terms of its origin, whether this is from the individual or the workplace, or more likely a combination of both.

The notion of stress is far reaching and can encompass numerous disciplines, such as medicine, sociology, management, and psychology (Pitts, 2007). Consistent with Baker's (1985) analysis, a frequently cited definition of workplace stress relates to the person-environment fit model (Blix and Lee, 1991; Edwards, 1996, 2008). In this view, problems with stress-related phenomena occur when the person-environment fit is dysfunctional. This definition of workplace stress is used as the frame of reference for this paper, such that stress arises when undue pressure is applied as a consequence of tasks or conditions occurring within the work environment during the course of employment (Pitts, 2007; Blix and Lee, 1991).

Causes of workplace stress

Several causal factors are now discussed, specifically predisposition factors, demographic factors, job-demand characteristics, leadership and management, working in interdisciplinary teams and the advent of conflict scenarios. The examples are specifically from the health professions literature.

Person-environment fit characteristics were investigated in reference to the profession of psychiatry where it was shown that psychiatrists tended to be more neurotic, open and agreeable when compared with physicians and surgeons (Kumar, Fischer, Robinson, Hatcher and Bhagat, 2007). The attributes of neuroticism, openness and agreeableness may be useful for psychiatrists to perform well within their sensitive profession but, also, may create a predisposition to stress-related outcomes due to the psychologically demanding nature of their work such as when working with patient violence; difficult or hostile relatives or patient suicide (Kumar, Hatcher and Huggard, 2005). These latter factors are also in line with demand-control theories, which emphasise the demands of the work situation and the environmental moderators of stress, such as empowerment in relation to a decision-making process (Baker, 1985). Other studies have also shown that doctors with high scores on neuroticism and who were more introverted tended to be more at risk of stress-related problems (McManus, Keeling and Paice, 2004).

A further study of young surgeons in New Zealand and Australia identified stress-related factors such as being female, working in small hospital units and working excessive hours (Benson, Sammour, Neuhaus, Findlay and Hill, 2009). However, it has been suggested that females are disproportionately employed in workplaces that are highly stressed as they are considered less likely to respond to conflict and stress with aggression (Barling, Dupre and Kelloway, 2009). It has also been noted that predispositions to stress are related to mood states, including depressed mood and anxiety (Brief and Weiss, 2002). A study investigating workplace stress amongst Japanese doctors (Haoka, Sasahara, Tomotsune, Yoshino, Maeno and Matsuzaki, 2010) indicated that conflict and the hierarchical nature of supervision created stressful environments.

However, there is a twist to this story, as one study suggested that personality factors may also play a role in selecting particular career choices; more specifically Shanafelt et al., (2009) found that about 40 percent of American surgeons surveyed suffered exhaustion and burnout, but ironically 70 percent of the sample seemingly enjoyed this stressful career choice. Nonetheless, there is good evidence to suggest that workplace stressors are harmful as they affect performance

as well as personal well-being (Wallace, Lemaire and Ghali, 2009). Some causal factors cited in the medical literature include workload, work hours, fatigue, emotional interactions, cognitive demands, restricted autonomy, and structural and organisational changes to practice (Wallace et al., 2009; Boerjan, Bluyssen, Bleichrodt, Van Weel-Baumgarten and Van Goor, 2010; Haoka et al., 2010; West et al., 2006).

Similar studies from the nursing profession (McVicar, 2003), have shown several job-demand factors that create an environment of stress. McVicar suggested that key issues are workload, leadership/management, professional conflict, and emotional labour. Workload issues are related to the inadequate staffing of both nurses and administrative personnel, which is inevitably related to funding concerns. Many nurses leave full-time positions as it is perceived that these positions require higher levels of responsibility leading to greater stress with no adequate remuneration packages (Lumley, Stanton and Bartram, 2004).

Leadership and management styles are also linked to employer and employee stress, with positive and integrative styles such as transformational leadership tending to engender more participation at all levels. Further stressful precipitators linked with the issues of leadership and management are shift work and remuneration (McVicar, 2003).

One key cause of stress identified in hospital settings is inter-professional and intra-professional conflicts, which are often related to poor communication between team members (Xyrichis and Lowton, 2008). The emotional demands of the job and working with patients who are in constant need of attention all play a role in creating a stressful environment (McVicar, 2003; Hooper et al., 2010). Brief and Weiss (2002) cited a study that showed that nurses' exposure to AIDS patients was significantly correlated with the cultivation of negative affect and thus, impacted mood state. This mood state was also moderated by organisational and social support, suggesting that if management were more supportive of staff the stressful consequences of working with very ill patients could be ameliorated. In addition, the personal backgrounds and contexts that nurses bring to the hospital also play a key role in the way they can cope with this stressful environment (Brief and Weiss, 2002; McVicar, 2003).

Consequences of stress

Physical

The physical consequences of stress are, generally, considered in physiological terms. It was noted by Steffy and Jones (1988) that the use of physiological measures to monitor stress was a step forward and complemented survey methods by allowing access to more objective and reliable measures. Some of the earlier physiological measures shown to be related to stress were higher levels of serum cholesterol, triglyceride serum, uric acid, and blood pressure; and these physiological measures are considered indicators of stress-related disorders such as coronary disease and peptic ulcers (Steffy and Jones, 1988). More recent studies have confirmed that workplace stressors are associated with greater coronary heart disease risk (Chandola, Heraclides and Kumari, 2009). Measures in this research to determine levels of stress were linked to sympatho-adrenal biomarkers (plasma catecholamines and heart rate variability) and HPA axis biomarkers – the post-morning profile of cortisol.

Psychological and social

Psychological and social consequences of workplace stress are given a wide exposure in the literature (Barling et al., 2009; Deckard, Meterko and Field, 1994; Henning et al., 2009, Kumar et al., 2007, Srivastava et al., 2007). Some of the obvious signs of workplace stress identified in the health profession literature include problems with personal and professional relationships, insomnia, headaches, anxiety, panic attacks, and depression (Srivastava et al., 2007, Deckard et al., 1994). Owens (2001) also explored the prevalence of sleep loss and fatigue amongst medical personnel and noted links with stress and to the incidence of medical errors and quality of patient care. A further study (West et al., 2006) found that self-perceived errors were associated with incidence of depression and burnout (including reduced empathy, depersonalisation, emotional exhaustion, and lower personal accomplishment).

At the extreme end of the continuum, there is evidence to suggest that job stress is linked to workplace aggression and violence (Barling et al., 2009). In a recent article (Dellasega, 2009) that reviewed some of the ideas and literature in relation to bullying in the nurse workplace found (from a survey of over 1000 health workers) that 44 percent of nurses in the United Kingdom had experienced "peer bullying". Similar experiences were found in Finland, the United States, and New Zealand. Bullying was also noted in a radiographic workplace environment (Ng, Yeung, Cheung, Chung and White, 2009), although in this case the source of bullying (such as verbal abuse) came from patients rather than peers.

Existing approaches to and models of stress in the workplace

Research in the area of stress has embraced several measurement systems that encompass the use of physiological methods (Chandola et al., 2009), self-report stress measures (Kristensen, Borritz, Villasden and Christensen, 2005; Holmes and Rahe, 1967; Curbow, Spratt, Ungaretti, McDonnell and Breckler, 2000; Lambert, Lambert and Ito, 2004; Haoka et al., 2010; Boerjan et al., 2010; Robinson, Clements and Land, 2003), observational measures (Morash and Haarr, 1995) and qualitative measures such as using semi-structured interviews (Kinman and Jones, 2005). These systems are useful when exploring the philosophical approaches or models that frame stress phenomena as they relate to the workplace environment. Two approaches to explaining stress in the workplace are considered: unitary approaches (causal versus intervention) and multidimensional approaches (integrative).

Causal and intervention approaches

Several of these have been proposed in the literature. The first type of approach explains a particular aspect of the process of workplace stress and often involves a theoretical standpoint, such as focussing on the causes of stress or focussing on methods of preventing, minimising or managing stress. Causal approaches, such as the person-environment fit and job demands-control models, fit this category (Baker, 1985; Blix and Lee, 1991; Edwards, 1996, 2008; Karasek, 1979; Pitts, 2007). Models of intervention are based on developing approaches that are integral to managing stress, which can be considered in terms of primary, secondary and tertiary prevention systems (Cooper and Cartwright, 1997). Primary prevention refers to ameliorating the workplace stressors that exist within the work environment. Secondary prevention focuses on developing a person's level of awareness and providing techniques to cope with stress. Lastly, tertiary prevention is aimed at treating and assisting persons thought to have suffered from a serious illness related to stress.

Integrative approaches

The second type of approach tends to integrate cause with intervention. Wallace et al., (2009) have provided a holistic model that considers an explanatory phase and an action phase. The explanatory phase involves workplace stressors and their effect on physicians, which has a follow-on impact on the health-care system. Physicians' outcomes are also affected by contextual factors and person characteristics. The action phase considers the intervention aspect of dealing with the issue of workplace stress and outlines potential interventions based on the causal evidence. Such interventions consist of addressing concerns related to: (1) workplace and profession awareness, management and prevention, (2) physician self-care and prevention, (3) physician treatment and recovery, and (4) improved patient care and system outcome. Another example of this type of integrative approach for health professionals is Dunn's conceptual model of medical student wellbeing. In this model, a 'coping reservoir' demonstrates the interplay between positive input (psychosocial support, social activities, mentorship, intellectual stimulation) and negative input (stress, internal conflict, time and energy demands) as well as taking into account personality factors, and possible outcomes (burnout or resilience). It is suggested as a useful model for use in individuals to pinpoint possible areas for intervention (Dunn, Iglewicz and Moutier, 2008).

A conceptual model of stress: Applications for focussing on one element, integration and measurement

The present paper aims to present a measurement model that can be used to monitor arousal states over time and to consider these state changes in reference to their impact on workplace stress, specifically in the health professions. The authors feel that this model will be useful for directing research in this area. It is an extension of earlier models cited in this area (Zubin and Spring, 1977; Selye, 1970, 1976) and considered in more recent literature (Diehl and Hay, 2010; Ray, 2008). These earlier models used an adaptation framework intermeshed with the notion of resilience, 'survival of the fittest'. Selye (1970), in his seminal work on the evolution of stress, noted the relationship between stress and the symptoms of loss of vigour and feeling exhausted. It is from the feedback loop between stress and its symptoms that the three phases described in his General Adaptation Syndrome arise: the experience of hardship (alarm reaction), the adaptation to it (stage of resistance), and finally the make or break phase (stage of exhaustion).

The notion of adaptation and resilience resonates with the health profession literature. A recent article (McAllister and McKinnon, 2009), reviewed the area of resilience in relation to health professions and their adaptation to the health workplace. McAllister and McKinnon suggested that resilience has personal and cultural aspects that are required when faced with demanding work environments. For example, nurses and paramedics are often placed in traumatic situations that are extremely adverse and thus, have to introduce mechanisms to survive these situations. McAllister and McKinnon further state that research into the mechanisms involved in resilience and adaptation in relation to the health workplace is still in its infancy. Consequently, the main purpose of the present paper is to describe an adapted measurement model that can be used to investigate these phenomena in more detail within the health and other environments.

The adapted model is represented in Figures 1 and 2 below. The horizontal axis indicates time and the vertical axis represents a combination of physiological (and potentially psychological) indices of arousal, which is pertinent to the health professions given the evidence suggesting acute and chronic exposure to high levels of arousal leading to adverse stress-related pathologies (Bakker and Demerouti, 2007; Rick et al., 1988; Ryan, 2010). The exact mix of indices is not crucial so long as it consistently indicates the reaction typically seen in response to acute

stressors. Heart rate on its own, for example, could be expected to follow essentially the same pattern as indicated in the graphs, and the index mix could be customised to meet the needs of different research projects. Similarly the absolute values of the rising and falling index at different points in time are less important than the *pattern* of responses.

Figure 1. Accumulation of stress over time
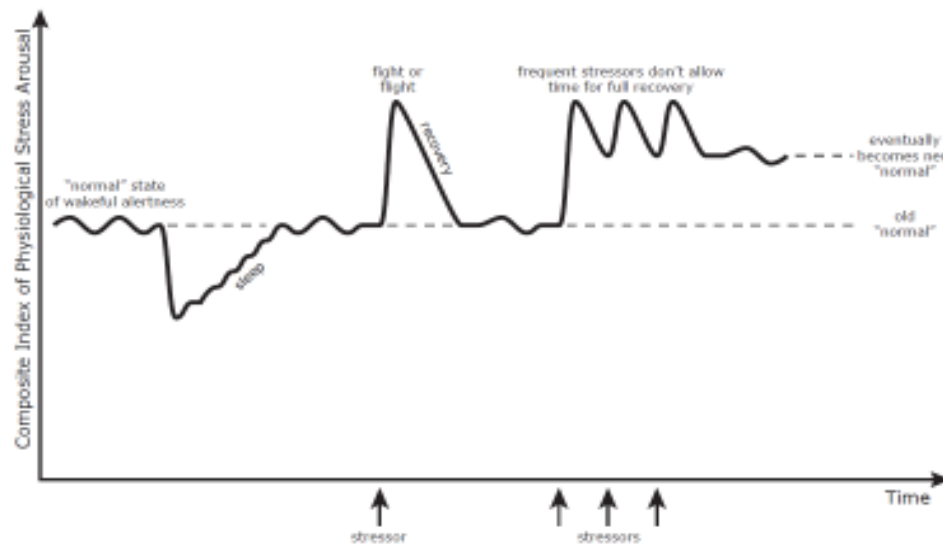
As can be seen in Figure 1, a person is conceptualised to have a reasonably constant "normal" state of arousal when awake, until some event or activity changes it significantly (Selye, 1970, 1976; Zubin and Spring, 1977). Clearly, the hours of sleep are one such event and the so-called "fight or flight" response, or stress reaction to an acute stressor is another; both are indicated in the diagram. In an ideal world, individuals would have the time to recover fully from the physiological changes produced by the stress response, as the stressor is dealt with or ameliorates, and their arousal index returns in due course to its "normal" state.

However, in many workplace environments, and especially in the medical professions, the frequency of stressors is high enough not to allow this opportunity (McAllister and McKinnon, 2009). A person begins to recover from an acute stress response but has not yet completed the process – they have not yet returned to their "normal" state – when another stressor occurs, producing a repeat stress response. As the figure indicates, in a high stress environment the frequency of occurrence of stressful events can prevent the individual recovering sufficiently to return to their original "normal" state of arousal until they have finished work for the day; and recovery at this stage is likely to take longer than it would from a single stressful event – a notion of accumulative stress that has been presented on numerous occasions (Kasl, 1984; Benoliel, McCorkle, Georgiadu, Denton and Spitzer, 1990). If their chosen forms of out-of-work "rest and recreation" are in fact more arousing than relaxing, and if their workplace is chronically stressful, it is easy to envisage a longer-lasting change in arousal state, such that a higher level becomes their new "normal" state, interrupted only by sleep, or in some cases by alcohol or drug induced stupor. Clearly the extent to which different individuals follow this path will depend on a number of factors, including their level of resilience or stress vulnerability (Zubin and Spring, 1977; Selye, 1970, 1976; Diehl and Hay, 2010; McAllister and McKinnon, 2009; Ray, 2008).
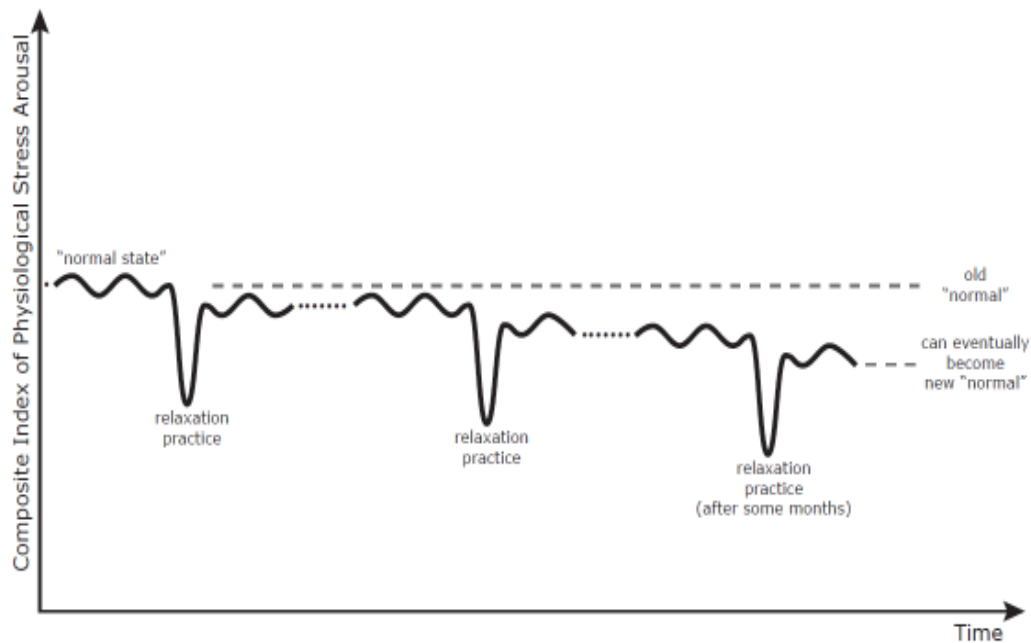
Figure 2. Implementation of relaxation techniques in professional life

Figure 2 indicates how, over time, the use of an effective relaxation practice can reverse this negative process and actually lower a person's "normal" arousal state. The concept is that after a session of, say, Tai Chi, progressive muscle relaxation or Transcendental Meditation, during which the person's arousal index will have fallen significantly, returns to their usual activities while retaining a slightly more relaxed state than normal. Clearly, they cannot perform normal activities while experiencing the full "relaxation response" (Benson, 1975, 2000), but they *can* do so while remaining slightly less aroused than was previously typical for them. Over time, typically several months, this change can become lasting, resulting in a new lower "normal" state of arousal – almost a mirror image of the higher arousal produced by long-term stress. Good evidence from a number of studies, including meta-analyses, for this process in the case of blood pressure and a range of other cardio-vascular risk factors in response to Transcendental Meditation and, to a lesser extent progressive muscle relaxation, is provided in a review by Schneider, Alexander, Salerno, Rainforth and Nidich (2005).

Thus, the model attempts to describe the medium to long-term changes resulting from the accumulated effects of repeated short-term changes in arousal in response to stressors. This model can incorporate the different measurement systems presented above and aim to be instructive for interventions. However, as the model is dynamic in nature, it may also create insight into the accumulative nature of stress-induced arousal and the recent conditions that impact on the increase in stress. It is ideally suited for the health workplace (and indeed many other workplace contexts) as it maps out changes that may occur over an extended period of time and can be used to appraise the temporal effect of working in a stressful or stress-free environment. It can also be employed to monitor stress-induced arousal levels of health professionals and consider the effect of critical incidents such as major management changes.

Implications for research and well-being

This proposed model of monitoring stress-arousal levels is useful for both workplace practice and research. Effective interventions are available and a recent article in the New Zealand Medical Journal (Henning et al., 2009) posed several initiatives that could be applied to the medical workplace environment to heighten quality of life for doctors and thus, reduce the onset of stress and burnout. The initiatives include: (1) having a monitoring system for identifying early warning signs of burnout, (2) promoting and implementing engagement in healthy exercise, (3) developing healthy sleep patterns, (4) creating access to retreats and regular meditation, (5) establishing peer groups and one-on-one support systems, and (6) ensuring close supervision and support for junior doctors. These ideas were derived from reviewing the salient literature in this area (Bruce, Conaglen and Conaglen, 2005; Child and Old, 2004; Hassed, Lisle, Sullivan and Pier, 2009; Huggard, 2003; Krasner, Epstein, Beckman, Suchman, Chapman, Mooney and Quill, 2009; Owens, 2001; Paice, Rutter, Wetherell, Winder and McManus, 2002; Saleh, Quick, Conaway, Sime, Martin, Hurwitz and Einhorn, 2007) and resonate with more recent research (Hartfiel, Havenhand, Khasla, Clarke and Krayer, 2010). In addition, interventions relevant to New Zealand need to consider the unique contextual aspects of the New Zealand environment such as the multicultural nature of the health workforce in general (Suaalii-Sauni et al., 2009; Alexander, 2008) and doctors more specifically (McKimm, Wilkinson, Poole and Bagg, 2010).

Research paradigms are crucial to investigating these areas. The research in this area is flexible and can encompass both qualitative and quantitative approaches and utilise physiological and psychological self-report stress measures (e.g., Chandola et al., 2009; Holmes and Rahe, 1967; Morash and Haarr, 1995) and semi-structured interviews (Kinman and Jones, 2005). The measurement model proposed in this study can be used to consider the multifaceted levels of stress that encompass psychological and physiological factors. First, the model can be used to monitor self-perceived levels of wellness using self-report mechanisms as monitoring mechanisms (Kristensen et al., 2005; Holmes and Rahe, 1967; Curbow et al., 2000; Lambert et al., 2004; Haoka et al., 2010; Boerjan et al., 2010; Robinson et al., 2003). Second, physiological measures (Chandola et al., 2009) can be used to gain an objective measures of stress-induced arousal. External to the measurement model, sociological aspects of wellness can also be investigated by considering the wider aspect of context and culture (Alexander, 2008; Suaalii-Sauni et al., 2009) and it may be that some aspects of this dimension, too, can yield numerical data that can be used in the model.

Conclusions

The measurement model presented in this paper is an extension of earlier models (e.g., Selye, 1970, 1976; Zubin and Spring, 1977). It suggests that humans adapt to the workplace environment to survive its inherent stressors. However, adaptation may not be a functional outcome if it leads to vulnerability to stress-related illness and problems with well-being. This measurement model will likely be useful for various workplace environments, but the focus of this paper was the health-related environment. For example, the authors intend to utilise this framework for further empirical quantitative and qualitative work in this area, specifically monitoring doctors' well-being in the hospital environment. In addition, the first two authors have already used it in training and development courses (for example, to explain the cumulative effects of ongoing stress and of repeated use of secondary stress-management interventions to business and medical students) as it is an inherently intuitive and applied model that often resonates with medical and business students as it does with both employers and employees alike.

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Occupational Stress: Are We All Talking About the Same Thing?

MARK LE FEVRE[*] AND GREGORY S. KOLT**

Abstract

Occupational stress is of increasing concern for employers and employees. The term stress has multiple, and at times conflicting, definitions and uses in the academic literature. In addition very little investigation has related to how employees define stress, and whether their definitions have any relationship to those used by academics. This may call into question the relevance of academic research to those who experience, or must attempt to manage, stress. This paper investigated managers' experiences and concepts of stress and finds a core of agreement between managers' experience of stress and academic definitions.

Occupational Stress: Are We All Talking About the Same Thing?

Stress, and occupational stress in particular, has become a major issue in the public eye. Quite apart from the often reported costs, physical, mental, and financial of stress (ASCC, 2007; Atkinson, 2000; Bejean & Sultan-Taieb, 2005; Cartwright & Boyes, 2000; HSE, 2006; Midgley, 1997) (ASCC, 2007; Atkinson, 2000; Bandler & Grinder, 1982; Bejean & Sultan-Taieb, 2005; Cartwright & Boyes, 2000; HSE, 2006; Midgley, 1997) most people in casual conversation will admit to some level of stress, often related to their work situation; 91% according to Lifeline Australia ("<Lifeline Australia - Stressed Out Australia - Survey Sparks Call for Urgent - 03jul08.pdf>,"). Since at least 1984 (Murphy, 1984) authors have bemoaned the inconsistency of terminology and definitions used in the literature, and the problems this causes. Some (Doublet, 2000) have even gone so far as to suggest that there is no such thing as stress, partly because its definition is so amorphous. This may represent a fairly extreme view but the lack of any agreed terminology or definition is a continuing problem (Le Fevre, 2008; Nash et al., 2010; Nasiri Khoozani & Hadzic, 2010).

Recently there have been efforts in the academic literature to develop better definitions of stress (Nasiri Khoozani & Hadzic, 2010) and more consistent ways of assessing it (Nash, et al., 2010) albeit in the last case primarily in a military setting. Most of this debate, however, is academically centred. It is inward looking and may have little relevance or resemblance to what most people mean when they talk about stress. It seems important that some concordance exist between what academic researchers define as stress, no matter how inconsistently, and what those who express themselves as "stressed" actually mean. i.e., what

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do people mean when they say "I'm stressed"? Without evidence of some agreement the relevance and validity of academic research into stress for practitioners may be called into question. The academic literature appears to have very few examples of enquiry into so called "lay" definitions of stress (Dewe & O'Driscoll, 2002; Kinman & Jones, 2005) and those that do exist have tended to either be a little indirect in their approach (Kinman & Jones, 2005) or have used a relatively narrow approach using predefined psychometric constructs (Dewe & O'Driscoll, 2002; Rydstedt, Devereux, & Furnhams, 2004).

The study reported here was part of a larger effort examining the effectiveness of stress management interventions (Le Fevre, 2008). As part of that project, managers were asked about the nature of their job and workplace to give some context to the study and were also very directly asked "When you say I'm stressed, what does that mean?" This was in order to give some reassurance that what the researcher was investigating based on academic theories and models bore some resemblance to what the participants were experiencing.

Methodology

Method
A descriptive qualitative approach was used for this study and the research questions being investigated were:

- How do managers define stress?
- What is the workplace like in terms of demand, interpersonal interaction, and change?

Participants
Participants were 14 managers working in the telecommunications industry in New Zealand and Australia.

Procedure
Participants were recruited through e-mailed requests to take part in follow-up interviews after the end of the SMI project (Le Fevre, 2008). A total of 66 e-mail invitations were sent to all participants. Of these, 19 invitations were sent to participants from the Australian organisation and 47 to participants from the New Zealand organisation. All e-mail requests were followed up by telephone, usually resulting in voice mail messages being left. Seven participants from the Australian organisation replied accepting the invitation and arrangements were made to carry out the interviews over a 2-day period at the organisation's head office in Sydney. Unfortunately, 2 of the participants were unable to attend the scheduled interviews due to unexpected work commitments so 5 interviews were carried out. No other replies were received from the Australian organisation, either to repeat e-mails or to voice mail messages left prior to the deadline for arranging the interview schedules. Fourteen participants from within the New Zealand organisation replied, 3 declining to take part and 11 accepting. Of the 11 who accepted 2 later had to withdraw, one due to an overseas transfer within the organisation, and one due to increased work commitments. No other replies were received from participants within the New Zealand organisation either to repeat e-mails or to voice mail messages left prior to the deadlines for arranging the interview schedules.

Interviews were carried out by the author either in Sydney or in Auckland at the offices of the employing organisation for each participant. Notes were taken by the interviewer during the interviews to record gestures or expressions that may have modified interpretation of the audio record by adding a further dimension to the communication that occurred at the time. Notes were kept brief to allow the interviewer to concentrate on what was being said and to appropriately question and probe. A semi-structured interview format (Flick, 2006) was used with standard questions maintaining a coherent structure between respondents while allowing a relatively free discussion to develop where respondents were so inclined. All interviews were recorded to mini disk for later transcription and analysis.

Analysis

All interviews were transcribed by the researcher and entered as source documents into NVivo. Transcripts were read several times to begin the process of extracting themes. An open coding approach was used to develop a coding framework (Bryman & Bell, 2003; Miles & Huberman, 1994). Two parallel approaches were used to code the participants' responses. Initial coding consisted of simply gathering together all the participants' responses to each question using the auto coding feature of NVivo 7. This process enabled the interviews to be read two ways, both as narratives by each respondent and as sets of comparative responses question by question. From this joint-structure reading approach more narrow areas of commonality emerged, were noted, defined as themes, and used to code responses. Where such themes emerged later in the analytical process, previously coded material was reviewed to enable the new themes to be included where appropriate. During this process some areas of text were coded to more than one theme as sufficient of the responses were coded to retain intact the sense and context within which the coded text occurred.

Findings and Discussion

In the following discussion it should be noted that the participants' statements used to illustrate particular ideas often emerged as part of the discussion related to questions that were not, *a priori*, associated with that idea. (e.g., statements referring to high pressure in the job may have been made while responding to a question relating to other issues).

In the following section some conventions are observed to fairly represent the complexity inherent in the responses, aid clarity, and preserve the anonymity of participants. All directly quoted material is within quotation marks and is italicised. Where portions of text have occasionally been excised to reduce the length of quotes or remove material not necessary to maintain the meaning and intent, ellipses (…) are used. Quotes are identified as originating from either New Zealand or Australian managers and, where proper names were given by the participant they have been replaced by [Name] in the text for personal names or [Organisation Name] for the name of participant, or any, organisations.

Organisational Context

The two organisations from which the interviewees were drawn were the New Zealand and Australian operations of the same multinational telecommunications corporation. They share a significant core set of values and, more formally, policies and standard operating

procedures despite their geographical separation (S. Gotty, personal communication, May, 2005).

Telecommunications is usually characterised as a high-tech, fast-paced and dynamic industry which seems to be reflected in the reported characteristics of the two subject organisations. This is demonstrated in the following quotes.

> *"It's a dynamic industry and probably a very dynamic organisation." [Australian manager]*

> *"... it's mainly what I was saying about fast paced, dynamic, forever changing, restructures, moving different departments, different projects..." [New Zealand manager]*

> *"...[Name] has often said- the previous CEO - this is the most dynamic environment he has ever worked in..." [Australian manager]*

Against this background of industry-related dynamism these particular two organisations appear to share a cultural milieu of high pressure and rapid change. All interviewees mentioned the rapidity with which projects and priorities within the business could change, and all also related this rapid change to ideas of pressure and lack of control over outcomes. These are both factors considered to be associated with occupational stress (Spector, 1998; van der Klink, Blonk, Schene, & van Dijk, 2001). Pressure and lack of control are reflected in some of the following examples relating to the fast pace of the environment.

> *"...because of the pace of change in this industry: you know, if you don't keep up with the new technology you're dead. Things do change before we've even had time to launch something and it's already redundant."* [New Zealand manager]

> *"I think with [Organisation Name] it's such a fast paced environment...we change all the time, in fact I've never worked in such a fast changing environment before. You start working on a project and then it changes focus or it stops. You know that can be a really hard environment to work in and I think, you know, that's why we have such a lot of burnout here at [Organisation Name] because of the nature of the environment."* [Australian manager]

> *"A very simple example* [of lack of control] *our budget constraints. You plan a thing and then it can't happen because of the budget constraints."* [Australian manager]

> *"...for instance I was working on a resourcing project for a year, nearly to the end, nearly to the business, and suddenly it got canned, and that sort of pressure and when you've been working on something and it just changes, and it changed because we didn't have the budget, and for good reasons but when you put your heart and soul into something and then it suddenly changes. It's that that you've got to deal with and you've got to become very resilient and just roll with the punches."* (laughs) [New Zealand manager]

Respondents frequently commented on the effect that the felt pace and pressure in their working environment had on their lives, both in their work and private capacities. For example:

> *"I used to come in to work and work most weekends when I first worked here at [Organisation Name] like [Name] is doing now. Like he is fairly new he's working some crazy hours and so are a lot of people around here, crazy hours, and I used to come in every weekend and I just refuse to do that now and, yeah so I guess I have adapted (laughing)."* [Australian manager]

> *"I do have periods after very exhaustive and quite difficult meetings sometimes go over eight hours I feel really drained and all I can do is go home and sleep."* [New Zealand manager]

> *"I often get quite anxious, quite nervous on a Sunday night about work on a Monday 'cause in my mind I'm always thinking ahead and thinking OK I've got to do this this week … I get a bit anxious and I find it really hard to sleep on a Sunday night."* [Australian manager]

Despite the repeated perceptions of pressure and stress one can't help but be struck by the generally high energy and enthusiasm of the organisational members as the following quotes show.

> *"There's always something interesting going on. So it goes, up and down; but I am at the moment on the upward curve because of the change and I've got a new area so, up and down and challenge. And the old one is becoming boring, but as long as there is something to balance and you're challenged, well the old boring stuff can stay..."* [Australian manager]

> *"I took this role and it's a challenge for me. It's a totally different skill set so, even though I've found it to be very difficult, and handover could have been done a lot better, it has been very challenging and I am enjoying it."* [Australian manager]

> *"I mean today I'm having a great day and I've got an awful lot on, but, it's like 'great' 'cause I'll just get on and do it."* [New Zealand manager]

> *"I like my job very much. Yes I do"* [New Zealand manager]

Every meeting room and most work spaces in both organisations have notices, with the corporate logo and colour, exhorting standards of energetic and enthusiastic work and customer service. Unfortunately given the wording of the notices and the nature of the businesses it is impossible to directly quote them without instantly identifying the organisations concerned. The organisational context within which these managers live and work seems to be one of frequent change due to the dynamic nature of the industry, with the pressure that almost inevitably goes with such rapid change. This is felt by most organisational members interviewed as both pressure to perform and some lack of control due to relatively frequent project changes and, at times, budget restrictions. Long work hours are frequently reported by managers as illustrated below.

> *"Oh yeah, by the time it's time to go home it's dark. I mean I'm here 'till six o'clock, maybe a little bit later; it's dark."* [Australian manager]

> *"… the problem with this one is I've worked 60 hours for six or eight weeks so I've got a load of extra time there that I'm probably not going to get back and I can't necessarily afford now to take a week off because I've got the next bit hard on its heels and still got issues from the first one … Every year we get busier and that will just continue."* [New Zealand manager]

Not all managers, however, agree with the idea that such long hours are required by the organisation as is illustrated by the example below.

> *"[Organisation Name] creates an environment that is not what I'd call a presenteeism culture, but it's down to the individual to take that on board. Some people have worked in other organisations where presenteeism is the culture and they bring it with them. So although the company supports a different culture it's down to the individual to take advantage of that. I know for a fact that some people don't take advantage of that but I do."* [New Zealand manager]

It is possible, therefore, that some of the pressure felt may be self-generated although only one respondent expressed the above opinion and no other members of the respondent's team were interviewed. It is quite possible that differences between the cultures of individual teams within the organisation have a role to play here. Unfortunately the nature of this sample of participants (there are no multiple members from any team) does not allow this possibility to be examined.

In summary the respondents' perceptions of the organisational context within which they work appears to be characterised by high demand, pressure, relatively rapid change, and some lack of control often related to budget restrictions. Most feel that long work hours are required though two respondents expressed different opinions. One suggested that the perception of a requirement for long hours may be something that people bring with them from previous employers, and one makes clear that they no longer work the long hours they did when they first joined the organisation having realised that *"you don't actually get any thanks for that and you need to be smarter in how you work."* [Australian manager]

Yet within this environment there is still considerable enthusiasm and energy for the job.

Participants' definitions and experiences of stress

All participants were asked what they meant when they said "I'm stressed". In the discussion following this question, several related themes emerged that may be described under the headings of "workplace overload", "general overload", and "internally focussed conceptions of stress". These were related to different aspects of the way stress was defined and experienced by the participants.

The following quotes may best illustrate the workplace overload theme.

> *"… overloaded, too much to do, not in control of things."* [New Zealand manager]

"Too much happening at once, and I used to have a phrase with a friend of mine, where an "it's all too much moment", where there's just too many things happening at once and it really seems like it's just all too much." [New Zealand manager]

"The expression 'pushing shit uphill' comes to mind." [Australian manager]

"I think work overload" [Australian manager]

These responses all reflect a primary concern with feelings of having too much to do, or perhaps too many different things to do in the work place and are reminiscent of the idea of role overload as exemplified by the work of Kahn (Kahn, 1974; Kahn, Wolfe, Quinn, & Snoek, 1964).

In terms of the general overload theme, one manager specifically referred to a tendency to voluntarily assume too many responsibilities in and outside work and another referred directly to other pressures outside the work environment.

"but usually for me it's about taking on too much and then it all kind of hits all at once so it is my own fault usually" [New Zealand manager]

"not having a good work-life balance, so trying to manage you know a property outside work, on the committee of, the strata committee trying to make all these changes there and do everything at work so I'm not really relaxing at home er, putting too much pressure on myself. Yeah I guess it's a number of things yeah." [Australian manager]

This general overload theme may be illustrative of spill-over where stressors outside the workplace affect occupational stress, and workplace stressors affect general stress levels outside the workplace, a process which may lead to an overall increased level of stress both in and out of the work situation (Leiter & Durup, 1996).

Most participants reflected on a more internally focussed conception of potential stressors and form the third theme.

"I personally after trying to define stress would think it stress is someone not being able to meet one's own expectations." [Australian manager]

"I think it means a number of things. I feel probably a great weight of responsibility. When I'm particularly stressed I can feel that it's almost insurmountable whatever the particular issue is" [New Zealand manager]

"I'd associate with that an uncertainty around certain decisions that have to be made, definitely when it affects myself, but probably more so when it is something that is going to affect other people. That would probably be more stressful, more anxiety creating. That would probably be it." [Australian manager]

As far as these managers were concerned the prime workplace stressors were centred around work pressure and multiple concurrent demands and, for some as expressed above, uncertainty surrounding decision making. This latter concern recalls ideas related to role

conflict where managers become uncertain about how to act or make decisions in response to a lack of clarity in their work roles, a situation which, it has been suggested, leads to increased stress (Rizzo, House, & Lirtzmann, 1970). Most respondents also did not closely distinguish between stress and stressor in their responses to the initial question. This lack of distinction is perhaps best illustrated by the single reply below, which contains references to external pressure and demand, emotional response, and physiological response in a single answer to the initial stimulus question.

> *"It's usually just things flying around too much I found too sometimes it's can't concentrate. I found that a bit last week, when I had lots of projects to manage and I had lots of people coming to me to ask questions and stuff. I'd start something and then forget what I was doing, be easily diverted into something else. I have on occasions felt physical, like a couple of occasions when you know, you can't take a deep breath it's hard to breathe and I guess the other one is you sort of feel more emotion. I had one like that last week, the really horrible day lots and lots of emotions running really hot amongst the whole team so I found that I got more angry. And when I left a particular meeting, I felt quite emotional. I sort of could feel the tears coming and I don't do that. Those are the things, but usually it is too many things going on in my head"* [New Zealand manager]

When it came to describing their experience of stress participants' responses covered various aspects including emotional and physiological responses, perceived cognitive impairment such as confusion or inability to concentrate, and some behavioural patterns, often in combinations. Some examples are summarised in Table 1.

The literature concerning non-academic and non-professional interpretations of stress is relatively sparse (Kinman & Jones, 2005) but it is interesting to note some parallels between the findings of this study with earlier work, especially the most closely related study of Kinman and Jones. In a similar manner to the current study, Kinman and Jones were interested to find what people meant when they said they were stressed. Whereas in the current study that question was posed quite directly "When you say 'I'm stressed' what does that mean?", Kinman and Jones were a little more indirect. They asked six questions in a semi-structured interview approach with question one "What do you think the term 'occupational stress' means?" (Kinman & Jones, 2005, p. 107) being their slightly less direct question. The authors specifically stated that they wished to elicit their interviewees' opinion on the concept of stress in general rather than their personal, first hand, experiences thereof. Despite the differences in approach and the potential influence of recent stress management training and psychometric survey on the current sample there are strong parallels in the findings.

A third of Kinman and Jones' (2005) interviewees conceptualised occupational stress as negative stimuli such as work overload whereas all interviewees in the current study regarded overload as a prime stress while also acknowledging other more internal aspects such as "a great weight of responsibility" and uncertainty as contributors to a stress response.

Table 1: Participants' descriptions of their experiences of stress with indications of emotional (E), physiological (P), cognitive (C), and behavioural (B) reference

Quote	E	P	C	B
"It could mean that I'm stressed because I just don't know what to do next. I've got all these things in my head that I know I need to do and I just can't clearly pick one out and do it. Or I'll start doing it ... I did it yesterday. I started doing something, did something else, did something else, having about five different conversations with people all at the same time em, and like handling three or four tasks. And yeah, multitasking's great but there comes a point where I'm saying "Am I really actually getting anything out of this?" I'm just expending my energy on it and I'm not getting anything back." and *"Yeah the whole not being able to pinpoint one thing, not being able to focus. And maybe being a bit agitated and finger tapping and you know that would be a physical attribute of it and sometimes ... I don't like huffers, but sometimes I'll have a huff."* and *"Just annoyed, just like I know it doesn't have to be like this. If it's someone else that's put this upon me well that's what I hate, but it's just general annoyedness pissed-off-ness."* [Australian manager]	x		x	x
"Em, I think, a number of things ... you often em ... for me it's more of a physical thing. I can feel it in my body very quickly. I get flushed, (giggled and flushed) *tense in my shoulders em, my heart starts to race, em yeah it's a very physical reaction to me. I just get very anxious em, my mind becomes a bit cloudy, I start working really quickly, and em, yeah it's just a feeling of 'Oh shit!'* (laughs) *yeah. You just, you just don't know where to start and you just feel overwhelmed and what that must do to your body is just; yeah!."* [Australian manager]	x	x	x	x
"What would that translate to? Probably a typical sensation I would be agitated I would feel a bit fuzzy in the head, I would probably feel like my blood pressure was growing up I would feel a bit of pumped up like that. Maybe some other things like a tightness in the neck or the back something like that. And from a mental point of view I'd say confusion to a certain extent, just being unsure of everything... is clear in your head, and possibly it leads to a kind of procrastination where there's so much to do what you do first?" [New Zealand manager]	x	x	x	x
"I think in the first instance it's probably a little bit of anger that you're so busy, but I think after that it would probably turn the other way and become oppressive because you would feel that you, well I would feel that I'm not performing to the best of my ability so I'd be angry but also distressed and perhaps a little bit depressed about it." [Australian manager]	x			x
"Okay! The symptoms are that inability to focus on one thing plus the feeling of being out of control kind of a drowning feeling sometimes and increased pulse even so physical manifestations sometimes even kind of a cold sweat but not quite to the n'th degree just very slight." [New Zealand manager]	x	x	x	
"There are certain things I do, that I only do in a stressful situation and if I see myself doing them I know that I'm stressed: obsessive things, repeating things. If I ever see myself doing that then I know. Things like shut the car three times and make sure it is locked, not be happy with something I've written down from notes and just rewrite it there's really no need to do that, I'll find that I'm preoccupied with how much I've got ahead of me." [New Zealand manager]	x			x
"Where stress for me comes into is when I feel there is little moments where you're just holding on just by the tips of the fingers and then suddenly you don't feel anything (gesturing with fingertips, hands clawed) *and you think ' shit am I falling,*	x		x	

am I finding something else.' And that's exactly how it feels to me and those situations are quite simply I don't know what's next, I don't know my diary, I don't know where things are at, I don't know what stage people are working on things. It's usually very much a light touch approach when you feel that you haven't got that, that you think wow! Stop. I've got to go all the way back and re-establish all that again so I can get my anchor point again, and then I can still just hold on with fingers I don't need to hold on tight I just need to hold on with fingers that's fine. That's when I feel stressed is when I just don't have that certainty of just knowing what's generally going on." [New Zealand manager]			
"*When I was younger and really worked way too hard I remember driving home and vomiting in my own lap because I was so stressed and tired and exhausted and I was about 30 then, that when I was about the worst.*" [New Zealand manager]	x		

Those interviewees of Kinman and Jones who conceptualised occupational stress as primarily a response to external stimuli (20% of their sample) showed a range of ways of describing the response, which Kinman and Jones categorised as physical responses (e.g., departure from physical health), cognitive responses (e.g., inability to think clearly), affective responses (e.g., departure from optimum psychological functioning), and as a combination of all of these. As shown in Table 1 and elsewhere in the current study, a similar complex multi-faceted concept seems to underpin the responses given by this group of corporate managers. Similarly to Kinman and Jones' findings, participants in the current study often gave responses that contained aspects of some or all of emotional, physiological, cognitive, or behavioural interpretations of stress.

Other researchers (Dewe & O'Driscoll, 2002; Rydstedt, et al., 2004) have also investigated non-academic interpretations and concepts of occupational stress. Rydstedt et al. investigated the relationship between lay theories of stress and resulting distress in a longitudinal study and found a small but significant effect in that beliefs regarding the causes and alleviators of stress were related to longer-term perceptions of mental stress. Dewe and O'Driscol were more directly concerned with managers' conceptions of stress and how they related to the actions managers may take to reduce stress in their organisations. The findings from this study suggested that individuals who perceived they had little control over stress factors in their workplace were more likely to consider stress and its management as a managerial responsibility than as an individual responsibility. These studies took a, perhaps, more narrow stance due to the prime use of psychometric instruments, with their predefined constructs, to elicit responses regarding stress rather than the more open approach of Kinman and Jones (2005), though Dewe and O'Driscol did also employ some more open questions in their survey. Kinman and Jones employed semi-structured interviews to elicit lay representations of work stress.

Conclusion

In summary it would seem clear that despite Doublet's (2000) claim that there is no such thing as stress, managers, at least these managers, certainly share a core perception that stress not only exists but that they experience it. That what they experience is indeed both complex and difficult to define is also clear, however there does appear to be a common core shared between these "lay" concepts and academic constructs of stress as shown by the themes that emerged in this study. i.e. stress is experienced as physical manifestations as well as psychological and emotional states, and behavioural outcomes often with little differentiation between these different aspects. The academic use of the term stress to refer to environmental stimulus, psychological and physiological and psychological manifestation, and behavioural outcome is therefore reflected in these managers' experience. Perhaps Doublet (2000) has a point and a new terminology is required to replace such an ill-defined term. In the meantime, however, there does appear to be general agreement between academic and non-academic concepts of stress even though that agreement encompasses considerable confusion.

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Autonomous motivation and well-being: An alternative approach to workplace stress management

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Abstract

Task or job autonomy has long been recognised as one of the factors that promote eustress in the workplace. However, it can also be associated with increased workload and consequent distress. This article proposes that the much broader construct of autonomous motivation, as understood from a Self-Determination Theory perspective, can provide a comprehensive approach to stress management that avoids these dangers. Strong empirical evidence is presented that the facilitation of autonomous motivation in a variety of ways promotes individual well-being and hence eustress, to the benefit of both employer and employers.

Introduction

The direct causes of workplace stress, in terms of work overload and inadequate organisational and/or personal resources have been well-described (Bakker and Demerouti, 2007; Colligan and Higgins, 2005). More specifically, the causes of distress and eustress ('negative' and 'positive' stress respectively), have been described, with a central role for individual perception in distinguishing between them (Lefevre, Matheny and Kolt, 2003).

Among other factors, job autonomy has been well established as a means to reduce job distress. For example, Rousseau, Salek, Aube and Morin (2009) found that perceptions of poor procedural justice were less likely to lead to psychological distress in the presence of work autonomy; Van Yperen and Hagedoorn (2003) found in a survey of nurses that job control lessened fatigue, and Kalleberg, Nesheim and Olsen (2009) found job autonomy and participation in decision making reduced stress in a sample of Norwegian workers.

Bakker and Demerouti (2007) note that job characteristics, such as decision latitude, an important variable in Karasek's (1979, 1998) demand-control model of job strain, satisfy the need for autonomy, one of the three basic human needs according to Self-Determination Theory (Gagne and Deci, 2005; Ryan and Deci, 2000a, 2002). The other two fundamental needs – for competence and relatedness – can similarly be satisfied by resources such as constructive feedback on performance, and social support, which "agrees with Hackman and Oldham (1980) job characteristics theory that emphasizes the motivational potential of job resources at the task level, including autonomy, feedback, and task significance" (Bakker and Demerouti, 2007: 312).

However, the concept of autonomy used both in the research on causes of workplace distress and in theoretical models like those of Karasek (1979, 1998) and of Bakker and Demerouti (Bakker and Demerouti, 2007; Demerouti, Bakker, Nachreiner and Schaufeli, 2001) invariably refers, perhaps not surprisingly, to *job* or *task* autonomy, i.e. the degree of latitude an employee has in determining how they will perform the tasks that constitute their job.

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As others have noted, increased task or job autonomy does not always necessarily reduce distress, and can, indeed, increase it (Kashefi, 2009; Parker and Sprigg, 1999; Van Yperen and Hagedoorn, 2003). In some cases, its provision can be seen as a control mechanism (Graham, 1995; Lincoln and Kalleberg, 1990) and exploitative (Godard, 2004; Osterman, 2000). The effects of job or task autonomy are also likely to vary as a function of individual differences, with it having a beneficial effect on those who are autonomously motivated as a trait (see below) but not on those who are more control motivated (less self-determined) (Fernet, Guay and Senecal, 2004).

This article argues that autonomous *motivation*, as understood by Self-Determination Theory (Gagne and Deci, 2005; Ryan and Deci, 2000b, 2002), can act to reduce distress and promote eustress and well-being in a number of ways above and beyond the effects of simple task autonomy – ways that perhaps run less risk of becoming exploitative.

Autonomous Motivation, Well-Being and Eustress: definitions

It seems reasonable to construe distress as low or absent well-being. In other words, what promotes well-being is likely also to promote eustress.

There are several related and overlapping constructs of well-being. For example, the contrast between hedonic well-being and eudaimonic well-being (Ryan and Deci, 2000a) closely parallels that between Subjective Well-Being and Psychological Well-Being (Keyes, Shmotkin and Ryff, 2002). Similarly, more passive forms of happiness or contentment are distinguished from vitality (Nix, Ryan, Manly and Deci, 1999). However, all these constructs reflect positive states of being and all have been associated more strongly with autonomous as opposed to controlled motivation.

The constructs of intrinsic and extrinsic motivation are well-known and may be defined in the work context as follows:

> "*intrinsic motivation*: the motivation to engage in work primarily for its own sake, because the work itself is interesting, engaging , or in some way satisfying" and "*extrinsic motivation*: the motivation to work primarily in response to something apart from the work itself, such as reward or recognition or the dictates of other people" (Amabile, Hill, Hennessey and Tighe, 1994:950).

In the framework of Self-Determination Theory (Gagne and Deci, 2005; Ryan and Deci, 2000b, 2002), *autonomous motivation* includes both intrinsic motivation and well-internalised (or "integrated") extrinsic motivation, and is contrasted with *controlled motivation* consisting of external motivation (traditional extrinsic motivation, external to the organism) and "introjected" motivation, which "involves people taking in an external contingency, demand or regulation, but not accepting it as their own" (Deci and Ryan, 2008:16).[1]

The motivation to perform a particular action may be clearly autonomous or controlled, but also at the trait level, an individual can be described as, generally, more inclined to be autonomously than control motivated, or vice versa, as an individual difference characteristic, and individuals will vary in how strongly they can be thus typified.

In the literature reviewed below, some studies refer to intrinsic motivation and others to autonomous motivation which, as noted, also includes well-internalised forms of extrinsic motivation. In every case, the extrinsic or controlled motivation they are contrasted with is either entirely external or a combination of external and poorly internalised "introjected" motivation, so there is no overlap between the two broad categories of motivation.[2]

Autonomous motivation increases well-being

A tendency toward more intrinsic as opposed to extrinsic motivation is associated with more trusting, empathic and stable relationships (Kasser and Ryan, 2001; Sheldon and Kasser, 1995), whereas a more extrinsic motivational orientation is linked with Machiavellianism (McHoskey, 1999). Striving for a goal for self-determined reasons, or to help bring about intrinsic rather than extrinsic higher level goals, is associated with greater well-being and predicts positive daily mood (Sheldon and Kasser, 1995). Pursuit of autonomous rather than controlled goals increases happiness both in its hedonic form and its eudaemonic (self-realisation) form, but only the latter leads to adaptive coping and a consequent reduction in stress and to improved physical health (Miquelon and Vallerand, 2008).

A closer analysis reveals that both *what* you strive for (intrinsic versus extrinsic goal contents) and *why* you pursue them (autonomous or controlled motives) independently affect well-being (Sheldon, Ryan, Deci and Kasser, 2004). For example, although both are extrinsic, purchases made with the intention of acquiring a life experience make people happier than purchases of material possessions (Van Boven and Gilovich, 2003). Koestner, Lekes, Powers and Chicoine (2002) showed that progress towards goal attainment is associated with positive affect and decreased negative affect, but actual attainment of goals tends only to enhance well-being if the goals are intrinsic, not extrinsic (Koestner, 2008; Sheldon and Kasser, 1998). In a study by Niemiec, Ryan and Deci (2008), the attainment of intrinsic aspirational goals was associated with psychological health and well-being, but attainment of extrinsic goals was related to ill-being.

This contrast is visible both at the trait and the state levels. Experimentally induced states of autonomous motivation enhance subjective vitality (Moller, Deci and Ryan, 2006; Nix et al., 1999; Ryan and Deci, 2008), and people with higher traits of autonomy and competence tend to report greater subjective well-being (Sheldon, Ryan and Reis, 1996). This is likely to translate into more positive behaviour towards other people. For instance, an autonomous orientation in medical students was associated with higher recognition of the importance of empathy, patient-centeredness and sensitivity to patients' psychological and social needs, and an increase in autonomous learning predicted both an increase in these psychosocial beliefs and in perceived competence (Williams and Deci, 1996).

Intrinsically motivated states, and especially the "flow" experience that can occur during intrinsically motivated engagement in an activity (Csickszentmihalyi, 1990, 1997; Csikszentmihalyi, Abuhamdeh, and Nakamura, 2005), are pleasurable experiences inducing positive affect. Hence, we can expect that those experiencing such states more often (i.e. those who are strongly intrinsically motivated as a trait) will exhibit improved health. This is likely because positive affect has been shown to have a direct positive influence on physiology, enhancing the immune, cardiovascular and digestive systems (Salovey, Rothman, Detweiler, and Steward, 2000). Similarly positive beliefs such as a sense of meaning, internal locus of control, and optimism, that tend to be associated with autonomous motivation, have physical health benefits (Taylor, Kemeny, Bower, Gruenewald and Reed, 2000), and in the case of internal locus

of control have also been associated with better job performance and greater job satisfaction (Chen and Silverthorne, 2008).

This expectation has been confirmed. Self-determined goal striving and the pursuit of intrinsic rather than extrinsic higher goals have indeed proved to be associated with greater physical health (Sheldon and Kasser, 1995) and fewer physical symptoms (Kasser and Ryan, 1996), and greater personal autonomy is associated with decreased mortality among nursing home residents (Kasser and Ryan, 1999). Exercise frequency and regularity were greater in older adults who were autonomously motivated, interestingly more so than when they were motivated by the need for stress management! (Dacey, Baltzell and Zaichkowsky, 2008).

Thus, there is substantial and growing evidence that autonomous motivation, in both state and trait form, is associated with a number of psychological, emotional, behavioural and physical health benefits in comparison with controlled motivation (Kasser, 2002). In short, it is associated with well-being across a variety of parameters and hence with reduced distress.

Autonomous motivation and work performance

Historically, the evidence for a link between work performance and either intrinsic job satisfaction (Hosie, Sevastos and Cooper, 2007) or intrinsic motivation generally (cf. Kuvaas, 2006 with Hechanova, Alampay and Franco, 2006, and Suh and Shin, 2006) has been weak and inconsistent. However, several recent studies have pointed more strongly to a positive relationship.

Coaches' autonomy support was shown by Gillet, Vallerand, Amoura and Baldes (2010) to improve sporting performance (judo). In a university setting, autonomous motivation was associated with better grades (Black and Deci, 2000) and with depth of processing and test performance (Vansteenkiste, Simons, Lens, Sheldon and Deci, 2004). In the non-profit sector, Grant (2008) found the positive connection between the desire to help others (pro-social motivation) and persistence, performance and productivity in doing so was greatly enhanced by the presence of intrinsic motivation. As noted earlier, the highly internal locus of control associated with autonomous motivation leads both to less job stress and to better performance (Chen and Silverthorne, 2008), and Fernet et al., (2004) found autonomous motivation led to better work productivity and reduced burnout. Similarly, Rubino, Luksyte, Perry and Volpone (2009) found loss of intrinsic motivation fully mediated the link between poor perceived job-person fit and the inefficacy aspect of burnout. In a test of the "happy productive worker thesis", Hosie et al., (2007) found self-rated affective well-being and intrinsic job satisfaction predicted managers' performance across a range of dimensions.

Taking these findings as a whole, there is increasingly strong evidence that autonomous motivation not only improves well-being in a variety of ways, which have direct stress-reduction effects, but also improves performance in a number of contexts. Improved performance not only rewards employers but usually also reduces, or at least satisfies, performance pressure (job demands) on employees, providing an additional indirect path to stress reduction.

Implications for staff selection and task assignment: the importance of choice

Task autonomy satisfies the need for autonomy with regard to *how* one does the job. Autonomous motivation, however, can also be a factor in *whether* one chooses to do that particular job, in other words an employee's decision to apply for a particular position.

This clearly has implications for recruitment and selection, and also for assignment of employees to specific tasks. Those working on jobs, or in organisations, for which they feel some value-based identification (i.e. *identified* or *integrated self-regulation* in the SDT schema), will experience autonomous motivation for the work, with the likelihood of the stress-reducing benefits described in the previous sections.

Similarly, where it is possible to assign employees, or have them assign themselves, to tasks they actively enjoy, they will experience intrinsic motivation for the activity with, again, the documented beneficial effects of autonomous motivation on distress.

Autonomous motivation by definition always implies an element of choice at some level. According to some theorists (Baumeister, Bratslavsky, Muraven and Tice, 1998), any act of choice comes at the cost of "ego-depletion" and loss of energy. However, this has been demonstrated to apply only to controlled choices (i.e. where there is subtle or not-so subtle external pressure to choose some options over others), but not to genuinely autonomous choices (Moller et al., 2006). A recent meta-analysis of 41 studies showed clearly that "when individuals are allowed to affirm their sense of autonomy through choice they experience enhanced motivation, persistence, performance, and production" (Patall, Cooper and Robinson, 2008: 298), although this effect may be stronger in Western rather than Asian cultures (Iyengar and Lepper, 1999). Thus, employers, in the West at least, who provide their staff with genuine choices regarding their work will benefit, while at the same time improving employees' well-being and eustress.

Passion, flow and meaningfulness

Passion

If autonomous motivation has all the benefits, both to employees and to their employing organisations, expounded above, should we expect the most intense forms of it to have the most benefit? This raises the construct of *passion* for an activity, in this case work activity. Vallerand's Dualistic Model of Passion (Vallerand, 2007; Vallerand and Houlfort, 2003) defines passion as "a strong inclination toward a self-defining activity that one likes (or even loves), finds important, and in which one invests time and energy" (Vallerand, 2007: 1-2). This passion, however, can take either of two forms, labelled "harmonious" and "obsessive"; the former involving a genuinely autonomous and integrative internalisation of the activity into a person's identity, and the latter, a controlling, ego-invested internalisation where the drive to perform the activity comes to control the individual rather than *vice versa*. As might be expected, harmonious passion has been shown to predict psychological adjustment and performance, whereas obsessive passion can lead to damaging over-persistence (e.g. pathological gambling).

Relating this to the work context, Burke and Fiksenbaum (2008) make essentially the same distinction between what they label Passion and Addiction. Their research found that while both types of behaviour result in higher than normal job investment (involvement, hours worked etc); passion is correlated with more work satisfaction, greater psychological well-being, and less

obsessive job behaviours, while addiction has exactly the reverse relationship with all three variables.

Thus, in terms of both stress management and job commitment, passion for the job is to be encouraged and selected for, but care must be taken to distinguish it from it's obsessional, addictive counterpart.

Flow

A state likely to arise more often in the pursuit of a passion is that of Flow or optimal experience, wherein the person is intensely involved in the activity, their skills just match the challenges posed by it, the subjective experience of the passage of time is often altered, and action is perceived as effortless (Csikszentmihalyi, 1990, 1997; Csikszentmihalyi et al., 2005). It has been argued that "flow is a form of eudaimonic well-being.…findings suggest that flow may be a critical psychological state that is associated with positive mood, a core component of psychological well-being" (Fullagar and Kelloway, 2009: 610).

Employers cannot create flow states in their employees – nor in fact, can the employees themselves in any direct and reliable fashion – but they can encourage and facilitate employees to engage in those activities for which they are highly intrinsically motivated or have a passion, and which are, hence, more likely to result in flow experiences.

Meaningfulness

Work that seems meaningful to an employee in terms of their own values will, by definition, be autonomously motivating via integrated self-regulation. If passion can be seen as a very high *level* of autonomous motivation, meaningfulness can be construed as a *deeper* form of it, one that is a powerful driver of work commitment and job satisfaction (Chalofsky and Krishna, 2009). It also has associations with workplace spirituality (Emmons, 2006; Kolodinsky, Bowen and Ferris, 2003). A full discussion of work as a source of meaning is beyond the scope of this paper, but selecting staff who do find a particular job personally meaningful over those with mainly extrinsic motivation would seem a sensible part of a stress management strategy. A word of caution is in order, however. As Lips-Wiersma and Morris (2009) point out, much of the research on meaning at work has focused on the *management* of meaning, which can often prove to be prescriptive and controlling, and hence not at all supportive of autonomous motivation.

Implications for stress management interventions

The foregoing discussion has presented evidence that practices that support autonomous motivation improve well-being and promote eustress. This is not to suggest that there is no role for more traditional primary and secondary stress-management interventions (SMIs).

Despite strong advocacy of primary (organisational level) SMIs (e.g. Cousins, MacKay, Clarke, Kelly, Kelly and McCraig, 2004), secondary (individual level) SMIs are more widely used (LeFevre, Kolt and Matheny, 2006) and, generally, more effective (Van der Klink, Blonk, Shene and Van Dijk, 2001). However, it can be argued (e.g. Gordon, Jauregi and Schnall, 2009) that emphasising secondary at the expense of primary SMIs allows organisations to shirk some of their responsibilities towards employees and their welfare, and amounts to telling the "victims" to "cure" themselves. Conversely, organisations that devote much time and effort to ineffective primary interventions may aspire to wear the halo of a "good employer", but are often wasting valuable resources for little other gain.

One solution to this dilemma may be to foster autonomous motivation supporting policies as a primary SMI while also making autonomously motivating secondary SMIs available in a manner that allows maximum choice. Secondary SMIs of any kind, provided they are effective, will generally be self-reinforcing, simply because they reduce distress and hence, increase well-being. The great majority are enjoyable to do and, therefore, intrinsically motivating. Those that are not, for example the painful early stages of a vigorous physical exercise programme for someone who is very unfit, will usually be motivated by well-internalised extrinsic motivation (identified or integrated regulation in the SDT schema) since the person sees the benefits of the programme in helping them become the person they want to be, and will, thus, still be autonomously motivated.

In a similar way, some secondary SMIs, especially Eastern meditation and yoga techniques, and some martial arts, also tap into integrated regulation because they are considered to be a means to attain self-development goals. At their highest, these goals link to "the meaning and purpose of life" and hence, the deeper form of autonomous motivation represented by meaningfulness. Since they tend also to be intrinsically motivating such practices are doubly or triply autonomous!

Conclusion

This article has presented strong evidence that workplace practices that encourage and cater to the autonomous motivation of employees will increase their well-being in an impressively wide variety of ways, including improved emotional and physical health and much reduced distress. In particular, as noted above, when employees are provided with genuinely autonomous choice they experience "enhanced motivation, persistence, performance, and production" (Patall et al., 2008: 298). Hence, overall their work experiences are of eustress rather than distress, and of better performance. When the more developed forms of autonomous motivation and the phenomena associated with it – (non obsessional/addictive) passion for the work, a sense of meaningfulness, and frequent flow experiences – are given the opportunity to flower, the research indicates that not only eustress but improved job satisfaction and organisational commitment result.

With such benefits both for employers and employees from autonomous motivation, it would seem obvious that the traditional "carrot and stick" extrinsic/controlled approach to worker motivation is long overdue for retirement, at least from the majority of jobs in the Western workplace, and replacement with practices that make daily work something to enjoy rather than merely tolerate or even dread. What might such practices look like? Specifics will obviously depend on the job and the context, but the provision of freedom of choice is the essence, whether it be choice of job, of the way best to perform a job or tasks within it, of the order in which to perform tasks or, where feasible, a more general executive freedom to make job-related decisions as circumstances change. Clearly, some jobs lend themselves to such practices much better than others, and there still remain some where the carrot and stick have a place, but it is important to emphasise that with a little ingenuity *every* job has at least some aspects that can be made subject to autonomous choice.

This article has argued that promotion of such practices constitutes a broad approach to stress management at the primary intervention level that, combined with choices from a range of autonomously motivating secondary SMIs, will be empowering rather than controlling. As such, it goes well beyond the simple provision of task or job autonomy and will avoid the potentially stress-increasing effects such policies can sometimes have. Not only should stress levels be significantly reduced, but performance levels and job-satisfaction increased, to the benefit of all concerned.

Notes

[1] Interestingly the intrinsic-extrinsic distinction has recently received support at the level of brain function, with overlapping but different brain areas becoming active when a person is experiencing intrinsic motivation contrasted with incentive motivation (Lee, Reeve, Xue and Xiong, 2009).

[2] Although it is, of course, perfectly possible to be both intrinsically and extrinsically motivated for the same activity at the same time (Amabile et al., 1994).

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Unhealthy Work? The policy-practice divide in Australian Call Centres

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Abstract

Call centres have attracted the attention of researchers globally due to their implementation of new forms of work organisation and the implications these represent for the workforce. While there has been a great deal written on the poor working conditions within the call centre industry, and some discussion on the impact of these conditions on the health and safety of workers, there is still little known about the occupation health and well being policies and practices used in these workplaces. There has also been scant research on the health and safety experiences of call centre workers. This paper aims to address these gaps by examining whether the tasks performed and the occupational health and well being policies and practices in call centres lead to unhealthy outcomes for workers. A case study methodology is applied to explore these questions in two Australian call centres which highlight the diversity that exists in the industry. Key findings based on interviews with case study participants and key stakeholders indicate a misalignment between policy and practice, which represent various immediate and ongoing risks for employees. A number of policy concerns are raised through the data, particularly where negative occupational health outcomes can be associated with the lack of organisational compliance with employment legislation.

Introduction

While call centres offer various economic opportunities in the form of increased efficiency through business process re-organization, and regional and urban development, poor job quality is increasingly becoming recognized as a norm across these workplaces. The call centre industry is frequently described in the literature as engaging in low-profit value-added activities, characterised by poor wages and conditions, a disposable workforce, and the implementation of Taylorist principles, all of which have real implications for occupational health and well being and well being (Wallace et al., 2000 Paul and Huws, 2002).

The growth of the call centre market has been paralleled with the emergence of an extensive literature on call centre workplaces, yet there has been muted discussion on the occupational health and well being of call centre workers. Where occupational health and well being is discussed, much of the existing research merely draws attention to the risks prevalent in these workplaces. There is little in the way of research that specifically evaluates the occupational health and well being policies, practices and outcomes in these contexts. This paper aims to address these gaps in literature by determining whether the

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tasks performed and the occupational health and well being policies and practices in call centre workplaces are conducive to ill health. In setting the context for this paper, literature pertaining to the health of call centre workers will be reviewed. The case study research design will subsequently be outlined, followed by an overview of the key findings, and a discussion on the potential implications these represent.

Call Centres and occupational health and well being: the literature

Call centres exemplify the shift towards technology based work, and the new forms of work organisation that are emerging in the services economy. Over the past decade, call centres have represented one of the most important sources of job growth in a number of countries including Australia (Batt and Moynihan, 2002 Russell, 2004). Since call centres started proliferating in the market two decades ago, they have surpassed their traditional role as efficient and effective marketing and response mediums, and are increasingly being realised as profit-centres, representing the first line of consumer contact for a multitude of business types, across all industries and sectors (Burgess and Connell, 2004). The tendency for organizations in the new economy to focus on 'core competencies' has also led to greater outsourcing and offshoring of call centre functions, and the growth of specialist call centre service providers (Australian Communications Association (ACA), 2004).

Although these organizations have grown in prominence, the job quality issues that have emerged in the broader Australian socio-economic context, particularly with the transition to the new economy, are also highly relevant to these workplaces (Green, 2005). Firstly, call centres are characterised by relatively low levels of union representation. The URCOT (2000) report suggests that although call centres are a growing centre for employment growth in Australia, union representation and coverage of these organisations remains scarce. The increase in outsourcing arrangements across call centres also represents obvious implications for job quality, given that outsourced activities still tend to be under-regulated, and under-represented where unions are concerned (Australian Council of Trade Unions, 2002).

Technology has played a strong and distinctive role in the labour process of call centres providing organizations with structure, surveillance and control – essentially the antecedents of this new form of work organization. This raises important implications for occupational health and well being and job quality, given that these technologies allow work to be controlled and monitored in a way that was previously not possible, largely removing control from employees, and placing these in the sphere of consumers and managers (Crome, 1998 Callaghan and Thompson, 2001). Further, occupational health and well being issues are raised due to technology from the 'information era' being combined with the principles of work organization derived from the 'industrial era'. Work organization in call centres is often highly reminiscent of the Taylorist and Fordist production line system, particularly with the focus on 'mass production', 'mass consumption' and the standardisation of processes, organised in an assembly line method of production (Taylor and Bain, 1999). These processes are familiar, in terms of the repetitiveness of tasks, the scripting of work, and the intense pressure to process as many potential customers as possible using telephone and computer technology (Holman, 2002 Hutchinson et al., 2000a). The customer becomes the subject and object of the call centre.

These centres promise lower cost and high returns for the purchaser of service but the delivery of these services is dependent on an "automated employee".

These organizations are also characteristic of the formulation of new and diverse management ideologies, all of which have the same goal of increasing worker productivity in the new economy (Green, 2005). On one end of the scale are managerial principles that endorse high commitment philosophies and team based structures as a means of attaining normative control (Thompson, Callaghan and van den Broek, 2004), and at the other end of the spectrum are more 'sacrificial human resources strategies' which rely on employee replacement as opposed to employee development as a means of maintaining consistently high levels of productivity and quality (Wallace et al., 2000).

As started earlier, there is scant research on the occupational health and well being experiences and outcomes in the call centre literature. Nevertheless, the issue of stress and burnout is the most widely reported occupational health and well being issue in the call centre literature (Holman, 2002 Healy and Bramble, 2003). The 2009 *Its your call* survey of 1,549 Australian call centre employees found stress to be a more prevalent issue in 2009 than what it was 10 years ago. Higher levels of stress could be attributed to increasing job insecurity concerns with call centre work going overseas, greater phone call monitoring, fewer opportunities for breaks, fewer opportunities to take annual leave, poor ergonomics and lack of training and support. Over one-third of participants also highlighted their dissatisfaction with KPI's and targets, suggesting these are additional workplace stressors.

Call centre work is often target-focused, where non-fulfilment often leads to disciplinary action (Bain and Taylor, 2002 Shire et al., 2002). In order to avoid being isolated, workers have to be highly performance driven, and constantly work towards meeting statistical goals (Australian Communications Association Research [ACA], 1998 Richardson and Marshall, 1999 Union Research Centre for Organisation and Technology [URCOT], 2000 Paul and Huws, 2002). According to URCOT (2000) these demands can create a great deal of stress for employees, particularly when statistical targets are unrealistic or unreasonable. The unpredictable nature of call traffic with job cycle peaks and fluctuations, also contributes to stress by creating uncertainty for workers (Australian Communications Association Research [ACA], 1998 Batt and Moynihan, 2002).

Extensive systems of monitoring can also be associated with stress and burnout in call centres (Richardson and Marshall, 1999 Union Research Centre for Organisation and Technology [URCOT], 2000 Bagnara and Marti, 2001 Paul and Huws, 2002 Healy and Bramble, 2003). Employees are aware that they are under constant management surveillance and performance monitoring, and this creates greater pressure for workers to perform. There is also evidence of monitoring being used as a tool to intimidate and demean staff; the monitoring of toilet breaks, and private calls are two prime examples (see URCOT, 2000). Systematic and often rigorous monitoring mechanisms have been strongly associated with turnover in this industry.

Work in the call centre environment can also be very emotionally demanding, particularly given that employees are often expected to deal with abuse and harassment from customers (Crome, 1998 Richardson and Marshall, 1999 Wallace et al., 2000 Bagnara and Marti, 2001; Deery and Kinnie, 2002 Paul and Huws, 2002). Crome (1998) suggests customer frustration is becoming a more common phenomenon in the industry, and is often associated with organisations' promises of fast and efficient services, which are not

always possible to deliver. Being on the frontline, call centre workers are required to deal with emotionally demanding scenarios on their own, often with little or no time to recuperate because of the constant pressure to continue taking and/or making calls. The URCOT (2000) study indicates that uneducated callers can have similar effects, creating a significant amount of anger and frustration for employees trying to maintain their performance targets. This issue is also relevant for offshore call centres where CSR's often experience language problems (Taylor and Bain, 2004).

Employees working in the call centre environment are largely isolated from their co-workers during shifts, given that the primary interaction is between employees and the organisations customers. Thus, another cause of call centre workplace stress can be associated with what ACA (Australian Communications Association Research [ACA], 1998) describes as the "inconvenience of being literally wired to the desk". The stress of having minimal social interaction is exacerbated by further expectations on employees to remain seated and attached to telephony and computer equipment for what can sometimes be, extended periods of time (Australian Communications Association Research [ACA], 1998 Union Research Centre for Organisation and Technology [URCOT], 2000 Paul and Huws, 2002). This aspect of employment can cause significant emotional and physical strain.

The issue of 'emotional labour' also represents major implications for health and safety in call centre environments, and represents an area that has been examined by a number of researchers (Frenkel et al., 1998 Houlihan, 2002 Callaghan and Thompson, 2001 Mulholland, 2002). Hochschild (1983) first coined the term "emotional labour" to describe occupational emotional demands experienced by flight attendants. Emotional labour is defined by Hochschild (1983) as "the management of feeling to create a publicly observable facial and bodily display". Emotional labour is represented by the effort expended to manage or regulate ones emotional reactions at work in order to exhibit those performance behaviours valued by the organization, and to suppress the expression of less acceptable behaviours (Hochschild, 1983; Taylor, 1998). This is particularly the case in interactive service occupations, which require one-on-one contact with customers (Taylor, 1998). Call centre employees are particularly vulnerable to a demand for emotional labour, as their jobs generally require maintaining a friendly and positive demeanour despite job characteristics that may engender negative emotional reactions (e.g., irate customers, complex problem solving, or hectic work pace). As Taylor (1998: 98) noted in his study of the telephone sales department of a British airline "service sector employers are increasingly demanding that employees deep act actively work on and change their feeling to match the display required by the labour process ". These "displayed" emotions have an economic value, with employees being judged on the basis of customer satisfaction (Houlihan, 2002 Callaghan and Thompson, 2001). According to Frenkel et al (1999) some of the 'emotional labour' capabilities required of call centre workers include the ability to remain calm despite the pressures associated with responding to a continuous flow of customer calls; and the ability to maintain a friendly, positive and tactful, attitude whilst simultaneously remaining disengaged psychologically as a means of defence against rude and abusive customers.

Physical strain is another key issue, and is associated with the multiple demands placed on workers at any given time. Not only are employees required to stay seated during shifts, they are also expected to make and/or receive calls while simultaneously reading scripts and/or entering data into manual or computerised systems. This is all done under strict

surveillance as they work to maintain their performance statistics. The restrictive and repetitive nature of these tasks and the simultaneous use of multiple call centre technologies, represent a number of hazards for employees'. These include eye sight problems/computer vision, occupation overuse syndrome/repetitive strain, acoustic shock/hearing problems, occupational voice loss, sleeplessness, back/postural problems and headaches (Union Research Centre for Organisation and Technology [URCOT], 2000 Paul and Huws, 2002). In their research, Taylor et al (2003) found that the two most commonly reported health and safety complaints were tiredness and mental fatigue. A quarter of respondents also experienced stiff shoulders and necks, backaches and pains/numbness in hands, wrists or arms. Headaches were also common place – reported by half of all respondents as a regular occurrence.

The URCOT (2000) report suggests that physical discomfort, including neck and back stiffness persist despite the use of ergonomically designed equipment in the workplace. Taylor et al's (2003) research however suggests that ergonomic issues are a concern only for a minority. Rather, "it is the way in which call handlers' tasks (are) structured, organized and performed" that is the biggest cause for concern (Taylor et al, 2003: 446). In other words, there is significant evidence to suggest that the very nature of call centre work is strongly predisposed to physical stress. Whilst employees surveyed in the URCOT (2000) study drew attention to the value of regular breaks in minimising the effects, Taylor et al (2003: 435) suggest "radical job re-design" as the only effective remedy.

Methodology

It is clear from the international literature that there are occupational health problems associated with call centre work, particularly stress, fatigue and musculoskeletal disorders. However, what has generally been overlooked in the literature is an examination of the occupational health and well being policies, practices and outcomes of call centre work in the one study. The aim of the research was to close this gap by identifying the extent to which the policies and practices used in call centres made the work unhealthy for workers.

Two call centres were studied to examine the relationship between these three facets: one located in the public sector (referred to as "Govtcall") and the other located in the private sector (referred to as "Salesplus"). A qualitative case study methodology was adopted to cater for the multiplicity of 'reality' captured through subjective experiences, and to allow for an examination of the experiences of customer service operators (CSOs) in the context in which they occurred (Marshall and Rossman, 1995). To examine the occupational health and well being policies utilised in both workplaces policy documents, union documents (where relevant) and employment agreements were reviewed and analysed. Data on the occupational health and well being practices and outcomes experienced in the two call centres was derived through in-depth face to face interviews with Managers, Team Leaders and CSOs. A comparative element was also adopted into the research design to facilitate comparisons between the case study sites.

The profiles of the two call centres are presented in Table 1. Salesplus is located in Melbourne, and operates as part of a network of outsourced call centres (CCs). This CC has been in operation for 14 years, and with 1400 CC seats is a very large CC by industry standards. Salesplus has managed to maintain economies of scale whilst operating wholly

as an outsourcer, providing a variety of fixed term and ongoing services to the 50 plus clients they service at any given time. This CC involves a balance of inbound and outbound calls. There is no union presence on site, which is typical of the majority of CCs in the Australian market. Turnover in Salesplus is recorded at less than 10 per cent, and is mostly associated with students pursuing overseas travel. Exit interviews indicate that CSOs rarely turnover to join other CCs.

Table 1: Call Centre Type and Location

	GOVTCALL	SALESPLUS
Location	Newcastle	Melbourne
Sector/ industry	Public/ Government Services	Private/ Outsourcer
Type	In-house/capacity as outsourcer	Outsourcer
Size	226 seats	1400 seats
Age	13 years	14 years
Types of calls	Inbound & Outbound	Inbound & Outbound
Union presence	CPSU – 49 per cent unionised	No presence on site
Turnover	Under 10 per cent	Under 10 per cent

With 226 seats, Govtcall is the largest CC in a network of customer service CCs. Based in Newcastle, this particular CC has been operating for 13 years. In terms of CC type, Govtcall largely operates as an in-house CC dedicated to the servicing of 3 specific Government funded programs which operate as separate business lines. Some 98 per cent of the work is inbound – customer service being the primary function. Around 49 per cent of the CSOs in Govtcall are members of the Community and Public Sector Union. In Govtcall, turnover relating to those employees leaving the organization altogether is only 5 per cent. This figure rises to 10 per cent when considering the number that move out of the CC and into other areas of the organization's network.

As Table 2 indicates, semi-structured interviews were conducted on site or over the phone with CSOs, Supervisors/ Team leaders, and Managers. The length of each interview varied depending on the amount of detail given by interviewees, but generally ranged from 30 to 80 minutes in length. These interviews were supplemented with workplace observations, archival analyses, and document reviews. The number of interviews undertaken represents around 10 per cent of staff and Govtcall and 3 per cent of staff at Salesplus. The issue of sample accuracy is always present, especially for Salesplus. The triangulation of interviews across CSO and managers and the use of documentary information assisted in improving the validity of the interviews undertaken.

Table 2: Sample Interviewed Within the Two Call Centres

	Govtcall	Salesplus
Call Centre operators	18	26
Supervisory staff	6	8
Managers	3	4
Total	27	38

Findings

This section outlines the key findings relating to occupational health and well being policies, practices and outcomes in these two call centres. The occupational health and well being policies from each call centre are outlined in the following table. Key weaknesses in the policies are also listed as identified by CSOs and TLs during interviews.

Table 3: Occupational health and well being Policies in Govtcall and Salesplus and Identified Weaknesses

Govtcall	Problems in the policy	Salesplus	Problems in the policy
Services & Facilities: - Ergonomically designed height adjustable work stations - Work stations assessed by accredited OHS reps and local area occupational therapists - On-site gym - Referrals to EAP or Call Centre Social Worker	- Hot desking - occupational health and well being reps not always available and occ therapist on site only once a year	**Services & Facilities:** • Ergonomically designed height adjustable work stations • Work stations assessed by team leaders • Masseuse makes regular site visits • Referrals to Counselling/ EAP • Stress management courses and workshops available • Relaxation/Time out areas	- stress management course not mandatory
OHS Training & Information: - OHS induction training - Staff kept aware of OHS policies and procedures & updates – available on intranet and hardcopy - Annual evacuation training and all staff site evacuation - Fire wardens – bi-annual training for different scenarios - Training and accreditation for OHS reps/first aid officers - OHS & wellbeing discussed during team meetings	**-** team meetings not long enough and focus more on 'targets'.	**OHS Training & Information:** • OHS induction training • Staff kept aware of OHS policies and procedures & updates – available on intranet and hardcopy • Regular updates from OHS reps • OHS discussed during 1 on 1's with team leaders	**-** lack of team leader training in dealing with occupational health and well being. conflicting demands (with organisations objectives)
OHS Reporting: - Can report to team leaders - available to provide assistance - Can call on OHS reps/ OHS committee members - Union reps available - Local area occupational therapists - All hazards recorded on hazard register - All OHS incidences recorded using online accident reporting system	**-** lack of team leader training in dealing with occupational health and well being. conflicting demands (with organisations objectives) - low levels of reporting due to negative 'stigma' - lack of action taken in response to reports	**OHS Reporting:** • Report OHS issues to team leaders/managers • Report OHS issues to OHS reps	**-** lack of team leader training in dealing with occupational health and well being. - Infrequency of OHS rep meetings
Monitoring of OHS: - At least 1 OHS rep on site at all times - Workplace assessments undertaken by accredited OHS reps - Workplace hazard register (maintained by all staff)	**-** evidence of inadequately trained reps conducting assessments - leave has negative stigma	**Monitoring of OHS:** • OHS reps ever floor • Fire wardens on every floor • Team Leaders consult with CSOs about OHS issues	- large call centre – not all CSOs aware of who occupational health and well being reps are

Govtcall	**Problems in the policy**	**Salesplus**	**Problems in the policy**
- Staff stress/fatigue monitored via leave and statistical data	attached to it in this call centre.		
Consultation/CSO involvement: - Active OHS committee comprising elected staff reps – hold quarterly meetings - CSOs can influence additional OHS checks - First aid officer/fire warden/OHS rep roles all staffed by CSOs	**-** existence of committee but to what extent are concerns being communicated to committee due to infrequence of meetings? - general management team have very different views about occupational health and well being to that experienced on the shop –floor – is information being adequately communicated upwards?	**Consultation/CSO involvement:** • First aid officer/fire warden/OHS rep roles all staffed by CSOs	
Other: • Compulsory 5 min OHS breaks every hour • Utilise national OHS policy	- Breaks tightly policed - Inadequate recognition of 'local' issues	**Other:** • De-briefing with Team Leaders after stressful calls	- reactive rather than proactive approach to stress-management

The following section summarises findings relating to the occupational health and well being practices and outcomes in the two call centres. CSOs were firstly asked to reflect on the adequacy of the occupational health and well being policies and practices in the workplace, and to discuss any occupational health and well being issues they had experienced as a direct consequence of the work in the call centre (e.g. stress, fatigue, back ache etc). The findings are as follows.

Govtcall

In-depth interviews with CSOs from Govtcall suggested employees either had or were still experiencing occupational health and well being problems due to their work in the call centre.

Just over a fifth (22 per cent) of Govtcall CSOs interviewees complained that being seated for extended periods of time caused them discomfort, although ergonomically designed workstations had assisted in minimising the severity of outcomes. A number of interviewees (22 per cent) had also experienced some form of musculoskeletal disorders – including neck pain, back pain, and repetitive strain injury in their fingers, hands and arms. Two CSOs stated they had seen other CSOs in the workplace experience similar discomfort.

"I've seen other people go through neck injuries and RSI and it seems to me that they are placed under a bit of stress. Some don't ever report it because of the hassle and they don't think anything will be done about it anyway" (Govtcall, CSO 12)

CSOs interviewed argued that one of the main reasons why there was an increase in rate of musculoskeletal disorders amongst the staff was that they were now regularly required to rotate to different workstations, and readjusting the new workstation each time they moved. The CSOs interviewed also point out that most employees had no or little experience of correctly adjusting the workstation to suit the individual and their team leaders also lacked training in this area. As one CSOs interviewee stated:

"It's just at the moment I constantly have to adjust my desk every week because my back will hurt or my shoulders will hurt or I get headaches or something. It's also just the frustration that I can't just have the person who's trained, and qualified to do it set me up - and the fact that it's ongoing is frustrating at the moment. I've changed chairs trying to get it to fit in properly. And you can really say too much about it, it doesn't go down nicely, and won't change anything much". (Govtcall, CSO 5).

Although the team leaders were aware of the musculoskeletal disorders associated with the nature of the work, with repetitive strain injury (RSI) being the most common problem, they believed that the musculoskeletal disorders had increased as a result of the introduction of the self-paced learning tools.

"The number of people complaining of physical pain is extremely high. Not many report it though. I think the increased use of the mouse and the computer, and the self paced learning things – so now they are not even getting away from the computer – it's all PC based". (Govtcall, Team Leader 2)

Team leaders stated any cases of musculoskeletal disorders were dealt with promptly and those experiencing the discomfort were given some flexibility with regard to their targets.

"Straight away – we do something – as soon as they tell us we act on it. The occupational health and well being rep checks on the desk set up for them, and we start swapping arms. If it slows them down we don't care". (Govtcall, Team Leader 4)

Stress and fatigue were other prominent occupational health and well being issues. All the employees interviewed at Govtcall had experienced stress at some time during their work. The probationary period of their employment was particularly stressful in which they were continually monitored and were required to achieve 95 per cent accuracy rate in order to be offered continued employment. In addition, many of the interviewees (44 per cent) stated that the stress they had experienced was as a direct result of the inflexible managerial practices in the organisation, particularly in relation to work-life balance issues.

"I know I won't get time off for when my children start school. There is lack of support here – and no one really to ask for help". (Govtcall, CSO 1)

Other management practices that created stress among employees were: excessive monitoring; the lack of team leader support; greater focus on negative rather than positive reinforcement in relation to performance; and intimidating behaviour towards the employees, as the following comments indicate:

> "They'll pick up on things like your call handle time which is supposed to be 5 mins, 20secs. Mine might be 5.22 and they'll pick up on that for two seconds. I just think that's so ridiculous and I do get upset about it. If it was 2 seconds in the 'real' world or another workforce – they'd just let it go". (Govtcall, CSO 17).

> "They won't notice you when you do something right or well, but they are all over you if you make one mistake. Like you'll get an email, and then the team leader will come talk to you about it, and then another team leader will come talk to you too a few minutes later. You're always worried about stuffing up because there's no chance of getting away with it". (Govtcall, CSO 12)

> "There's been times when I've wanted to put forward ideas and things and they'll all squash them because they think they're stupid. That's hard to deal with because it might be stupid to them, but it definitely isn't to me or the people around me". (Govtcall, CSO 2)

Negative managerial practices were not the only sources of stress; dealing with rude and aggressive callers also caused a great deal of anxiety. Over a third of the CSOs interviewees stated that they were required to deal with highly agitated and abusive customers and yet were expected to suppress their own hurt feelings in order to do their job in a professional manner. They also found it upsetting dealing with customers who had suffered a tragedy or when they were unable to help a distressed customer, as depicted by the interviewee quotes:

> "You tend to get some really fiery customers yelling and swearing and sometimes they can just hit all the buttons to get you going. No matter how pissed off or upset you get – you have to suck it in and get on with it" (Govtcall, CSO 9)

> "I had a mother whose 10 year old child died. It wasn't the greatest call, it was bad. You have to be able to sympathize with them. Once you're off the phone you just start to think about it for a while and put down your head. Take a break, depending on how bad the call is. I generally take a break". (Govtcall, CSO 12).

> "You can really have the stress of the call where you know you want to help someone but you really don't know if you can or you don't feel you can". (Govtcall, CSO 3)

Team leaders also acknowledged that their employees were experiencing work-related stress and attributed the fact that CSOs had to meet high performance demands, whilst simultaneously dealing with distraught or difficult customers:

> "About 2 per cent of customers are quite aggressive and it depends on how staff handle that – some take it to heart and others think 'whatever'. It can get quite stressful. It can also get quite stressful because it's measured. Some people might

try their hardest and hardest and still not meet what they are required to meet".
(Govtcall, Team Leader 2)

"Our CSOs have to deal with some of the tragedies our customers have been
through. There are two sides to the stress mainly, and that's sort of the people side
of it. And then there's the performance side to it – if they are not performing we
need to take formal action – I guess that could cause them some distress".
(Govtcall, Team Leader 6)

When questioned about the support provided by Govtcall in assisting employees
experiencing stress due to dealing with agitated or distressed callers, the general response
was that support was inadequate. CSOs felt they had little option than to take a break, but
even these were monitored. CSOs were left to deal with such issues on their own as
communication between CSOs was also largely restricted during shifts. Team work,
particularly on an informal level was not actively encouraged. CSOs largely worked
independently, and were discouraged from speaking to or seeking assistance and advice
from their co-workers as it may reflect negatively on their statistics. Special systems were
set up that dictated that all questions and queries were directed to technical support
officers within the call centre. Over half of the CSOs interviewed however indicated they
often disabled calls in order to have a much needed chat with other CSOs between calls.
This was done cautiously given the high levels of monitoring in the workplace.

"Sometimes you just need to take a breather, and let it all out, especially if you
have a bad call - you can just turn around. Like today I did a death notice. It's
nice to have someone you can just say 'that lady was so upset' – it's nice to have
that communication. I sometimes just put a hold on my calls and have a quick chat
with the person next to me. They don't like you doing that here – but it's unhealthy
to keep it in. You'd go crazy if you didn't". (Govtcall, CSO 8).

Interestingly, managers had very different perceptions about the level of stress in the
organisation and how stress was managed. They argued that while stress did occur, it was
not a significant problem, and was always closely monitored and dealt with quickly. For
example, if a CSO experienced a bad call, they were required to record the details of the
call online, and complaint was then followed up by the HR staff who would then
implement remedies.

"It's something we're always looking for. We don't have huge compo claims so
we seem to manage it well and team leaders are really trained in identifying stress.
It's not a huge issue here." (Govtcall, Manager 1)

These claims were not supported by CSOs, who stated that reports were rarely followed
up, and when they were, little was done about them. CSOs felt that whilst some team
leaders were supportive, others had little idea about how to deal with stress issues.

Another significant occupational health and well being issue (identified by 90 per cent the
employees interviewed) was the poor scheduling and short length of the breaks and the
strict or arbitrary way the breaks were monitored, as the quotes below illustrate:

"Schedules can be very difficult to work in sometimes. One day I had training and morning tea was at 11:00am and my lunch wasn't scheduled till 3.00pm. That can be a bit of a stretch and you don't have much choice in changing it". (Govtcall, CSO 16)

"Timing is a bit of an issue. Sometimes you're scheduled for lunch at like 20 past 11 in the morning. They don't even make kindergarteners go to lunch at that time so I guess that's where the control aspect comes in. No one can really argue with the breaks because they are in our agreement". (Govtcall, CSO 18)

"Sometimes you only need three minutes and then sometimes you need longer. In the first couple of months when I had morning sickness, I was in the toilet once for 10 minutes and I had a team leader come in and ask me why I was taking so long – I had just come out of the toilet and my face was all pale and I was so angry that I had to explain I had morning sickness and I wasn't feeling well. It was just ridiculous that she waited for me outside the toilet after trying to track me down". (Govtcall, CSO 10)

"I don't like the fact that if you get up even to go to the fax machine or the photocopier or whatever, then technically you don't get a break anymore. I disagree with that. If I go to the fax machine - I do it because I have to. I'm not thinking about rolling my head or stretching my wrists and arms and stuff. I'm not thinking about those things when I'm still in work mode". (Govtcall, CSO 9)

"They call them occupational health and well being breaks and too right – you're stressed the whole time you're on it because you know you have to be back within four minutes or face their wrath". (Govtcall, CSO 4)

"It's really prison like in that once you reach the end of your tea time you have to get straight back. And there are instances where people around me have gotten a call at the time they should have gone on a tea break and they've had someone come up and tell them they should have gone then". (Govtcall, CSO 1)

Some 28 per cent of the CSOs interviewed stated they often came into work sick because their employer took a heavy-handed approach to sick leave. Most CSOs complained that there were frequent outbreaks of viral and bacterial diseases spread through the air-conditioning system and that the root cause was the pressure put upon them by the employer not to take sick leave, as highlighted by the following statement:

"There's a bit of a stigma about taking personal so more often than not people come to work sick then pass on their germs; and with the type of air conditioning system that we have - it's not a bad system and it is environmentally friendly, but because there's the stigmas that you shouldn't take personal leave people come to work sick so it passes it on to the next person and because there's so many of us it just goes round and round the office. That's frustrating". (Govtcall, CSO 5)

Finally, there was a general lack of autonomy and the micro-management style illustrated by the managers' inflexible approach to break times and personal and sick leave at Govtcall was a perennial complaint. There appeared to be a great deal of rhetoric around occupational health and well being, but in reality there were significant pressure on

employees to keep working in order to make their quota of telephone calls. This lack of autonomy interviewees argued had a direct impact on their health and wellbeing.

Salesplus

Unlike Govtcall, three-quarters of Salesplus CSO interviewees stated their working environment was satisfactory. The interviewees also indicated they were aware of the company's health and safety policies, the regular occupational health and well being meetings and the company's occupational health and well being officers. They recalled occupational health and well being training being included in the induction process, and stated there were regular refresher courses held throughout the year. CSOs suggested team leaders paid good attention to occupational health and well being and regularly questioned them about their occupational health and well being needs during one-to-one sessions. Full-time CSOs also stated that because the organisation did not employ "hot-desking" or move them around, their workstations can be set up to meet their unique ergonomic needs. Workstations were specifically set up for each of the employee's requirements, and checked on a regular basis by qualified occupational health and well being officers. Moreover, CSOs also indicated they were kept up to date with all developments, including occupational health and well being. Other measures identified to aid employee well-being included an onsite masseuse, 'get fit' competitions, aerobics training programs conducted in the organisation, boot camps, and lunch-time 'fun in the park' activities, all the things that Govtcall did not provide.

Nevertheless, 50 per cent of CSOs identified ill-health and injury associated with the job as negative consequences of the job. Although it was noted that team leaders encouraged staff to take regular breaks, 19 per cent of the CSOs interviewed stated being seated for long periods of time caused them moderate to significant muscular discomfort. All the CSOs interviewed stated Salesplus was highly supportive providing necessary equipment (e.g. glare screens); carrying out necessary assessments and djustments to workstations, and referring staff to the on-site masseuse.

Some 25 per cent of Salesplus interviewees stated they regularly experienced negative stress. These were most likely those employees who had their performance- based pay calculated around key performance indicators (KPIs) calculated at the end of each month.

The increasing pace of work, the lack of control over rosters and the number and length of breaks were also identified as causes of stress, although there were conflicting views. Overall, CSOs stated that that their breaks were generally adequate and if requested, the time allocated and length of the breaks could be altered.

> *"Our project manager is quite lenient and has given us the option of taking breaks at the times that we actually want to take them because we don't have the influx of calls coming through. So if you want to have lunch at 12:00pm instead of 2:00pm and have someone else rostered in for you, it makes it a lot easier. It makes it a lot easier especially if you're not hungry, or you're not ready to go out again and you're in the middle of something then there is flexibility to change". (Salesplus, CSO 11)*

> *"If you go for your 30 minute lunch break for 40 to 50 minutes they'll obviously pull you up on it. But otherwise – no not at all. They don't make a fuss if you're a couple of minutes late, but we all know how far we can push it". (Salesplus, CSO 12)*

In addition to three breaks throughout the day, Salesplus CSOs stated they were allocated an additional ten minutes a day of personal time, which could be used for whatever purpose, including going to the toilet, recuperating after a difficult call, getting a drink, etc. Several CSOs expressed a need for more personal time during the shift, particularly when they were feeling unwell. These same CSO interviewees did, however, suggest that team leaders currently allowed them to go over the ten minutes allocated if there was a need for it. In addition, a small number of CSOs stated that breaks were sometimes not distributed evenly enough, and could be scheduled either too close together or too far apart.

> *"It's not spread out very well sometimes. Sometimes you may have just come in and have to go again just when you're getting back into it. Other times it's too long sitting on the phone in front of a computer, especially when it's not busy." (Salesplus, CSO 27)*

For many CSOs, particularly those on performance-based pay, intermittent outbound calls was another source of stress. CSOs stated they often had days where every second or third call that was dropped through went through to an answering machine or a disconnected number, which diminished their ability to meet their sales targets which in turn meant a reduction in their pay. However, dealing with disgruntled and abusive customers was the primary cause of stress among all the CSO interviewees, as the quotes illustrate.

> [Have you experienced any negative stress as a result of the work itself?] *"YES – and you can put that in capital letters. But that's from the customers though – it's not from the people here. Particularly with our project you get a lot of complaints, it can be really frustrating". (Salesplus, CSO 22)*

One team leader commented that stress was most often experienced by those team members who were of Indian origin, who became the target of abuse by customers who assumed they were dealing with a call centre in India.

> *"Ultimately the public is cruel. We have a lot of Asian, East Asian workers, so customers do have the misapprehension that we are in India from time to time. Also Australians are a bigoted bunch of people and a lot of them tend to take it out on our staff". (Salesplus, Team Leader 4).*

The call centre was seen to provide staff with a number of avenues to reduce the level of workplace stress:

> *"There is a lot of support – they have offered counselling. Also we have team development meetings, and they come up to us all the time and see how we are going. And we also have one-on-ones with our team leaders, and we can request a one-on-one with the project manager if something is really bugging us". (Salesplus, CSO 18)*

Team leaders also stated that they endeavoured minimise the level of stress and outlined the various measures in place, as indicated below:

> *"One of my jobs is to ensure that my staff are in a mindset that they are (A) willing and able to make sure that persons call is terminated – I will not have my staff deal with people like that, and (B) that they are assuring that they are not taking that baggage home with them. I make sure they are ok by having a chat with them every so often to see that they are doing ok. I have referred CSOs to counselling in the past, and many have taken the stress management course we offer". (Salesplus, Team Leader 3)*

Both the managers and team leaders interviewed maintained that in general, the work itself was not inherently unsafe or unhealthy, and that the organisation had sufficient occupational health and well being measures in place to deal with any health or safety issues or incidents.

> *"I don't think there's much in terms of physical injuries or things like that, at least not in my area. But if something comes up we deal with it straight away and as best we can". (Salesplus, Team Leader 5)*

> *"Being a call centre, the work itself is not intrinsically unsafe. The office type environment in fact suits most of our employees. If there is a chance of anything occurring, our call centre has all the procedures and policies in place to deal with these things if they do arise". (Salesplus, Manager 4)*

Discussion and Conclusions

A number of parallels can be drawn between the health issues raised in the two call centres. Around 20 per cent of CSOs drew attention to the negative physical outcomes they had experienced as a direct consequence of the work, and a further 50 per cent from Salesplus and 89 per cent from Govtcall drew attention to negative stress outcomes. Across both case studies, the causes of the negative physical outcomes were largely attributed to, as described in ACA (1998: 6) the "inconvenience of being literally wired to the desk", which refers to the extended periods that CSOs have to remain seated and 'attached' to technology in order to do their jobs. The job-related stressors and stress outcomes reported by CSOs in the two call centres (emotional labour, monitoring of calls, KPI's, lack of variety of job tasks, lack of control) were also reminiscent of much of the call centre literature (e.g. ACA 1998; Richardson & Marshall, 1999; URCOT, 2000; Paul & Huws, 2002).

While some of the elements of call centre work that lead to negative occupational health outcomes can be described as inherent to the job (e.g. the repetitive handling of telephone calls; being restricted to a particular workspace – remaining seated for extended periods of time, and being "literally tied to the phones"; the lack of control over work timing – calls automatically 'dropped-in'; the lack of control over work flows – unpredictable, fluctuating work flows; & dealing with distraught or disgruntled customers) the mere presence of these conditions cannot determine whether or not the work will necessarily lead to negative health consequences. This is because in any call centre context, those factors that are inherent to the nature of the work itself operate

simultaneously alongside factors that can be controlled. This was demonstrated through the Salesplus example where despite the presence of the aforementioned conditions, the CSOs reported more positive occupational health outcomes than those in Govtcall. This could largely be attributed to perceptions of there being a supportive culture where health and well being issues are concerned.

Conversely, in Govtcall the range of musculoskeletal issues and stress generating factors was more comprehensive, a fact largely attributed to the hard outcome orientated human resources management approach used in the call centre which focussed on performance and the achievement of KPIs. The issue of emotional labour for instance, was identified as a strong workplace stressor, however the negative outcomes associated with this process were heavily exacerbated by the lack of either a supportive or systematic approach in managing these issues in practice. These findings confirm earlier studies that occupational health outcomes and experiences are significantly influenced by the attitudes held by senior management and the broader philosophies of the company (Lloyd and James, 2008). They also add weight to Noblet's (2003) assertion that 'social support' is an important avenue for creating work settings that protect and enhance employee health and wellbeing.

The findings of this study also highlight some of the more systemic issues in the management of occupational health and well being in call centres. Whilst policies give an impression of compliance, various working practices may in fact negate their application in practice. In this study, working practices including hot-desking, the insufficient number of health and safety representatives, insufficient team meetings and the lack of team leader training, particularly in Govtcall, represented an explicit departure from policy documents. For instance, as far as reporting of occupational health and well being was concerned, while policies state that CSOs are able to raise occupational health and well being concerns during team meetings, these were considered too short and more focussed on 'targets' and 'KPI's' to represent a good outlet for employees to discuss occupational health and well being concerns. While systems for reporting on occupational health and safety issues were available, in Govtcall the negative stigma attached to reporting could be attributed to the under reporting of occupational health and well being issues; the lack of communication about occupational health and well being issues to the occupational health and safety committee, and the lack of recognition by the general management team about the severity of occupational health and well being concerns. Furthermore, although policies place emphasis on team leaders as playing an important role in managing occupational health and well being on a day-to-day basis, their lack of training in occupational health and well being matters and the conflicting demands placed on them within the call centre environment often saw occupational health and well being under prioritised.

These issues also tie in to the broader concept of *perception* – something that also arose as a contributing factor to negative health outcomes. Findings from this study provide strong evidence of negative health outcomes becoming an acceptable aspect of call centre work. This is further augmented by the lack of recognition on the part of employee, TLs and managers of the health risks present within the work environment. Indeed, most significantly, the perceptual divide between management's views of the extent and significance of negative health outcomes and the experiences reported by CSOs raises important questions surrounding the level of consultation, involvement

and engagement with CSOs in the area of occupational health issues. This again is more so a concern in Govtcall, the unionised call centre where greater levels of engagement and better occupational health outcomes would generally be expected (Bohle and Quinlan, 2000).

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Call Centre Work and Health and Safety Issues

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Abstract

Previous research has found variation in terms of employment outcomes, job satisfaction and career opportunities across various industries, type and size of call centre and different management approaches. This paper continues to explore the work experiences of call centre workers and is based on research in New Zealand conducted in public sector call centres. Insights from focus groups of trade union delegates informed the development of a survey which was circulated across 22 organisation, drawing responses from 845 call centre workers. The findings show that over half of the workers consider their call centre work is enjoyable most of the time, their work is strategically important and there are a number benefits. The benefits include career enhancements, new skills and developing social capital. However, despite the positives described in open ended survey questions and the ranking of attributes important to call centre workers, almost half of the respondents have health concerns about the nature of their work or the call centre workplace. It is this particular finding that is the focus of the paper. It illustrates the need for an occupational health focus to be extended to call centre employment in New Zealand.

Introduction

There has been considerable research on call centres with much academic interest focussed on the labour process used in call centre employment and a common theme of the international research has been the criticism of the call centre workplace and the practices used within it. Many studies demonstrate that stress and the nature of call centre jobs leads to the high levels of staff attrition, sickness and/or health problems (Callaghan & Thompson, 2001, 2002; Holman, Batt, & Holtgrewe, 2007; Taylor & Bain, 1999; van den Broek, 2004).

The extensive range, depth and spread of the literature reflects keen academic interest as call centres provide an interesting and unique loci for exploring contemporary work. The use of standardised work practices in call centres to deliver service with the adoption of technology to measure human performance have provided fruitful research directions. Such research has become more important as the number of call centre employees continues to grow, representing a signification proportion of the paid workforce in many countries. A question behind the research undertaken for this paper is whether call centres provide decent work and whether the negative portrayal of the nature of work in studies located in the UK, Australia and Europe is representative of the New Zealand context.

To date the research undertaken on employment in New Zealand call centres has shown mixed evidence. One study suggests the work meets the New Zealand Department of Labour's definition of precarious work (Hannif & Lamm, 2004). The same data was analysed for

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evidence of occupational health and safety concerns and found in two contrasting case studies that workers facing certain health risks are a result of their call centre work practices (Hannif & Lamm, 2005). An earlier study demonstrated that the adoption of technology in bank call centres was both enabling and beneficial for new skills development (Sayers, Barney, Page, & Naidoo, 2003), while an ethnographic study on a call centre offering social services found call centre workers had problems reconciling their front line work with their non-work lives (Copas 2004). Case study research across six sectors explored the work experience of promoted female call centre workers and found many positive accounts of career trajectories and the call centre work experience (Hunt, 2004a, 2004b, 2006, 2008; Hunt & Rasmussen, 2006 2007; Hunt, Rasmussen, & Lamm, 2006). While Hunt (2008) does not claim such findings are generalisable across call centres, her research suggests a more positive image of call centre work is possible. She found that the call centre work experience of new entrants to the labour market – for example, immigrants, students or return-to-work mothers – can be invaluable for career progression externally or within call centres.

Despite the large body of research on call centres, little is known about the occupational health and safety (OHS) policies and practices used in these workplaces. There has been scant research on the health and safety experiences of New Zealand call centre workers. Hannif and Lamm (2005) sought to address that gap by examining whether the tasks performed and the OHS policies and practices in call centres made the job dangerous or unhealthy for workers. Case study methodology was used to explore such questions in two call centres, selected to epitomise the diversity that exists in the industry. Their findings based on interviews with case study participants and key stakeholders showed that OHS policies and practices in these call centres represented various risks with negative OHS outcomes demonstrated by a lack of organisational compliance with the New Zealand employment legislation (Hannif & Lamm, 2005).

Internationally the occupational health problems in call centres were first noted as early as 1999 when a study was initiated by London School of Economics and International Federation of Commercial, Professional and Technical Employees (FIET). The British affiliate in the banking sector, BIFU at this time had drawn attention to the increased risk of Repetitive Strain Injury (RSI) to which telephone operators are exposed because of their constant use of the computer. The union had also detected that operators in the call centres were losing their voices, with the worst affected being part-time employees who could work up to five hours without a break (Demaret, Quinn, & Grumiau, 1999).

While many studies on call centre work have noted the stressful nature of the job, the concern about health issues in call centres was not systematically researched until Taylor et al. (2003) investigated a former public utility in central Scotland. Their work explored the physical and social work environment of the call centre using a combination of qualitative and quantitative method. This included responses (n=634) to a self-completed questionnaire to gain information from call handlers (74% of respondents) and non-customer facing respondents about frequency of health complaints and reports on their levels of discretion and control. They also sought information on physical working conditions and their findings highlight the importance of having a framework that management and workers agree to work within. While they question whether *"one can generalise from a single case study …. to call centres more broadly",* they do suggest that unless radical change in work organisation in call centres is instituted, widespread work-related ill health will be persistent within the call centre environment (Taylor, Baldry, Bain, & Ellis, 2003).

In their paper on occupational safety and health in the New Zealand call centres Hannif and Lamm (2005) note too, a *"muted discussion"* on the impact of call centre practices on the health of the workers. Similarly our paper explores concerns raised about health in call centre employment. The study was initiated by a trade union seeking to measure quality of work-life, as it gathered evidence about how workers felt about call centre employment. Questions about what attributes of the call centre job are enjoyed, what aspects of the job are important and key worker concerns, were included in the research. More importantly the study asked workers what they would like to change if they could. Initiated in 2008 and completed in 2009, using mixed methods of focus groups and responses to a self-completed email questionnaire, the study gathered responses from call centre representatives (n=845) and union delegates (n= 45). Respondents worked in 22 call centres operated by the public service sector which represents the largest segment of call centre employment in New Zealand.

Health and Safety in New Zealand

Health and safety issues associated with call centre employment must also be seen in its wider context of regulatory and public debate of occupational health and safety (OHS) issues. In the last two decades, there has been considerable pressure to adjust OHS legislation and workplace practices in New Zealand. The pressure has been generated by: a perceived inadequate legislative approach; high profile court cases (legal precedent); an unsustainable rise in accident compensation expenditures; and rising public concerns about work-life balance and stress issues.

The perceived inadequate legislative approach has prompted two major legislative reforms – the Health and Safety in Employment Act 1992 and the Health and Safety in Employment Amendment Act 2002 (see Lamm, 2009). These reforms have moved towards *"one act and one enforcement authority"* and have ushered in a new approach to OHS management with an emphasis on workplace hazard identification and prevention (Hannif and Lamm, 2004). Thereby the main responsibility and accountability for OHS rests primarily with the employer, and this has become a major managerial pre-occupation. The message to take OHS *"seriously"* has also been bolstered by financial penalties and incentives being increased dramatically: there are higher fines available; there have been several high profile court cases awarding large compensations; and organisations are faced with higher accident insurance premiums or rebates associated with a stellar OHS prevention record (Rasmussen and Anderson, 2010). The Amendment Act 2002 also introduced OHS committees for organisations with more than 30 employees, and with active union support, it appears likely that OHS issues will be a common agenda item in many managerial meetings (Lamm, 2010).

In terms of call centre employment, the focus on work environment, stress and work-life balance has been particularly important. There has been more emphasis on ergonomics and noise (hearing aids subsidies being a major accident compensation expenditure), with the Department of Labour sponsoring several intervention campaigns. Stress and fatigue are now recognised as a potential work hazard in the New Zealand legislation, following a handful of legal precedent creating court decisions where employers received substantial fines (Caisley, 2004: 71). This has put the spotlight on the intensive nature of working in call centres, and countering stress and fatigue has been a topic at conferences held in New Zealand and Australia (Hannif & Lamm, 2005). While ergonomics, stress and fatigue are obvious targets in a call centre environment, some research has suggested that some work-life balance issues can be solved by appropriate call centre scheduling and managerial attendance to employee needs (Hunt and Rasmussen, 2006).

Research Methods and Findings

Qualitative insights about the issues facing public services call centre workers were first gained by holding focus groups with trade union delegates. Three focus groups attracted around 45 delegates from across New Zealand, and their discussions and concerns about call centre work were recorded and transcribed. These transcripts were analysed and used to develop the questionnaire that had been used in earlier surveys of call centre workers (see Hunt 2008). An internet-based questionnaire link was emailed to delegates across 25 call centres, and members were encouraged to complete the survey. At most of the call centres, management supported the survey being completed during work time, which probably assisted in 845 surveys being returned. Most of the respondents were entry-level workers from 17 different call centres. The findings from the survey are presented below, using a combination of statistical software SPSS and Nvivo.

Respondent Characteristics

Seventy nine percent of respondents completing the survey were employed full time (see table 3), and seventy four percent belonged to the largest union. Nineteen percent (159) recorded that they did not belong to any union, and 2% (16) reported they belonged to an *"other"* unspecified union. Cross tabulations shows that 23% of those who do not belong to the union were employed part time.

Table 1: Gender (N=845)

	Frequency	Percent
Female	620	73.4
Male	208	24.6
Missing	17	
Total	845	100.

Table 2: Position in Organisation

	Frequency	Percent
CSR	679	80.36%
Other	71	8.40%
Professional/Technical	40	4.73%
Team Leader	34	4.02%
Case Coordinator	1	0.12%
CC Manager	1	0.12%
HelpDesk	1	0.12%
Representative	1	0.12%
Social Worker	1	0.12%
Missing	16	1.89%
Total	**845**	**100.0%**

Table 3: Employment Contracts

	N	Percentage of Total
Full Time	671	79%
Part time	143	17%
Fixed Term	5	1%
Missing	26	3%
	845	**100%**

Qualification Levels

Respondents demonstrated that they were reasonably well qualified, with 32% having University-level qualifications, 21% having college and polytechnic diplomas, and 11% having trade certificates (see Table 4).

Table 4: Tertiary Qualifications

	Frequency	**Percent**
University	274	32%
College	176	21%
Polytechnic Diploma	179	21%
Other Trade Certificates	97	11%
Missing	119	14%
	845	**100%**

Importance of Call Centre Work

The questionnaire was designed to seek to understand the attributes of the call centre job that were important to workers. Employees were asked to agree or disagree with a number of statements as to what was important in the job using a scale of 1 to 5 where 1 was *strongly agree* and 5 was *strongly disagree.* Table 5 below notes the mean rating of all responses. The strongest positive response was a mean of 2.00 to the statement that *"call centre work is strategically important"*. This was followed by *"the supervisor is helpful"* (mean of 2.05). The strongest negative reaction (disagree) was 4.02 recorded against the statement that *"being time efficient is more important than fully addressing the customer query"* (see Table 5).

Table 5: What is important in the Call Centre Job

Statements that workers were asked to rate on a scale from 1 to 5 (with 'strongly agree' being 1 and 'strongly disagree' being 5)	N	Mean Ratings
Being time efficient is more important than addressing customer query	827	4.02
Outsourcing is a concern	825	3.77
Pay rates are good	822	3.25
Rest of Org is positive to the call centre	825	3.09
Managers listen to my concerns	828	2.97
I have control over my work	826	2.90
Monitoring is meaningful	822	2.89
HR staff are helpful	823	2.64
I enjoy my work most of the time	828	2.48
Unions are important	828	2.41
Environment is good	825	2.41
Technology enables me to do my job	831	2.29
I have learned technical skills	825	2.21
Collective Bargaining is important	821	2.14
Supervisor is helpful	830	2.06

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Collective Bargaining is important	821	2.14
Supervisor is helpful	830	2.06
Call centre work is strategically important	827	2.00

The results indicate that the call centre workers consider their work *is important;* that they have some control and discretion over their jobs; and that they learn technical skills. A neutral response to *"monitoring is meaningful"* contrasts many of the international studies on this aspect. (See for example, Deery, Iverson, & Walsh, 2002; Demaret et al., 1999; Holman, 2002; Houlihan, 2000; Kjellseup, 2001; Poynter, 2000; Union Research Centre for Organisation and Technology, 2000; van den Broek, 2004; Yeuk-Mui, 2001)

Figure 1: Most Important Reasons for Seeking job in the Call Centre
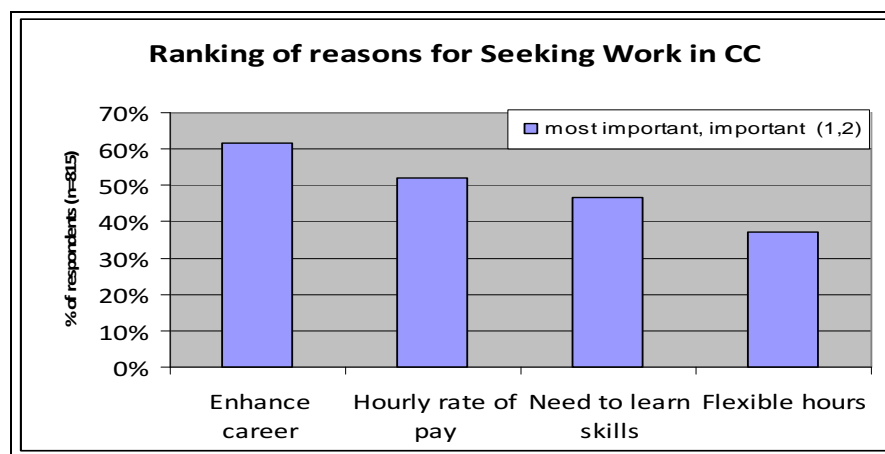
Why Work in a Call Centre?

Much of the international research which deplores call centre employment has not established why workers continue to seek jobs at call centres. To understand more about this motivation, respondents were asked to rank a number of statements about what had attracted them to work in their current call centre. The four reasons ranked most important or important (1 or 2) are noted in Figure 1 below. While hourly rate of pay was noted by half of the respondents, just over 60% ranked "*enhancing their careers*" as most important, with the need to learn skills ranked as number three. This finding contradicts the international research findings which demonstrate career development opportunities are not consistent with working in call centres.

What are the Key Benefits of Call Centre Work?

To understand more about what call centre employees found positive about their work, an open ended question asked respondents to describe the key benefits of their job in their particular call centre. This generated a total of 756 written responses (88% of all respondents), and the analysis of these responses used Nvivo software to identify a number of key themes. The analysis is based on developing a code book and establishing nodes in order to group responses. The Nvivo references show the number of references to the particular concern and a measure of the percentage coverage of the text. Table 6 shows that new *skills and career prospects* followed by *conditions of employment* and then *job satisfaction* are important to workers. The latter includes many references to flexible hours and hours that suit individual workers (see table 6).

Table 6: Breakdown of Themes Describing the Benefits of Call Centre Work (as coded with Nvivo Software)

		No. of References
New Skills\Career *Node 1*		**404**
	Career Prospects	107
	Knowledge of Organisation's Business	97
	Communication, Customer Service, People Skills	96
	New Skills Learned	61
	General Work Experience	60
	Computer Skills	33
	Working for Govt Dept or Corporation	33
	Confidence - Personal Development	24
Job Satisfaction *Node 2*		**147**
	Helping People	49
	Working with and Meeting Different People	40
	Fulfilling Work	27
	Variety of Work/Diverse Roles/Challenging Work	23
	Applying my Skills and Knowledge	4
	Consistency	4

Conditions of Employment Node 3		236
	Pay/Financial Incentives/Benefits	84
	Hours Suit Me	79
	Flexible Hours	30
	Conditions of Employment	25
	Other	18
Environment		165
Node 4	Environment	68
Node 5	Training and Support	54
Node 6	Physical Environment	37
Node 7	Fun/Friendly Place to Work	6

Verbatim responses demonstrate too that an important attribute of the call centre job is that it provides career prospects. Under the node *"skill/career"* there are a total of 404 references with *"career prospects"*, *"knowledge of the business"*, *"customer and people skills"* being most frequently noted. The references to conditions of employment are more widely spread however *"hours that suit"* and *"flexible hours"* contribute to over one hundred references. The third largest node that categorises the most frequently mentioned benefits is *"job satisfaction"*. This includes many mentions of *"helping people"* illustrating the importance of people gaining satisfaction from helping others in life. The following are illustrative examples of the type of verbatim responses recorded in Table 6 and 7.

Table 7: Examples of Responses

Node 1: New Skills/Career Prospects
Learning about policies, government, work environment.
A great deal of scope for career development.
Gaining experience to further my career.
Work is immediate and satisfying.
I enjoy fast pace of work.

Node 2: Job Satisfaction
Huge sense of satisfaction when I know I've been instrumental in making a difference to someone.
The variety of work and the challenges provided by the role I am in.

Node 3: Conditions of Employment
Flexible Hours:
Being a working Mum, the hours suit me because I can take care of my youngest child, but at the same time be able to work. Centrally located and easy to get to work.

Node 4: Environment
The environment is phenomenal, awesome bubbly and colourful workplace, the activities and benefits for coming to work not only makes you want to go to work but most importantly helps you feel comfortable. Fantastic working environment.

Node 5: Training and Support
The training was a good introduction to the role; it was in depth and good support whilst training.
I think that the on-the-job training is absolutely fantastic and the fact that this is always evolving and changing to meet the needs of staff is brilliant.
You learn a lot from your workmates when you are in a contact centre environment.

Health Concerns in Call Centres

Following concerns raised by union delegates about health issues in call centres in the focus groups, an open-ended question was included in the survey with respondents being asked if they had any health concerns. If they replied yes they were asked to describe them. Table 8 below shows the results of categorising the open-ended written responses using Nvivo software.

The single largest response was OOS (occupational over-use syndrome) with 109 references made to OOS in the open-ended responses. The text coverage is slightly misleading as many responses were simply OOS. Some of the quotes below speak about:

> *"Overuse (sore back, over use of hands, sore eyes, and sore tailbone), RSI in the wrists and arms, having to sit all day at a desk, hunching over all the time as well as eyesight deterioration from using keyboard and VDU all day."*

The physical working environment is the next most frequently mentioned concern with 89 references, and the most frequently mentioned one being the air conditioning. Stress and mental health concerns are a frequently described health issue, and there are 67 coded references to this. The references to stress are mainly noted as different aspects of the job, for example, "constant noise in the ear", *"constant call after call"*, *"system failures"* and *"dealing with difficult calls and managing relationships with team leaders"*. The physical working environment is also included in mentions of stress. One quote, *"being treated more as a labour unit rather than an individual"*, draws attention to the factory like organisation of a call centre operation. Contrasting the earlier neutral responses to a question on monitoring and supervision, *''monitoring practices and team leaders"* are noted as the cause of a stress and *"intimidation"*.

An often repeated quote mentions that management do not recognise the stress that customer service operators are under as attested by the following quote: *"the managers here don't fully understand the stress our call centre staff are under from their customers"*.

Table 8: Breakdown of Themes Describing Health Concerns

Nvivo Analysis of Text References by Node				
Node No.	**Description of Node**	**% Coverage Text**		**Total References**
1	***OOS Related***	4.01%		139
	• OOS/RSI mentions		109	
	• Sore fingers/wrists		13	
2	***Physical Working Environment***	7.64%		89
	• Air-Conditioning		25	
	• Seats/Equipment		15	
	• Easy to get sick in CC		15	
3	***Stress /Mental Health***	4.65%		67
	• Stress		54	
	• Mental Health		13	
4	***Eyesight/ Hearing Related***	2.40%		57
	• Eye/Vision Impairment		40	
	• Hearing Problems		7	
5	***Sedentary Nature of job***	3.09%		46
			17	
6	***Back, Neck, Shoulder Complaints***	1.84%		37
	• Back		33	
	• Neck/Shoulders		4	
	•			

7	*Other*	2.62%		31
	• Headaches		4	
	• Sore Throats		2	
	• Posture Problems		2	
	• Exhaustion		1	
	• Bullying		1	
	• Breaks		3	
8	*Sick Leave Issues*	0.71%		9
TOTAL NUMBER OF REFERENCES/MENTIONS CODED				**247**

What Should Change

One of the last questions in the questionnaire asked respondents to describe what they would just change if they could change just *one* thing at their current call centre workplace. This question generated a total of 199 responses which were also analysed and sorted into nodes using the Nvivo software (Table 9). The most commonly recorded response was around the *"conditions of work"*. This included *"pay"*, *"flexitime"* and *"hours of work"*, with the latter being noted more frequently than pay. Management practices, the nature of work and the use of KPI's are another aspect that call centre workers would like to change. There are 31 mentions of the environment and team work, while health concerns are only raised 11 times. This is somewhat surprising given that so many respondents described concerns about health issues in the previous question. Va*riety of work* and *"upskilling opportunities"* are mentioned confirming the desire to seek job variation given the repetitive nature of the work (refer to Tables 9 and 10).

Table 9: Examples of Regarding Specific Health Concerns

NODE NO	Quotations Regarding Specific Health Concerns
1	Repetitive work has lead to some discomfort in my arms, back and hands.
	RSI in wrists and arms, etc.
	Overuse (sore back, over use of hands, sore eyes, sore tail bone).
	Just normal hazards when working with keyboard/computer.
2	Just the normal OOS issues, repetitive work.
	Illnesses spread through air conditioning.
	Working in such a closed environment there are often times when you get sick due to so many other people being sick and the air conditioning carries this round.
	People having to come into work because of the high level of calls, and most of the people at the call centre are sick. This puts stress on people and others get sick at the same time.
	Women workers having to walk alone along dark streets after shifts due to lack of parking provided.
3	Mental and emotional stress are not "recognized" enough.
	The job is stressful and not enough recognition has been given to this.
	Constant noise in the ear, constant call after call, system failures cause lots of stress.
4	Stress! Both from customers, and management, not a day goes by where we don't get abusive callers. The nature of our customers range from beneficiaries, mental health patients to ex prisoners, as well as immigrants with little English.
	Deterioration of eye-sight from using and concentrating on computers daily for long periods of time.
	Personally my eyesight has gradually gotten worse but that's because my previous job didn't involve me sitting in front of a TV screen all day.

	I have also become slightly short sighted since working here. Up until earlier this year I had pretty much perfect eye sight. Hearing tends to be affected with the different volumes of call coming in daily which give me migraines sometimes but not often. Also vision gets affected with constantly looking into a computer PC. Computer damaging my eye-sight. Also head phones can affect my hearing on one side.
5	The inactivity of the job. I have gained a lot of weight as well as health problems since joining. Sitting constantly all day without being able to get up and move around while doing work. Increased weight due to sitting for the whole day.
6	Back issues - sitting on a phone all day. Long hours on phone/computer can cause back problems. Tensed back and shoulders will lead to back pains and headaches. Sitting for long periods - lower back pain, aching arms and upper back pain from repetitive typing.
7	I get migraines from the lights. Headaches from staring at a PC constantly. Voice strains, constant talking can be aggravating to the voice. Can get cancer with earphone close to your brain.
8	Sick leave is high. This may be a symptom of Call Centre work. High rate of sick leave.

Table 10: Analysis of Key Themes: Responses to Question about what would you change?

Node Description	References included in the node	No. of Refs (% text)
Nature of Work	• Specific mention of job tasks/duties. Includes mention of need for variety; dealing with difficult customers. • Desire to *"upskill"*/train/ do *"greentime work"*/move around departments.[1]	119 (11.4%)
KPIs, QC and Compliance Issues	• Includes mention of any *"AHT"* (Average Handling Time). • *"ADH"* (Adherence); *"CHT"* (Call Handling Time); and other QC measures that were part of KPI's. • Key Performance Measurements / reporting / monitoring / targets / performance appraisal measures.	87 (6.5%)

Conditions of Employment	• Any mention of general conditions of employment (e.g. pay levels, hours, workloads, rosters).
	• Annual leave provisions (allowances for *"flexi-time"*, breaks, staffing levels).
	• More specifically:
	   o Pay (47%)
	   o Flexi-time (32%)
	   o Hours of work (48%)
		174 (7.4%)

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[1] May also be double coded under "Management Practices"

Discussion

Given the international evidence on call centre employment, findings that suggest there are health concerns in call centres operated in New Zealand should not be surprising. The problems of stress, repetitive strain injury or occupational overuse syndrome as described above are similar to findings reported elsewhere. More surprising given New Zealand's employment law and emphasis on safety and health in employment is that these call centres are operated by the public sector, usually seen as an exemplary employer.

Apart from the exploratory study by Hannif and Lamm (2005), health issues in call centres were not detected in other New Zealand research. Hunt's research over four years found some evidence of concern from management about healthy food snacks because staff tended to be over weight which could be attributable to stress and the sedentary nature of the work (Hunt, 2008). The research finds contradictory evidence about the quality of the call centre work occupation. Workers, despite stated concerns about the occupational health of their jobs, seem to enjoy working in call centres. They find that the employment experience is useful for enhancing their career prospects. This suggests other attributes of the job outweigh the concerns workers may have about the health risks associated with the job.

The responses to questions about what workers enjoy and why they choose to work in call centres provides some clue as to attributes considered important to workers. Flexible work practices accommodating some work life balance, opportunities to meet and interact with people and work experience helping to gain employment elsewhere provide rational explanation as to why employees work in a call centre. What the research does not show is how long call centre workers stay at such workplaces and whether the turnover associated with the job helps manage the health issue or at least keeps it under wraps. Perhaps turnover helps to maintain the health of workers and is a necessary part of call centre employment?

Conclusion

It is clear that workers have mixed reactions to their employment in these public service call centres. Many enjoy the social and interactive nature of their work and claim that one key benefit is the job satisfaction they derive from assisting people over the phone. Some suggest they learn new skills and can enhance their career prospects by recording such a work experience on their CV's. Moreover, almost half of the respondents, however, feel that there are health concerns in their call centre job, with the key ones being Occupational Overuse Syndrome and stress. Surprisingly, when asked about the changes workers would introduce if they could, "addressing the health concerns" was not mentioned frequently. The physical environment, however, is noted as problematic with a key complaint being the operation of the air conditioning, not least for its role in the spread of sickness.

The research does not provide insights as to why workers who have health concerns about their employment would continue to work in the call centre. Further research needs to ascertain the choices workers have regarding other employment opportunities and establish whether call centre work is a job of last resort or a temporal solution to employment for a limited period. The research should seek to measure the impact of the health concerns on both the workers and the organisation. Answering such questions may be helpful for deciding whether this type of employment represents decent work.

Finally, under the current occupational health and safety regime in New Zealand, it is evident that management is not taking responsibility for the health of their workers in the featured call centres. This could be taken up more proactively by the union delegates but with New Zealand currently experiencing rising levels of unemployment, it seems that job security may be a more important attribute than healthy employment.

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Flexible Work Schedules and Employee Well-Being

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Abstract

This paper aims to improve understanding of the relationship between the use of flexible work schedules and employee well-being. Using a sample of 336 employees operating on two flexible work schedules (flexitime and telecommuting), clear evidence was found of the positive relationships between flexible work practices, job satisfaction and work/life balance. The results of the study also indicate that flexitime schedules can reduce the impact of role overload and job-induced stress. However, the findings suggest that telecommuting does not always enhance role overload and work/life balance. In addition, employees operating under flexitime work schedules displayed significantly higher levels of work/life balance than their counterparts utilising telecommuting arrangements. The study findings are discussed in relation to theories of employee flexibility and the implications for employees and organisations are addressed.

Keywords: Flexible work arrangements; work schedules; well-being; job satisfaction; work/life balance.

Introduction

There have been many changes to global business, international work forces and in employees' lives that have led to increased concern for the boundary between work and non-work. For example, the challenges created by the present financial crisis have led to more international organisations focusing on flexibility as an alternative to redundancy (Andrews, 2009). A further example of the ambiguity of the pursuit of balancing work and non-work is demonstrated by the increasing incidence of dual career couples, dual income families, and single parent families with either child or elder care responsibilities (Baird, 2006). Indeed, the number of working individuals with children or elder dependents for which they need to care seems to be increasing (Pocock, 2004). Furthermore, a greater number of employees telecommute (work from home), or bring work home, thus blurring the boundaries between work and non work (Hill, Hawkins, Ferris and Weitzman, 2001). Together, these factors have resulted in employees spending more time attempting to balance multiple responsibilities, and ultimately, increasing the concern for the boundary between work and personal life. To adapt to these changes, many organisations have implemented flexible work arrangements to help employees balance their work and non work lives.

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The impact of flexible work arrangements on employee and organisational outcomes has been well documented. For instance, research (Rubin, 1979; Ronen and Pimps, 1981; Stains and Pleck, 1986; Barber, Dunham and Formisano, 1992; Pierce and Dunham, 1992; Baltes, Briggs, Huff, Wright and Neuman, 1999; Saltzstein, Ting and Hall Saltzstein, 2001; Kossek, Lautsch and Eaton, 2006; Baker, Avery, and Crawford, 2007) examining the impact of flexible work arrangements has generally shown that these initiatives have a positive influence on the work and non-work attitudes of employees. However, these results are not supported by other studies. For example, empirical investigations (e.g., Hicks and Klimoski, 1981; Dunham, Pierce and Castaneda, 1987; Hill, Miller, Weiner and Colihan, 1998) exploring the work related benefits of flexible work arrangements have concluded that in some cases these initiatives can have little influence on employee attitudes.

The primary objective of the research was to assess the relationships between flexible work schedules and employee well-being of office based employees. To accomplish this objective a survey questionnaire was administered to office based employees in an Australian organisation. Evaluating the relationship between flexible work arrangements and employee well-being is appropriate as Australia is still generally considered to be underrepresented in the work-life literature (Baird, 2006). Four dimensions of employee well-being are assessed for the purpose of this research: work/life balance, role overload, job- induced stress and job satisfaction.

Theory Development and Hypotheses

Evidence presented in the literature suggests that greater autonomy provided to employees with the use of flexible work schedules can provide employees with positive outcomes (Ronen and Pimps, 1981; Pierce, Newstorm, Dunham and Barber,1989; Baird and Litwin, 2005; Baker et al., 2007). In addition, it is also been suggested that greater work schedule flexibility will lead to enhanced work/life balance perceptions for professional employees (Tausig and Fenwick, 2001). Flexible work programmes offer employees more flexibility and work schedule control than traditional working hours (Ronen, 1981). Therefore, it is logical to assume that organisational programmes that offer employees greater flexibility (e.g., flexitime and flexiplace) should provide employees with a better ability to balance work and non work responsibilities compared to their counterparts working on traditional fixed hour schedules.

Flexitime and Well-being

Flexitime work schedules (also referred to as flex-time or flexible hours) have been linked to numerous work and non-work benefits for employees. The review of the work/life literature revealed that flexitime schedules that offer the most benefits for employees are those with short core hours, the accumulation of hours, and the ability to change schedules daily or weekly (Olmstead and Smith, 1994). While there may be some limitations when utilising flexitime work schedules (Bailyn, 1993; Pocock, 2004), working flexible hours is generally considered to have a positive influence on employee attitudes such as job satisfaction (Ronen 1981; McGuire and Liro, 1986). Furthermore, flexitime can enhance work and personal life balance (Hayman, 2009). Indeed, flexible work schedule research (Owen, 1977; Pierce and Newstrom, 1980; Tausig and Fenwick, 2001; Saltzstei et al., 2001) has established a positive relationship between flexitime

operating schedules and work and non-work integration. Better integration of work and personal life leads to less work/life conflict which can have a positive impact on job related stress (Baird and Litwin, 2005). Consequently, it is predicted.

Hypothesis 1: The utilisation of flexitime work schedules will be positively related to employee well-being.

Flexiplace and Well-being

The impact of flexible work schedules, such as flexitime on employee attitudes, has received a great deal of attention (Hicks and Klimoski, 1981; Ronen, 1981; Hill, et al. 1998; Pierce, et al. 1989; Eaton, 2003). In spite of the abundance of literature exploring flexible work hours, the impact of working at home, or telecommuting has not received the same attention (Rasmussen and Corbett, 2008). One study by Hill et al, (1998), which is, generally, considered to be the first in the world to compare virtual office workers with their office-based counterparts, found telecommuting had moderate effects on employee productivity, flexibility and work/life balance. Other more obvious employee benefits of flexiplace initiatives include reduced commuting time, reduced stress, role overload and more time for personal and family activities (Kossek et al., 2006). Moreover, research (Grzywarc and Marks, 2000) has found in certain situations telecommuting can help manage role overload. Flexiplace schedules also help support diverse work and life patterns of employees and improve job satisfaction and well-being (Felstead, Jewson, Phizacklea, and Walters, 2002; Baker et al., 2007). Most research examining the impact of flexiplace initiatives suggests that the effect on work and non-work attitudes of employees is similar to flexible work schedules, such as flexitime (Rodgers, 1992). Therefore, it is conceivable that flexiplace or telecommuting work arrangements will also positively impact employee well-being. Consequently, the subsequent relationship between flexiplace work schedules and well-being is expected.

Hypothesis 2: The utilisation of flexiplace (telecommuting) work schedules will be positively related to employee well-being.

Methods

Research Setting and Participants

An Australian university was selected as an appropriate setting to conduct the study. The organisation is a large employer of office-based administrative staff with comprehensive access to flexible work schedules. Indeed, the participating university has utilised a variety of flexible work arrangements and work/life programmes and these are entrenched in the organisational culture. Furthermore, employees have had access to flexible work schedules including, flexible hours and working from home, since 1990. Consequently, this setting provides a unique opportunity to assess how flexible work practices influence the well-being of office based employees.

Respondents in the study were 336 administrative employees. 211 of the survey respondents used flexitime work schedules, with 125 respondents operating on flexiplace work schedules. A prominent feature of the sample characteristics was the majority of respondents were female (64 and 60 percent of respondents respectively), reflecting the nature of the administrative staff employed within the universities (*Healthy Life Style Office*, 2002). The second feature of the study sample related to job function; specifically, office-based administrative employees make up a large percentage of the non-academic university workforce, and indeed, a further feature of job function was that 93 percent of the incumbents were in the category of administrative and professional staff. Another feature of the sample was that all age groups were relatively well represented. A final feature of the sample was that over 50 percent of respondents in both organisations had children living at home and nearly 12 percent of the survey staff had eldercare responsibilities. Overall, the characteristics of the sample generally represented the demographics of the universities office based employees.

Measures

Work/Life Balance
Employee work/life balance was measured with a 15 item scale adapted from an instrument reported by Fisher-McAuley, Stanton, Jolton and Gavin (2003). The original scale consisted of 19 items designed to assess three dimensions of work/life balance: work interference with personal life (WIPL), personal life interference with work (PLIW), work/personal life enhancement (WPLE). Respondents were asked to indicate the frequency of feeling a particular way *during the past three months* using a seven point time related scale (e.g., 1=Not at all, 4=Sometimes, and 7=All the time). The factor analysis of the items confirmed the three dimensions of the work/life balance scale. Cronbach alpha values for the three factors were 90 for WIPL, .86 for PLIW, and .77 for WPLE. Higher arithmetic means indicate that respondents report having experienced that situation more frequently. For the WIPL and PLIW, sub scales higher means are purported to indicate lower levels of work/life balance. The WPLE sub scale is worded positively and higher means indicate higher levels of perceived work/life balance.

Work Role Overload
Role overload was measured using a six item scale reported by Arynee, Srinivas and Tan (2005). Work role overload is defined as a sense of feeling that there is too much work to do in the time available. Responses were obtained on a seven point response scale (anchored from 1=strongly disagree to 7=strongly agree). Example items include: 'It often seems like I have too much work for one person to do' and 'there is too much work to do everything well'. An arithmetic mean of the six role overload items was obtained (coefficient alpha = .87).

Job-induced Stress
A measure of job-induced stress was used based on an instrument previously reported by House and Rizzo (1972). The seven item instrument was adapted from a six point scale to a seven point likert scale (1=strongly disagree to 7=strongly agree) for consistency with the other measures in this study. Previous research (Macky and Boxall, 2009) using the measure of job-induced stress found acceptable reliability statistics for the instrument. Higher scores represent greater felt stress and the coefficient alpha obtained was .90.

Job Satisfaction
The overall level of job satisfaction was assessed using a section of the Job Diagnostic Survey (Hackman and Oldham, 1975). Using samples of white collar professional employees in a series of studies with office workers, the five item scale reported an overall internal reliability coefficient of 0.77 (Oldham, Hackman and Stepina, 1978). These results provide some confidence for using this instrument, which is a popular method for measuring global job satisfaction. An overall, rather than a facet measure, was chosen for the use in this study because the researcher is interested in how work/life balance relates to job satisfaction as a whole, rather than how work/life balance relates to specific aspects of the job. The instrument developed by Hackman and Oldham (1975) consists of five items referring to satisfaction with work, the job and how often they (the employees) feel like quitting their job. Two items are reversed scored. Responses were made on a seven point Likert scale (ranging from 1=strongly disagree to 7=strongly agree). An arithmetic mean of the five job satisfaction items was acquired with a coefficient alpha of .85.

Flexible Work Schedule
The analyses are based on 336 respondents who reported having used either flexitime or flexiplace (telecommuting) work schedules for a minimum period of one year. Of these, 211 employees utilised flexitime arrangements and 125 employees worked on flexiplace schedules, generally from a home office. Employees were asked how many days per week they worked from home. All employees worked from a home office for a minimum of two days per week. The instrument used to measure the use of flexible work schedules was adapted from an instrument reported by Hayman (2009). The three items relating the utilisation of individual work schedules were measured on a seven point scale (coefficient alpha = .91).

Analyses and Results

To test the research hypotheses and the overall fit of the model, structural equation modelling or a path analysis approach was used. AMOS (Analysis of Moment Structures) was employed to estimate path coefficients among the variables while simultaneously removing the effects of method factor bias. Modelling the two groups simultaneously provides more efficient parameter estimates than two single-group models (Bollen and Long, 1993), while also providing a test for the significance of differences between the two groups. Following the recommendations of Bollen and Long (1993) to report multiple fit indices, four goodness-of-fit measures were employed simultaneously in the assessment of model fit. First, the normed chi-square (chi-square ÷ degrees of freedom), in which a ratio of between 1.0 and 3.0 indicates an acceptable fit (Carmines and McIver, 1981) was employed. Furthermore, the Adjusted Goodness-of-Fit Index (AGFI) and the Comparative Fit Index (CFI) were also employed in the analysis. For the AGFI and CFI a value above .90 indicates an acceptable model fit (Bentler and Bonett, 1980). Lastly, the root mean square error of approximation (RMSEA), where a value of 0.06 or less represents a close fit, and the RMSEA should not exceed 0.10 (Bentler, 1990).

Descriptive statistics and bivariate correlations for all the study variables were assessed using seven point scales, with means score ranging from 4.89 to 3.60. Higher means indicate higher levels of the particular variable. All of the examined variables are significantly inter correlated, but not above the recommended level of .65. Flexible work schedules are significantly correlated to WIPL (r = .46, p < .001), PLIW (r = .28, p < .001), and WPLE (r = .44, p < .001), role overload (r = .30, p < .001), job-induced stress (r = .36, p < .001) and job satisfaction (r = .54, p < .001).
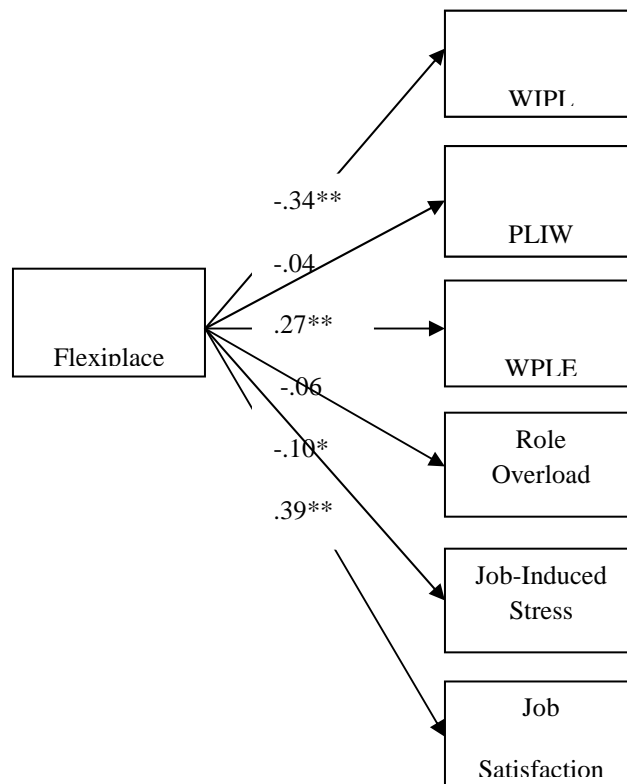
Figure 1: Path Model (n=211)
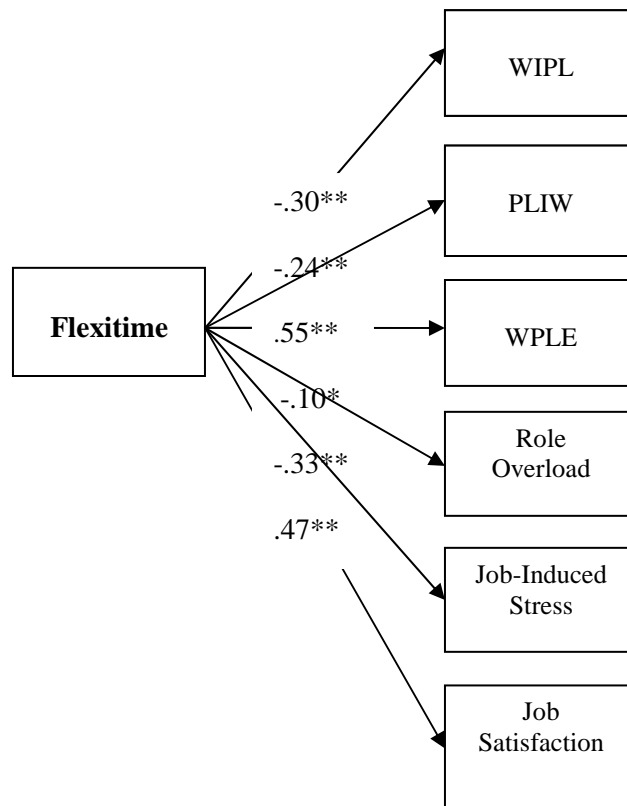
Notes:	a. Standardised estimates of the path coefficients are shown. Non significant path is in bold.
	b. χ² /df = 1.144, AGFI = 0.929, CFI = 0.977, RMSEA = 0.041
	c. WIPL = Work interference with personal life, PLIW = Personal life interference with work, and WPLE = Work and personal life enhancement. d. * p < .01, and ** p < .001.

The results presented in Figure 1 indicate that the conceptual model, and the data generally fit well (normed χ² = 1.144, AGFI = 0.929, CFI = 0.977, RMSEA = 0.041). Furthermore, the standardised path estimates reported in Figure 1 show significant coefficients at the p < .01 level. The results of the path analysis suggest flexitime work schedules were significantly related to the three work/life balance dimensions of WIPL, PLIW and WPLE. Indeed, flexitime was significantly related to role overload, job-induced stress and job satisfaction. These findings indicate flexitime work schedules generally enhance employee well-being. Consequently,

Hypothesis 1 was fully supported; suggesting flexitime work schedules are positively related to employee well-being.

The results presented in Figure 2 indicate that the data generally fit well (normed $\chi^2 = 1.240$, AGFI = 0.910, CFI = 0.937, RMSEA = 0.061). Moreover, the majority of the standardised path estimates reported in Figure 2 show significant coefficients at the $p < .01$ level. The path analysis results suggest that flexiplace work schedules were significantly related to two of the work/life balance dimensions of WIPL and WPLE. However, flexiplace schedules were non-significantly related to PLIW. These results imply that flexiplace schedules do not reduce the impact of personal life interference with work. Indeed, flexiplace arrangements were non-significantly linked to role overload and only marginally significant to job-induced stress. Hence, the findings suggest telecommuting did not positively impact role overload. Furthermore, there was a positive relationship found between flexiplace work schedules and job satisfaction. Consequently, Hypothesis 2 was marginally supported, which indicates flexiplace work schedules are only moderately related to employee well-being.

Figure 2: Path Model (n=125)

Notes: a. Standardised estimates of the path coefficients are shown. Non significant path is in bold.

      b. $\chi^2/df = 1.240$, AGFI = 0.910, CFI = 0.937, RMSEA = 0.061

      c. WIPL = Work interference with personal life, PLIW = Personal life interference with work, and WPLE = Work and personal life enhancement.

      d. * $p < .01$, and ** $p < .001$.

Discussions and Conclusions

The main focus of this paper was to explore the relationships between flexible work arrangements and well-being with a sample of office based employees. The hypotheses presented in this paper predicted that flexitime and flexiplace work schedules would be related to three dimensions of work/life balance: WIPL, PLIW and WPLE. Indeed, the expectation that flexitime would be linked to WIPL, PLIW, and WPLE was substantiated by the statistical results, although flexiplace schedules were not significantly related to PLIW. Overall, the results demonstrate the importance of organisational flexible work policies to reducing the negative impact of work conflicting on personal life and personal life interfering with work. In addition, these results provide empirical confirmation that flexitime and working from home was generally associated to positive enhancement of personal life on work and vice versa. With the exception of a small number of researchers (Eaton and Bailyn, 2000; Daves, 2004; Hayman, 2009), limited attempts have been made to empirically assess the importance of flexible work policies to positive experiences and well-being of office based employees. These findings make a significant contribution to the work/life literature as it is likely that organisational flexibility policies are related to a host of work and non work attitudes of employees (Eaton, 2003; Voydanoff, 2004). Consequently, future researchers may wish to consider the importance of other attitudinal variables when assessing flexible work practices.

The study also has implications for human resource practitioners. The results of this study imply that flexible work schedules make a significant contribution to employee well-being and to the ability of employees to balance their work and personal life. Consequently, an implication for the university managers and human resource practitioners who want to develop comprehensive work/life policies is to how to improve the degree of schedule flexibility provided to professional employees. In addition, university leaders may consider the importance of the type of organisational flexibility policies implemented, and attempt to provide a culture that supports and encourages the use of flexible work arrangements. Hence, there is an opportunity for university administrators to follow the requests of respondents who suggested that training programmes might improve the understanding of supervisory staff on the importance of schedule flexibility and access to flexible work policies for office based employees.

The study results should be interpreted with the following limitations. Firstly, the simultaneous path analyses results should be interpreted with some caution as the better model fit of the flexitime data may be attributed to the different data set numbers. Secondly, the study sample was limited to 336 administrative employees from the university, albeit at four geographically dispersed locations. Therefore, future researchers may wish to test the hypotheses in another university environment, or in other industries that utilise flexible work schedules with office-based professional employees. Thirdly, a cross sectional research design was employed, so as a result, causality among the variables cannot be determined, but inferences can be made from the associations. The fourth aspect of the study is the self-report data collected in the quantitative questionnaire to assess the study variables. Although this method bias, due to the use of a self-report approach, may have possibly inflated the magnitude of the observed correlations, this effect would not alter the statistical significance of the observed linkages between the study variables (Carmines and McIver, 1981; Kent, 2001). Indeed, the constructs included in the

present study were assessed by asking employees to report their own attitudes and perceptions, as work/life balance is in the eye of the beholder (Fisher, 2001). Consequently, the use of self-report questionnaires is an appropriate and convenient method for collecting the study data.

Despite the potential wealth of knowledge presented in this study, the research has arguably only begun to elucidate the complex relationships that might transform management practice and research interest. Indeed, the findings presented in the article are possibly suggestive, but an important consideration is that the results are not definitive. Furthermore, it is possible that alternative conceptual paradigms of work/life balance may be explored in future studies. Future researchers might also consider the model developed for this research across different cultural settings, in particular where flexible work arrangements are utilised by office-based employees, which may provide further understanding and consolidation of the study findings. Moreover, there may be the need for the current investigation to be extended by thorough empirical research that has the potential to refine work/life theory and design, and add knowledge to management practice. Finally, continued research on work/life balance has immense potential for improving organisational efforts to enhance the quality of people's work and personal lives.

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Commentary - Occupational Stress and Workers' Compensation: Getting out of the kitchen?

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Introduction

Most people accept that employers should compensate workers for work-related injury and disease. Workers' compensation law defines a work-related injury as an "injury arising out of and in the course or employment". The rule seems clear – if there is evidence that someone has suffered a work-related injury, they should be compensated for this harm or loss by their employer. However, workers' compensation has never been straightforward.

When it started a hundred years ago workers' compensation provided compensation for workmen who suffered physical injuries in work place accidents. Psychological injury, occupational diseases and conditions that arose over time were simply not accepted as work-related.   Over the years since coverage has been expanded to include psychological injuries as well as occupational disease but the need to prove that the injury is somehow caused by the employment remains. Before workers receive workers' compensation, they must prove that the injury or disease is work-related. As Arthur Larson rightly pointed out forty years ago, the problem of obtaining workers' compensation was always easier when the injury was 'physical':

> "[H]ow could it be real when. . . it was purely mental?
>
> This poignant judicial cry out of the past … contains the clue to almost all of the trouble that has attended the development of workmen's compensation law related to mental and nervous injuries. This equation of "mental" with "unreal", or imaginary, or phoney, is so ingrained that it has achieved a firm place in our idiomatic language. Who has not at some time, in dismissing a physical complaint of some suffering friend or relative, airily waved the complaint aside by saying, "Oh, it's all in his head?"" (Larson, 1970, at 1234)

Proof is also more difficult when the condition arises over time instead of at one specific moment. Quite simply it is easier to show that an injury is work-related when it happens in an instant, like a car accident, rather than over several days or months. Many claims for occupational stress present difficulties for workers' compensation because they lack a clear physical component and often arise over time.

Another problem is that the relationship between stress and injury is not well understood. Stress is associated many different types of work - with tedious and repetitive work, physically demanding and risky work, work with difficult and abusive co-workers or supervisors, work dealing with the public and work in isolation, work

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occasioned by dangerous or violent incidents and so on. And it is not at all clear how much stress is too much stress. Different workers react differently to similar stressors. Some workers may thrive while others get sick. All of these factors make it difficult to prove that the worker's injury or illness was work-related. Even if a link between the work stress and the injury is proven, the stress may be seen as an acceptable aspect of the job and the problem is not the job but the worker. Some believe that when the worker accepts a stressful job and the pay that goes with it, they accept the stress and if the stress is too much and they get sick, then they should find another job. As the saying goes, "if you can't stand the heat, get out of the kitchen".

The basic rule is that workers should be compensated for work-related injuries and diseases, but this rule is hard to apply when the injury and its cause are related to occupational stress. Below I discuss how 'personal injury' is defined by workers' compensation schemes and examine how this definition determines which claims are accepted as work-related injury or disease. As discussed below, the problem is that occupational stress is seen as an illness arising over time and therefore rarely meets the strict criteria imposed by workers' compensation agencies covering work-related injury.

Personal injury - this and not that

Workers' compensation is shaped by dichotomies – the duality of this and not that. The obvious duality shaping workers' compensation is that of work and non-work. Workers' compensation covers *work-related* injuries and does not cover non-work injuries. While many people feel as though they are working all of the time, if they count the hours, they will discover that they only work for 25 to 30 percent of their time. Any injury that occurs while they are not working, in the sense that they are not being paid to do what they are doing when hurt, is not covered by workers' compensation. This means that for most people if they are hurt doing something while at home, playing sports, or driving they cannot rely on workers' compensation to pay for their medical care or lost wages. For most workers, (although not those working in New Zealand)), workers' compensation is the only income insurance they have. If they are seriously injured and cannot work most workers face financial ruin, losing their savings and at times their homes, unless the disabling condition can be shown to be work-related. This has meant that in many jurisdictions, (again except New Zealand), workers have a strong motivation to prove that their injury was work-related. Moreover, in order to have their claim accepted, the worker must establish that their injury was a personal injury and that it arose out of and in the course of their employment. That is, the requirement is that the injury must be *a personal injury*.

The term 'personal injury' denotes the next set of dualities – that of personal injury versus property damage and that of injury versus disease. Injury is hurt or harm and personal injury is hurt or harm to the person, but does not include damage or harm to their property. When workers' compensation schemes were first established in the early part of the 20th Century, they generally covered physical injuries caused by accident. Damaged clothing or tools were not covered, although modern workers' compensation schemes will pay for damaged eyeglasses, dentures and prostheses. When first enacted, workers' compensation was to compensate injured workmen (initially the scheme did not cover women or women's work) for strains, sprains, cuts, bruises and broken bones caused by work-related accidents. Compensation covered physical, not mental, injury

(and death) caused by accidents that happened on the job. As stated above, the objective of workmen's compensation (as it was called for many years) was to provide compensation to workmen injured at work or if they were killed at work, to pay compensation to their widows. Workers' compensation was never intended to cover all misfortunes of life. The scheme was designed as a means to compensate workers who suffered personal injuries which happened during and because of work.

In most jurisdictions under workers' compensation schemes personal injury is now defined as including *mental* as well as physical injury as well as illness suffered as the consequence of identified diseases. For example, in British Columbia personal injury is defined by policy as "…any physiological change arising from some cause, for example, a limitation in movement of the back or restriction in the use of a limb." This definition resembles that offered in *Larson's Workers' Compensation* which defines 'personal injury' as including:

> "… any harmful change in the body. It need not involve physical trauma, but may include such injuries as disease, sunstroke, nervous collapse …" (Larson, 1984, at Chapter 42.00)

In New Zealand the Accident Compensation Act 2001 provides a long and rather complex definition for personal injury. The definition demonstrates some of the challenges drafters face when trying to offer a precise definition. The definition offered by Section 26 distinguishes between physical and mental injury and limits coverage for a mental injury to those injuries which are the result of a physical injury or are the result of a sex crime or a work-related mental injury as defined under the Act. Non-work mental injuries, which are not a consequence of a physical injury, are covered by the ACC scheme only if they are the result of a sex crime as defined by scheme. Despite the wider contemporary definition of 'personal injury', the traditional notion of personal injury as physical harm to the worker's person caused by traumatic accident continues to influence compensation decisions.

An understanding of what is meant by 'personal injury' also requires an appreciation of the other 'twosomes', that is injury' and disease and accident and disease, as outlined in table 1. These two dualities taken with the further twosome of cause and effect underpin the definition of personal injury in most compensation schemes. First, with respect to cause and effect, the duality of injury and disease represents the *consequence or effect* of some event, while the duality of accident and disease is concerned with *the cause*. Here confusion seems inevitable as the word 'disease' is used to refer to both the cause and effect – the word refers to both the illness and the process, which causes the sickness. A disease is an unhealthy condition of the body (or part of it) or the mind but it is not an injury.

Table 1: Duality of Terms

Cause	Effect
Accident	**Injury** (mental or physical injury)
- specific event	- strain, sprain, bruise, break, cut
- identifiable trauma	
- internal to the body	
Disease	**Disease** (mental or physical illness)
- process over time	
- uncertain trigger	
- internal to the body	

In British Columbia 'injury' is defined as a harmful physiological change in the body or mind arising from some cause, but not a condition which is also a disease (WorkSafeBC, 2011, at Paragraph C3-12:00). Under most workers' compensation legislation, including the New Zealand Accident Compensation Act, injury is distinguished from disease. This fits with the ordinary understanding of the words. People who are injured are not generally thought of as sick, at least not initially. This distinction is maintained by workers' compensation organisation's rules, which state that any sickness or disease suffered by a worker is not to be treated as a personal injury unless the specific disease is recognized as a condition that is to be treated as a personal injury. And the distinction between what is seen as an injury and what is a disease depends on its *cause*, whether the condition was caused by an accident or whether it was caused by a disease or disease like process. Basically, an injury is harm caused by an accident while a disease is harm caused by a disease.

The distinction between injury and disease thus turns on the distinction between accident and disease and thus the definition of an accident. The *Oxford Dictionaries* defines accident as: "an unfortunate incident that happens unexpectedly;…an event that happens by chance and is without apparent cause deliberate cause"[1]. This definition is similar to that set out in Larson's Workers' Compensation which defines 'by accident' as "…an unlooked for mishap or an untoward event which is not expected or designed" (Larson, 1984, at Chapter 37.00). The key is that an accident is an event (or series of events) and not a process. While the idea that an 'accident' is unexpected is important, this does not necessarily distinguish accident from disease because no one really expects to get sick.

Another quality of an accident is suggested by the British Columbian definition of 'personal injury' as physiological change "for some reason". Both accidents and diseases are unexpected and unwanted events, but an accident, unlike a disease, is assumed to involve some element of human agency. An accident is unexpected but a human mishap involves some element of human action or failure to act. Disease is mysterious and at times, beyond human understanding. There may be no reason why one person gets sick while another does not. So where the mishap cannot be attributed to any human activity or agency (in the sense that no person could reasonably bear any responsibility for the harm),

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[1] See http://www.oxforddictionaries.com/definition/accident?view=uk

then it might as well be assumed that the cause was natural and where human health is concerned, the cause must be a disease. In this way a disease is an Act of God, like a hurricane; a storm is not thought of as an accident. Similarly becoming ill is not usually thought of as the result of an accident, but if some human act is identified as the cause of the sickness, then the disease is accidental. And because accidents are felt to be result or consequence of human activity, they should be prevented. This sentiment underlies the belief that employers should take steps to safeguard their workers. Where such measures fail to protect the worker from those events which are within human control, then the worker should be compensated. But what responsibility should employers have for controlling diseases, when the unexpected and unwanted events are beyond human control? In a perfect world, all accidents would be avoided but diseases would only be contained. In this sense, aging can be seen as the quintessential disease. Very few accidents are as debilitating as old age but aging like many diseases is a process, not one event, and very little is understood about the process. In New Zealand the Accident Compensation Act, 2001 treats aging is a natural event and any mishap "substantially due to aging" is not considered to be a personal injury for the purposes of compensation. The distinction between accident and disease thus rest on the view that an accident is a discrete unfortunate but explicable event while a disease involves a poorly understood process.

This distinction means that accidents are easier to identify and explain than diseases. Furthermore, for the purposes of workers' compensation this means that it is easier to prove that an accident arose out of and in the course of employment, than it is to prove that a disease is caused by work. More precisely, an accident is an event, or series of events, which happened in a certain place and at a specified time and as result of some human act or omission. An accident can be witnessed, documented and proven to have happened in a certain place at a certain time. In contrast, there can be no first hand evidence that a disease, a poorly understood process possibly manifesting over decades and involving multiple workplaces and employers, arose out of and in the course of employment. The ease by which an accident can be explained is often reflected in the ease with which the resulting injury is proven to be compensable. It is simply much simpler to show that an accident is work-related than it is to prove that a disease is due to the worker's work activities or environment. In contrast, it can take years of expensive epidemiological research to demonstrate that an illness is due to the nature of certain employment. Diseases must be recognized by the compensation system as related to employment, as industrial or occupational diseases, before most workers can expect any compensation for them. The burden of providing evidence linking the injury or disease to the employment is often born by the individual worker in the sense that the worker absent the proof, the worker will not receive workers' compensation. But the proof of a causal relationship between a disease and a work activity (or environment) cannot be made on a case by case basis.

At the same time, the ease with which an accident is determined to be work-related does not mean that the distinction between an injury and disease (as the harm or effect) is clear cut for the purposes of workers' compensation. A worker pricked by a tainted needle might get a disease by accident and for the purposes of workers' compensation would have a personal injury whereas another worker who injured their back lifting a patient and was found to have an underlying back condition may be deemed to have a disease (ie degenerative disc disease). The injury or disease as an effect, requires an investigation of its cause and will be covered by the compensation scheme as 'personal injury' only if the cause can be determined as an 'accident'. Where the cause is

determined to be a disease or disease like process, then further inquiry is needed in order to find out if the disease has been recognized as an occupational disease.

In most jurisdictions in order for a worker to have a claim for occupational disease accepted, they must prove three things. First, they must prove that they suffer from a specific illness (i.e. that an appropriate medical expert has diagnose the worker as suffering from a certain disease). Second, the worker must establish that the diagnosed illness is an *occupational* disease (i.e. an illness which epidemiological evidence has been accepted by the compensation authorities as proving the disease is one which can be caused by work-related activities or conditions). Third, that the worker must prove that the activities or conditions at their particular work were similar to those which have been accepted as causing their condition and thus were likely to have caused their illness.

Given that workers' compensation is established primarily for work-related injuries, the seeming bias towards accident and against disease makes sense. That is, employers should only have to compensate workers for conditions that can be shown to be work-related. An injury caused by an accident on the job can bee seen by all concerned as work-related. A disease, however, cannot be so easily linked to a particular job. It took years of study and a lot of epidemiological evidence to persuade governments and employers to accept that some diseases could be caused by employment activities and conditions. For example it took many years to establish that the work environment was a significant cause of respiratory diseases rather than smoking or other urban pollutants. And while the list of industrial or occupational diseases continues to grow, the bias against claims for conditions that arise over time and as a result of a gradual process remains because the scheme is for work-related injury and disease.

Thus, it is important to understand that the categories which structure workers' compensation rules are shaped by the dualities of work and non-work, physical and mental, and injury and disease and are set against the backdrop of assumptions about accidents and diseases. It is this conceptual and complicated milieu that provides the context in which occupational stress claims are considered and helps explain why occupational stress presents workers' compensation with such difficulties.

Classifying Claims

A further duality – namely, mental and physical – is used to classify workers' compensation claims. Mental and physical as cause (trauma) and effect (injury) describe the four basic kinds of compensation claims. Every claim can be placed in one of these four categories, as outlined in table 2.

Table 2: Duality of Mental and Physical Injury

Cause / Effect	Physical injury	Mental injury
Physical trauma	Physical / Physical	Physical / Mental
Mental trauma	Mental / Physical	Mental / Mental

The first category is that of claims for physical trauma causing physical injury. An example of a physical/physical claim is when a worker breaks his thumb while hammering a nail. If the worker was hammering as part of his job, then the evidence to establish a workers' compensation claim is easy to find; that is, *the injury* is the broken thumb and *the cause* is the hammering. While physical injury involves harm or hurt to the body, physical *trauma* involves force, such as gravity, and its effect on the body. Physical trauma can be observed and incidents involving physical trauma and resulting in physical injury can be witnessed. All that is needed to establish the compensability of the injury is evidence that hammer blow which broke the thumb occurred while the worker was working and as a result of their work activities.

The second category is that of physical/mental claims in which physical trauma is caused by emotional or mental injury. Mental injury is not usually defined in compensation legislation but is described in most jurisdictions as involving significant psychological illness. Transient upset, such as humiliation, embarrassment or anger would not qualify as mental injury. In both New Zealand and British Columbia a diagnosis using the American Psychiatric *Diagnostic and Statistical Manual of Mental Disorders* is required before compensation is considered. Before a physical/mental claim is accepted the evidence needs to support a conclusion that the physical trauma and, in most cases the resulting physical injury, arose out of and in the course of employment and the medical evidence needs to link the claimant's mental injury to this physical trauma and the consequence of the compensable physical injury. For example, a worker who suffered a disabling injury and who subsequently became depressed would likely be compensated for the depression if the evidence supported a conclusion that the depression was caused by the physical injury.

The third category of claims is mental/physical claims where mental or psychological stimulus results in a physical injury. Here the precipitating event may be a sudden noise, a gun shot, with physical consequences, such as a heart attack. The event is 'mental' in that there was no physical contact with the worker, but the effect of the mental stimulus was physical in that the worker suffered an injury. The evidence needed to establish the worker's claim for compensation would be medical evidence of a direct link between the mental stimulus and the physical injury. In particular, in this type of claim, expert medical evidence would be needed to explain why the stress of the psychological stimulus caused the physical harm. The difficulty is that if the cause and effect cannot be witnessed then no one is able to observe the mental stimulus causing physical harm. Also the mental stimulus or trauma must be an event. Heart-related conditions may be accepted as compensable but only if the medical evidence also establishes that they were directly caused by a specific work-related event rather than by a gradual onset of heart disease. The condition must fit the requirements of *an injury* as opposed to a disease. In most jurisdictions it is difficult to obtain sufficient medical evidence to do this and heart disease is rarely recognized as an occupational disease. With the exception of certain occupations, such as fire fighters, most workers who suffer a heart attack at work would be found to be suffering from a non-compensable disease. Also mental/physical claims would not include claims where the sudden noise caused someone to fall as in those claims the cause of the injury would be identified as *the fall*, not the noise (even though the noise was the cause of the fall).

The fourth category of claims is that of mental/mental claims where mental trauma or stimulus causes a mental injury. An example of a mental/mental claim would be the claim for mental injury suffered in a robbery. The claim could be significant if the worker was disabled, unable to return to work, because of their psychological reaction to the shock of the hold-up. In most jurisdictions mental injury caused by mental trauma or stimulus (mental/mental claims) is accepted, but only when the evidence supports a conclusion that the mental trauma was analogous to an accident and if the accident arose out of and in the course of employment. For example, Section 5.1 of the Workers' Compensation Act in British Columbia states that a worker is entitled to compensation for a mental stress only where three the injury is "…an acute reaction to a sudden and unexpected traumatic event arising out of and in the course of the worker's employment". Similarly the New Zealand Accident Compensation Act Section 21B provides similar conditions for mental/mental claims. The event must be sudden and unexpected causing immediate mental harm, just like an accident.

For the purposes of workers' compensation, occupational stress claims are best described as claims involving mental trauma. They can be classified as mental/physical or mental/mental claims. In such claims the worker is alleging that they suffered a mental rather than physical trauma experience during work and because of that experience at work, it resulted in either physical or mental injury or both. Problems arise when the cause (mental trauma) and the effect (mental injury) resemble a disease. In particular, the more the cause is attributed to events that occurred over time and that the condition is a disease (as in mental illness rather than injury), then the less likely it is that the claim will be accepted.

'Occupational stress' refers to a cause of human injury or illness, not the condition itself. As discussed above, 'an occupational disease' is the term used to refer to those diseases that are recognized as being work-related. In contrast, occupational stress is the *cause* of injury or disease, not the effect, as with occupational disease. As the workers' compensation rules in both New Zealand and British Columbia demonstrate, the injury caused by occupational stress will only be accepted where the evidence establishes that the trauma was, in effect, an accident, that is, an unexpected, traumatic event resulting in immediate harm. Claims involving a process rather than an identifiable event are simply not accepted. While this reflects understanding of accidents and disease as cause and effect, when applied the rules seem quite harsh. But in the past workers' compensation rules were often harshly applied. For years, workers suffered illness and death as result of many different occupational diseases before the disease was recognized as an 'occupational disease'. What is needed is evidence that proves the link between occupational stress and mental and physical injury. However, the task of getting evidence linking stress to employment is compounded by difficulties in defining what is meant by 'occupational stress' and in understanding the link between stress and injury or disease. Complicating this relationship is the view that stress is a 'natural' part of many jobs and as such would be better covered through wages than workers' compensation. And with this view, of course, comes the sentiment that if the worker cannot stand the heat, then they should get out of the kitchen. This, however, suggests that the problem is stressed workers, not stressful work.

Some Concluding Thoughts

Most people believe that workers should be compensated for injury and ill health caused by their work. For over a century workers' compensation has provided compensation to workers who suffered physical injury caused by an accident which arose out of and in the course of their employment. Over the years workers' compensation coverage has expanded to include mental injury and occupational diseases as well as injuries arising over time seemingly caused by a disease like process but there remains a bias towards physical injury caused by accidents. This, of course, is the root of the problem with many forms of occupational stress. Occupational stress is not easily accepted as compensable first, because it manifests as mental, not physical injury, and second because its cause is often mental rather than physical trauma which has occurred over time rather than as the result of one incident or event. There is a level of institutional resistance to providing workers' compensation for occupational stress claims first because they are mental claims but this resistance increases if the cause is also shown to be stress (ie mental trauma) which has occurred over time. And so while people believe that workers deserve compensation for work related injury, they may also accept that workers suffering from occupational stress which has arisen over time should simply find a new and less personally stressful job.

Occupational stress, however, is not simply the worker's problem. Stress related injury and illness is calculated to cost employers and the economy a great deal of money every year. In the United States it is estimated that stress-related absenteeism costs the economy hundreds of billion dollars a year in absenteeism, reduced productivity and medical expenses (French 1998). There is a need for investigation of both stressed worker and stressful work. Every form of work presents some level of stress and the question should be, when does stress become unacceptable? There also needs to be a better understanding of the different kinds of stress which workers experience and the reasons why some workers get ill while others do not. At the same time there should be a discussion as to how best to compensate workers suffering injury or illness as a result of occupational stress. Still it may well be that workers' compensation is not the appropriate vehicle for compensation for occupational stress. This then leads to the question that if not workers' compensation, then what? Should there be a return to tort for occupational stress? If occupational stress arising over time is not covered by workers' compensation, perhaps workers should have the right to sue their employers for intentionally inflicted emotional harm under the rules of tort. Stressed workers might well leave the kitchen but why should they do so without their pound of flesh?

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Research Note: Stress Management Practice: Is it Effective?

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Abstract

We present a review of the recent literature focussing on the effectiveness of stress management interventions (SMIs) in organisational settings. Empirical studies carried out between 2006 and 2010 inclusive are reviewed. Though there is some improvement in methodology, experimental protocols and long-term follow up studies are still rare. We suggest that SMIs in future should include both primary and secondary approaches, and that success should be measures against both individual and organisational outcomes.

Introduction

There have been several reviews of the literature on stress management interventions (SMIs) since de Frank and Cooper's 1987 paper. In the intervening years there has been an increase in the proportion of studies employing empirical research methods. There is a suspicion, however, that there are scant rigorous experimental designs and repeat and longitudinal studies. Therefore, in order to discern the effectiveness of current SMI practice and to ascertain the robustness of the methodologies applied in the studies, we present a recent review of the extant literature. We restrict our analysis to empirical studies which focus on occupational stress and its reduction in organisational settings. We have chosen a meta-synthetic rather than a meta-analytical approach. Given the wide range of outcome measures and intervention designs employed it is doubtful that combining the data in a single analysis would yield reliable estimates.

Stress Management Interventions

Many organisations have implemented Stress Management Interventions (SMIs) in an attempt to reduce levels of stress and to help mitigate the detrimental effects of occupational stress (Richardson & Rothstein, 2008; Barry & Kuemmel, 2006; Le Fevre, 2001). The European Commission (2002) stated that:

> "...work related stress may be prevented or counteracted by job redesign (e.g. by empowering the employees, and avoiding both over- and under-load), by improving social support, and by promoting reasonable reward for effort invested. And of course, by adjusting occupational physical settings to the workers abilities, needs and reasonable expectations" (cited in Coffey, Dugdill & Tattersal 2009:.99).

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This statement illustrates how SMIs can be implemented at many levels starting at an individual level and moving through to initiatives aimed at the culture and fundamentals of the organisation (Coffey et al., 2009; Le Fevre, 2001). SMIs can be classified into three groups: primary interventions that deal with the source of the stress at a group or workplace level (Richardson & Rothstein, 2008; Le Fevre et al., 2006; Le Fevre, 2001; Randall et al., 2007): secondary interventions that focus on the individual (Richardson & Rothstein, 2008; Le Fevre et al., 2006; Le Fevre, 2001); and tertiary interventions that focus on assisting individuals with existing issues (Le Fevre et al., 2006; Richardson & Rothstein, 2008). The subsequent sections will focus on primary and secondary level SMIs.

Organisational-level SMIs (Primary SMIs) are designed to deal with the source of the stress – that is, creating a balance between demands placed on the individual and providing the resources available for dealing with the demands (Cox, 1993; Randall, Cox & Griffiths, 2007). Although the focus for primary interventions is essentially based around the organisation, it can be either employee or organisation focused (Le Fevre, 2001; De Frank & Cooper, 1987; van der Hek & Plomp, 1997; van der Klink et al., 2001). Medical benefits, staff counselling, employee assistance programmes (EAP's), stress management training workshops, are examples of employee focused interventions (Le Fevre, 2001). Job structure and rotation, organisational development, and organisational restructuring are examples of organisation focused interventions (Le Fevre, 2001; Richardson & Rothstein, 2008). Le Fevre et al., (2006) state that the objective of these interventions is to create an environment or culture that aims to remove sources of stress in the workplace, rather than treating present stress in employees. By attempting to remove stressors (Le Fevre et al., 2006), primary interventions can be an effective means of protecting and enhancing employee well-being in the medium to long-term (Randall et al., 2007). Typically, primary SMIs are run for over 12 months, this in contrast to secondary interventions that are more short-term.

Secondary interventions focus on the individuals within an organisation and can be broken down into three groups; somatic, cognitive, and multi-modal (Le Fevre et al., 2006). Somatic techniques include relaxation methods (e.g. Richardson & Rothstein, 2008; Kohler & Munz, 2006), cognitive techniques may involve affirmations and thought stopping (Le Fevre, 2001; Bunn, et al.,2007; Hampel, et al., 2007), and the third, multi-modal, is a combination of the prior two groups including techniques such as transcendental meditation and programmes that mix cognitive and somatic methods (Le Fevre, 2001). These techniques are often short in duration and, depending on the type of technique implemented, can vary in length (e.g. one meditation session, monthly workshops). Each one has the intention of teaching employees coping strategies to deal with stress by equipping them with skills they may require in the future (Barry & Kuemmel, 2006). Such skills as assertiveness and positive thinking (Barry & Kuemmel, 2006) are taught in attempts to reduce the severity of stress symptoms before situations become uncontrollable (Richardson & Rothstein, 2008). Altering the way individuals appraise stressful situations is intended to change reactions to stress in the future (Richardson & Rothstein, 2008; Soriano, 2009).

Primary interventions have been criticised in the past for placing the responsibility of dealing with stressful situations on the individual and thereby removing the obligation from management to address such problems (Le Fevre et al., 2006; Kenny & Cooper, 2003). Le Fevre et al. (2006) suggest that this has been used as an argument against the implementation of secondary interventions, and to support primary interventions as first choice. Le Fevre, Kolt and Matheny (2006: 562) conclude with:

> "...there may be advantage in employing individual focused, secondary approaches as a first step in interventions designed to reduce organisational job stress at the individual level, rather than as complements to an initial organisational-based approach"

It is the relationship between people and their environment that is the core focus when addressing the issue of stress. The person-environment fit (P-E fit) theory refers to the alignment or congruence of a person to their environment (Edwards, 2008). Under the heading of 'environment' comes the social environment, other individuals, groups, organisations, or vocations. In this theory stress is not related specifically to the individual or the environment, the focus is the fit between "attributes of the person and characteristics of different vocations" (Edwards, 2008:168). P-E fit offers an explanation for stress in the workplace; "when there is a mismatch between the person and their environment" (Le Fevre, 2001, p.3) stress is likely to be the result. As De Frank and Cooper (1987:8) rightly note:

> "There is great need to consider variation within persons *and* their environment as determinants of both levels of perceived stress and the effectiveness of stress management…"

Thus, understanding individual's interactions with the environment is important in the evaluation of the stressors, that same evaluation may predict whether individuals will accept and continue practicing secondary interventions offered (i.e. relaxation techniques, coping strategies). The adoption of the intervention by employees is essential if a long-term change is to be achieved (Appelbaum & Lefrancois, 2007; van der Hek & Plomp, 1997). Knowing the situational and individual factors that ensure the adoption of change may also predict the likelihood of a successful primary intervention adoption (De Frank & Cooper, 1897; Vakola & Nikolaou, 2005). It is hard to know the extent to which employees continue with the techniques taught post-intervention due to the limited number of follow ups conducted. According to De Frank and Cooper (1987) many organisations have not created a culture nor have implemented structures to maintain such practices, highlighting the need to see secondary and primary interventions implemented in concurrence with each other.

In essence, "occupational stress has been of increasing concern to both employers and governments for over 20 years" (Le Fevre, 2001:1). A rise in compensation claims, high turnover rates, and employees dealing with stress-related illnesses are all issues that are encouraging employers to address and find a solution for the damaging effects of stress (van der Klink *et al.*, 2001; Tisza & Mottl, 2003).

Search Strategy

In this review of empirical studies the authors conducted a search of studies between 2006 and 2010. A library and internet based search (Dedovic, D'Aguiar, Pruessner, 2009) was used to obtain information about Stress Management Interventions (SMIs), the history behind the terms strain, stress, and stressors, and empirical research from 2006 to 2010 on the application of SMIs. ProQuest, Emerald Full Text, ABI inform, EBSCO, and OVID were search engines used to conduct the searches. The search strategy included using the peer reviewed option and nine search terms producing a large number of articles that did not satisfy the requirement for this review (Sparrenberger, et al., 2008). To refine the results, searches were conducted within the results with a further six terms adopted for this purpose.

The search strategy also included using alternative terms for key words (i.e. stress management intervention/programme). Additionally the authors searched the references from significant articles using key words and title names. Original articles were sourced if they offered significant contribution to the theory or study being analysed. The restrictions applied to the search were date limits, peer reviewed, full text, search within the citation, search within the title, search for the author.

Among the thousands of results found in an original search, the refining process brought the number of more relevant examples down to 115. From these studies selected 55 satisfied the requirements of having a relationship to Stress Management Interventions (SMIs), and stress in the workplace. Ten studies satisfied the requirement of being empirical trials of SMIs. Of the ten, eight were individual focused interventions (secondary). The majority of the participants for the interventions were volunteers, the main tool for measurement was self-reported questionnaires, and there were limited follow up time-frames for the interventions and the people involved.

Criteria for the Inclusion of Studies

The review was restricted to articles written between 2006 and 2010. The reasons why some papers were not included are: they did not report on the findings from an empirical study; the results relied too heavily on personal accounts of what happened; or the focus for the intervention was rehabilitation after a traumatic event or severe illness. In the reviewed papers the majority of participants were female, from large organisations or alternatively university students, and took part on a voluntary basis. Studies that reported on SMIs at management level, employee level, and organisational level were included. The majority of the studies used groups that were not actively seeking assistance in the area of stress. In order for the studies to be included there had to be an intention to reduce an identified stress or stressor. Two studies that had no control group were included, though this was not ideal, the authors gave insight in to alternative control group options. All studies were published peer-reviewed journal articles (van der Klink, 2001).

Extraction of Data

At first, the titles and the abstracts of the articles were used to determine the relevance of the article and whether they would sufficiently meet the criteria (Sparrenberger, et al., 2008). Most articles were discarded due to the mainly medical focus or they did not feature empirical studies; although it must be noted that not all medical articles were overlooked as some offered an interesting insight into the often stressful nursing industry. The article's full text was used as a final level of evaluation and source of data (Sparrenberger, et al., 2008).

The ten studies featuring empirical research used a variety of measuring instruments but the majority used rating scales, self reports, and questionnaires. Stress was defined differently by the authors of each paper, however, when there was uncertainty between the terms strain, stress, and stressor we used a definition put forward by Le Fevre, Matheny, and Kolt (2003). "Stressor will denote the external force or situation acting on the individual, and stress will denote the deformation or changes produced in the individual as a result of those forces" (Le Fevre et al., 2003:728).

The review has highlighted an issue in attempting to measure the effectiveness of SMIs and comparing one type of intervention from another. The immense variation in resources available, the many stakeholders involved, and the type of intervention adopted which in turn makes measurement and comparison a difficult task. The difficulty in measurement and equally, the difficulty in implementation of primary or organisational level interventions may deter researchers and managers respectively from producing the required information for analysis (van der Hek & Plomp, 1997) resulting in a low ratio of organisational to individual level interventions in the literature.

Many of the studies had a short follow up time frame, again making it difficult to assess the sustainability of the interventions implemented. Two out of the ten did not have control groups and cannot, therefore, be considered as experimental. That is, experimental interventions enable treatment groups to be compared against control groups to enable the one to take account of organisation wide change that is common to both groups (Cook & Campbell, 2002, cited in Holeman, Axtell, Sprigg, Totterdell, & Wall, 2009).

Stress Management Interventions: Empirical Research

De Frank and Cooper (1987) and van der Hek and Plomp's (1997) past reviews evaluated the effectiveness of SMIs and this review uses their information as a starting point. The review offers an evaluation of current practice from organisations and whether the concerns from the past reviews (i.e. no long term follow ups, credibility of the interventions, cost effectiveness, effectiveness of intervention) have been addressed (van der Hek & Plomp, 1997).

The Effectiveness of Current Stress Management Interventions 2006 - 2010

Ten studies conducted from 2006 to 2010 met the criteria outlined above and are summarised in detail in appendix 1: table 1. Eight of the ten studies focused solely on primary interventions, one a combination of organisational and individual (though more the former), and one study was located at an organisational level only. Of the eight primary interventions, four studies involved a strong focus on relaxation techniques (i.e. meditation, muscle relaxation) as a way of dealing with present perceived stress and future stress. A majority of the studies involved education of some sort, in particular teaching the theory of stress, occupational stress, and coping strategies.

The two interventions implemented at an organisational level (Elo, Ervasti, Kuosma, & Mattila, 2008; Holman, Axtell, Sprigg, Totterdell, & Wall, 2009), focused on improving communication and communication training. However, there were differences. The aim of the first organisational intervention (Elo, et al., 2008) was slightly ambiguous and directed each member of the staff to attend specific workshops and seminars. The aim of the second intervention on the other hand (Holman, et al, 2009) specified exactly that the interventions were proposed to change the level of stress among the employees and took a less directive approach, gathering suggestions from all levels of the organisation regarding the different ways to approach SMIs. The duration of interventions in both studies ranged from one-off short, twenty minute workshops to full day retreats. The average length of time of the interventions was three months. Although, there was no obvious relationship between length of sessions and results, it has been postulated by Rausch, et al., (2006), van der Hek and Plomp, (1997) and van der Klink, et al., (2001) that the shorter, secondary level interventions

are most effective. In this sample of empirical reviews, the primary level interventions ran for a longer period of time, consistent with the findings of van der Klink, et al., (2001).

There was great variation in the techniques used in the secondary interventions. The sessions included; meditation, Indian head massage, mindfulness-based stress reduction techniques, progressive muscle relaxation, and cognitive behavioural theory.

Measurements for the outcomes also varied from questionnaires, focus groups, self-report stress scales, to self-reported symptoms. The limited number of organisational level interventions is consistent with the findings of van der Klink, et al. (2001). "Although there is general recognition that work and organisational problems are the major causes of occupational work stress there is still a lack of research into interventions on this level" (van der Hek & Plomp, 1997:135) but, as pointed out earlier, this may be due to methodological problems.

Discussion

The reviews by De Frank and Cooper in 1987, van der Hek and Plomp in 1997, and van der Klink in 2001 communicate a shared concern for the way that SMIs are measured and reported. In particular, while there has been a considerable improvement in the standard of research since the first review was written twenty two years ago, more progress is still needed in developing a framework that allows robust comparisons of the different SMIs. It is acknowledged, however, that comparisons are difficult to make given the unique nature of each organisation and more importantly because of the variances of each person within the organisation. Moreover, each organisation has many variables that affect the outcomes of the SMI's therefore making them difficult to compare.

Nonetheless, the literature sets out a number of criteria necessary for an effective implementation of SMIs. First, prior to the implementation, the aim of the intervention should be clear and agreed upon and motivating goals need to be carefully designed in order to guide the SMI process (van der Hek & Plomp, 1997; Elo, et al., 2008). Second, the link between the intervention and lowering the person's stress levels should also be established at the beginning of the intervention. Moreover, identifying those individuals most at risk and what constitutes a stressful situation, is a more effective way of addressing the particular occupational stress issues (Elo, Ervasti, Kuosma, & Mattila, 2008). Third, it is argued that determining the success of the SMI outcomes can only be done when measured against the organisation's specific objectives. Thus, tailoring the SMI to the organisation's environment and not the other way around may be a way of avoiding unsuccessful outcomes. Finally, cultural factors need to be considered carefully when planning future interventions and a clear motivating goal may need to be designed to guide the SMI process (Elo, et al., 2008).

However, if the environment and the conditions are a determining factor behind successful implementation of SMIs, then why do the primary level interventions have limited or no affect on reducing stress in the workplace (van der Klink, et al., 2001). The review of the literature offers some suggestions why this may be the case. For example, managers may often be reluctant to enter into such an undertaking due to the amount of resource required and the level of disruption to employees. Successful implementation requires full management support and has significant impact on the whole organisation (van der Hek & Plomp, 1997; Bunn, et al., 2007; Hampel, et al., 2007). In addition, implementing such a

change, (bearing in mind change causes uncertainty and often stress), requires full support from employees and other stakeholders involved. (Vakola & Nikolaou, 2005; Kohler & Munz, 2006; Coffey, et al., 2009; Appelbaum, et al., 2007). Individual perception and coping skills may also be necessary to ensure that the change process (in this case, the SMI) is successful (van der Klink, et al., 2001). Educating and equipping employees with the skills to deal with stress are very much similar to the skills required to deal with change; skills that are often taught in secondary level interventions. Once those skills have been taught and adopted it requires a supportive culture with job control and job design to ensure sustainable use of the acquired skills (Le Fevre, et al., 2006). What Le Fevre et al. (2006) suggest is that there is great benefit in implementing individual focused, secondary, approaches prior to the implementing an intervention at the organisational level. Holeman, et al., (2007) produced the only paper that demonstrated the combined effects of job redesign interventions and employee well-being interventions. The interventions produced multiple improvements in job characteristics (i.e. job control, skill utilisation, participation, and feedback). Participative job redesigns allowed the organisation to achieve multiple changes in job characteristics and off-site educational sessions produced improvements in employee well-being - a successful combination of the two interventions.

Consistent with prior research and the analysis of the studies above, it appears as though secondary interventions are the most effective (van der Hek & Plomp, 1997; van der Klink, et al.,2001; Le Fevre, 2001) and in general employees do receive greater benefit from such interventions as cognitive-behavioural theory and coping strategies (Bunn, et al., 2007; Hampel, et al., 2007; van der Hek & Plomp, 1997; van der Klink, et al.,2001). Some studies however, have not had such success with the implementation of interventions that have been successful in others. This was mentioned by van der Klink, et al. (2001) in their observation of evaluative studies and appeared again in a more current review (Bilfilco et al., 2007). It is consistent with the idea that it is not the SMI that is deemed to be effective or ineffective but more importantly the way it is implemented and whether or not the environment has been evaluated properly to highlight the need for this type of intervention. A combination of both secondary and primary interventions may help to evaluate the organisation's current environment as well as address the needs of the individuals (Elo, et al., 2008; Le Fevre et al., 2006).

Elo, et al. (2008) conducted a primary stress management intervention with the intention of positively increasing employee wellbeing through changes in the organisational environment. The results showed statistically significant results in all the measures that were organisation wide (clarity of work goals, information flow, work climate, and supervisor support). Interestingly there were no significant benefits at the individual level. An organisational SMI may improve the work climate and encourage effective communication, but the effects on individual well-being may be limited. In fact, in this case, work-ability decreased in the participants of the experimental group, (Elo, et al., 2008). This again suggests that combining both primary and secondary interventions may be more effective in decreasing stress. Le Fevre (et al., 2006:547) suggest that "secondary approaches be employed prior to the introduction of primary methodologies within a client organisation".

Difficulty of measurement of SMI effectiveness has haunted this area of research and each review, including this one, still finds only small improvements in clarity and accuracy of outcome measures (van der Hek & Plomp, 1997; van der Klink, et al., 2001). Extensive variation on outcome measures, a relatively low and unreliable presence of control groups and sound follow ups, and significant differences between organisations and studies makes it

very difficult to determine which type of intervention may be most effective. Although there has been a significant increase in methodologically sound studies, the results from the above review still produce inconsistent results that are difficult to compare (i.e. expensive trials with low success rates, cognitive behavioural theories producing great results in some and not others, long duration of SMI with some good results). Insight into the conditions surrounding the SMI may ensure a greater ability to make accurate comparisons (van der Klink, et al., 2001).

Conclusion

As a result of this review, and the reviews conducted in the past (De Frank and Cooper, 1987; van der Hek & Plomp in 1997; van der Klink 2001) it appears that secondary interventions have the greatest record of successfully reducing the levels of stress in the workplace. According to Le Fevre et al., (2006) the correct structures must be in place to support any secondary level interventions if the desire is to ensure stress reduction in the long-term. This was supported in one paper that implemented both secondary and primary level interventions (Holeman, 2009); they reached their desired objectives and were able to maintain the desired results for a significant amount of time. According to Elo et al., (2008) organisation wide interventions may improve communication and work climate but do little to improve the well-being of individuals. Cognitive training (individual specific) would enable employees to better deal with the changes caused by organisation wide interventions. Organisation wide interventions may help to ensure the longevity of the secondary SMIs so long as they are in combination with well-fitted secondary organisation (Elo et al., 2008).

Once the interventions had been implemented, however, it was often difficult to ensure continued practice of the education and exercises. The majority of studies did not have significant follow-up periods. According to Hampel et al., (2008) time was the most significant factor to ensure a successful outcome (p=0.01 in Experimental group x time). Thus, here lies a gap for future research. If the source of stress is identified as the relationship between the individual and the environment then surely both need to be addressed in order to see long-term, effective change? Time as a factor for success implies the need for a culture change to the organisation to ensure a sustainable and supportive environment for any current and future SMIs (Elo et al., 2008). Further research into combining both secondary and primary level interventions is recommended and also how this can be done cost effectively and with the support of the employees. Holeman et al., (2009) in particular had success with a bottom-up intervention incorporating the staff and their ideas into the change process. It is recommended, therefore, that future studies looking at the effectiveness of SMIs use organisation-specific goals to assess whether a SMI is to be deemed successful or not. Each organisation has specific risks and issues that will not respond to a "blanket-approach" solution for reducing stress levels. In short, any movement towards reducing stress for employees and encouraging active and support workplace cultures is a "worthwhile goal for employers, employees, and researchers alike" (De Frank & Cooper, 1987).

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Appendix 1: Table 1.

Authors	Intervention Type/s	Size of sample	Duration or no. of sessions	Measurement type	Outcomes – evidence of effectiveness	Main Findings	Critiques
Bunn, Bifulco, Lorenc, & Robinson, 2007	Initial talks to the participants helped them to define what they thought stress was. Relaxation techniques and coping strategies (correction of negative thinking) was used. The idea was to provide many solutions to prevent stress. The participants were asked to document their stress. They were taught how to gain and provide social support to, and from, family/friends.	Not available.	6 weeks with one hour sessions once a week. A final focus group.	A stress bull's eye used to measure what type of stress symptoms the participants were experiencing using an adaptation of MYMOP –a participant generated outcome questionnaire that is problem specific but includes general well-being. It aims to measure the outcomes that the patient considers most important. Symptoms were monitored with stress diaries	Anecdotal – how the participants rated the sessions. Figures improved, taken from pre and post tests.	Pre and post tests (using the bullseye) showed significant reduction in psychological and physical stress. From the accounts written by the participants, physical symptoms were the prominent issue. The participants were eager for follow ups and continued discussions as a way of dealing with future stress. Emotional well-being improved	No control group, no follow up. Good plan to take it further with development from feedback. Although this paper has showen positive results there are no statistics to back up the statements made. A simple t-test may have given statistical significance to the results. Control groups are hard to set up but would have allowed the author to compare control groups to

Hampel, Meier, & Kummel, 2007	Secondary Intervention – using psychoeducation, stress theory, coping, recovering activities, positive self-instruction, promotion of internal resources, repetition and consolidation, closing and feedback. Muscle relaxation was used; cognitive restructuring, self-control techniques, problem-solving, and role playing were also used and the participants were shown how the skills could be transferred into	Experimental group n=138, no treatment control group n=182	6 weeks delivered by trained teachers with each session ranging from 15min to 90min.	They were guided to reflect on their experiences. The German coping questionnaire (Hampel, Petermann, & Dickow, 2001) was used to measure coping strategies. Perceived stress was assessed by personal reports and questionnaires were used to measure other items taught. Treatment effects were measured prior to, immediately after, and three rating the intensity of the stress levels from (0-6). Focus groups were held in the last session.	Eighty percent of the participants reported high training acceptance. Improved self-efficacy was noted by close relations. Perceived stress increased in the control group but decreased in the experiment group slightly (11.73-13.10), perceived stress went down (11.64-10.40) and positive self-esteem increased slightly (17-18.9)	The social-support idea was supported by this paper. No changes were seen in the control group and in one instance their levels of perceived stress heightened, consistent with the concept of measurement causing heightened awareness and concern. Situation specific coping was seen to be most beneficial. Participants in the experiment experimental group. The ones observing the results were the teachers of the intervention – potential for bias. Non-randomised protocol. Limited to short to mid-term follow ups. The experimental group x time (EC x T) showed statistically highly significant results for each subscale measured (p=0.01). Time had a positive effect on the

	real life. The participants received an information booklet for continuous referral.			months after the intervention. Relations to the participants were asked if they saw noted improvement.		group reported increases in emotion-focused strategies.	coping strategies. There were no differences in the groups prior to SMI.
Searle, 2008	Experimental trial. Seventy percent of the participants reported high strain levels before the sessions started, it is considered to be a stress reduction study. Education about stress and discussions were the main foundation for the sessions. Problem-solving skills were taught as well as a personal change plan aiming to increase the proactiveness in the participants and as a result reduce strain.	N=95. Participants were called in response to a promotion which called for people who wanted to learn stress management skills. Two treatment groups were compared against one waitlist control group.	13 weeks	Self-report scale was used as an indicator consisting of seven choices that best describe the way participants react to situations. A stress diary was used during the week between sessions and the participants were provided with a questionnaire and asked to use that information to fill it in. A short version of the General Health Questionnaire (GHQ-12) was used to measure strain. This method can be	Participants in the experiment group showed an increase in proactive behaviour, people who received treatment also reported more goal-directed behaviour than those on the wait-list. Strain scores were higher among wait-list participants when compared with those who received treatment. Analysis of the data indicated that treatment led to a change in strain levels.	The intervention implemented was effective at reducing strain in comparison to the wait-list control group. The use of stress diaries may have encouraged all treated participants to take more action toward dealing with stressors; this could explain why goal-orientated behaviour was higher in comparison to the control group.	No long-term follow ups. Goal setting was not measured prior to the intervention, only after the treatment. The results for self-reported improvement were not statistically significant (p=0.55) however, judges found improvement in goal-directed behaviour (p=0.05).

Study	Intervention	Sample	Design/Procedure	Measures	Results	Conclusions	Limitations
Rausch, Gramling, & Auerbach, 2006	Meditation and progressive muscle relaxation (PMR). or control condition.	N=387 were recruited via advertising on a computerised internet programme. Further analysis was conducted on high-anxiety people (selected because they were above the mean by 1 SD)	Twenty minute session of intervention or a control condition (Meditation or reading magazines; Control or non-control). Then each participant was faced with one	The State Anxiety Scale or the STAI was used to evaluate state or transitory anxiety levels. It assesses current feelings and is rated on a four point scale. The Cognitive Anxiety Scale (CAS) which is used to measure cognitive anxiety	used to determine whether a treatment leads to crossing a meaningful threshold. A follow-up questionnaire was sent out after seven weeks after the start of training. An identical questionnaire was sent out thirteen weeks after the start date.	Those in the meditation and PMR groups decreased more in cognitive, somatic, and general state of anxiety than those in the control group. The PMR group had the greatest decline in somatic anxiety. After	Brief group training in meditation or PMR was demonstrated to be effective in reducing the state of anxiety. It was suggested the meditation prepares individuals for stress by heightening the response and	Unable to know whether this has long-term effects on participants. There were no significant differences among the groups on any demographic variables to start with. There was an overall decline in

Author	Intervention	Sample	Duration	Measures/Method	Results	Discussion	Limitations
			minute of stress (e.g. Traumatic scenes, impossible tasks), followed by ten minutes of the intervention that was administered at the start.	at the present moment using a five point scale. The Smith Somatic Stress Symptoms Scale (SSSSS-S) measuring which statement fits their present state. Finally, a demographic questionnaire assessed the participant characteristics.	exposure to a visual stressor, those in the treatment group had higher levels of anxiety but recovered faster than those in the control group. Pre and post tests were used.	awareness. Meditators tend to react more significantly and recover faster from stress. PMR is more likely to produce effects immediately because overt physical activity is involved	anxiety following initial SMI (p=0.001). A significant decrease over time was observed on each measure (p=<0.001).
Walach, Nord, Zier, Dietz-Waschkoski, Kersig, & Schupbach, 2007	Mindfullness-Based Stress Reduction (MBSR). Workers participated in MBSR training for stress related problems. The authors followed the generic MBSR manual adapted for the workplace situation. The classes comprised of sharing experiences, teaching, and formal meditation.	N=12 in the treatment group, n=11 in the control group	Eight weeks once every week in the evening and one six hour retreat on a Saturday.	The authors conducted semi-structured interviews and measured coping and well-being. They were conducted before the intervention started, after eight weeks of the course and again two months later. In addition to the interviews the authors used questionnaires	In the treatment group positive strategies of coping with stress increased and negative strategies of coping decreased. Eighty-two percent of participants reported reaching their personal goal. The training sensitized participants for	Participants in the control group had attained more awareness of work-related problems contributing to the stress and had grown more critical toward their work environment. Most participants felt they were able to respond to stress in a more mindful way	Need to comply with the intervention regularly to see the results. Small group limited the range in results. This making the sample size unsatisfactory. The intervention was time consuming. Results from the Stress Questionnaire

				(Stress Questionnaires SVF 120).	the reactions specific to their workplace; the situations that produced the stress in the first place. Participants increased their self-efficacy because of an increase of internal controls.	such as not experiencing immediate panic. Three respondents felt they saw no changes. Ninety-one percent opted for a continuation of the programme.
						(SVF120) measured change in positive and negative coping strategies. Positive strategies increased (p=0.05) with statistical significance.
						There are other issues that are more predictive of stress criteria.
Matthews, Emo, Funke, Roberts, Zeidner, Costa, & Schulz, 2006	One group was the control group (read magazines), the second, third, and fourth groups experienced more stressful situations (e.g. unsolvable mathematic problems, viewed traumatic events). The aim was to see whether EI could predict stress responses and coping strategies in varied settings. This paper compares EI and the Five Factor	N=200. There were 50 participants in each of the four groups.	The test session lasted for ninety minutes; each task duration was fifteen minutes.	The authors used six scales from the MSCEIT (representing Emotional Intelligence (EI). Emotional perception was measured by two tests: Faces and designs – a five point scale was used to rate the degree to which the images related to emotion. Personality was measured of sixty items on a	High emotional intelligence was related to lower distress, lower worry, and avoidance coping.	Emotional intelligence failed to predict task-induced stress. Measuring emotional intelligence is not going to help predict stress responses. Results confirmed that low EI was related to worry states and avoidance coping. EI was not related to task-induced

	Model (FFM) as predictors of task induced stress responses.			five point scale. Coping was measured by a questionnaire. Stress state was measured by a ninety-six item DSSQ.		changes in stress states.	
Anonymous, 2006 (Managed Care Law Weekly)	Lectures on the perception of stress, measures to cope with it, stress management recording sheets, and email counselling. The intervention was based on the cognitive behavioural approach.	N=28 in the treatment group and n=30 in the control group.	Three months in duration. Twenty-one out of the twenty-eight in the stress management group were successfully followed up.	Perceived work-related stress and psychological symptoms were evaluated using a General Health Questionnaire (GHQ-30), Centre for Epidemiologic Study for Depression, the questionnaire for work-related stress, and the Effort-Reward Imbalance questionnaire.	The treated group showed a significant improvement compared with the control group after being educated with the skills to cope with stress in the workplace. The effect of the stress management interventions on depressive symptoms in the workplace at follow up was significant (p=0.041)	The alleviation of perceived occupational stress was limited; this may be better suited for the prevention of depression as opposed to work-related stress.	A significant improvement in the depressive symptoms was observed (p=0.003) by a two-tailed t-test.
Willert, Thulstrup, Hertz, & Peter, 2009	Group based stress management intervention based on cognitive	N=51 in the experiment group, n=51 in the wait-list	Three months in duration. Eight times three hour	Outcomes were measured with the Perceived Stress Scale	On the PSS (baseline to three months) the intervention	The intervention was able to reduce perceived stress and	Results not presented for the future follow ups.

behaviour theory.	control group	sessions.	(PSS) and five dimensions from the Brief COPE questionnaire before, three, six, and nine months follow up.	group were affected positively in reducing perceived stress and the ability to positively reframe (coping strategy) compared to that of the control group, similar results were found in all the other areas tested. After three months the gains achieved were maintained.	strengthen coping ability through positive reframing. The SMI might have been more effective in changing attitude-orientated rather than behaviour-orientated coping. Having the intervention take place in the organisation allowed the programme to be tailored to the specific situation and the strategies could be implemented and practiced. Cognitive behaviour theory was used to reduce perceived stress levels in people that already have high stress levels and are actively seeking help.	Short-term follow up period

Elo, Ervasti, Kuosma, & Mattila, 2008	Organisation-wide stress management program aiming to improve psychological work environment and well-being. The intervention sessions were made clear as being a work duty. Communication and work climate were targeted by the intervention because of their significance to the organisational environment and their potential to affect workplace stress from a different angle to individual focus. The aim was to endorse balance of work demands and job control, endorsing leadership justice, and improving communication. Participation was considered	N=625. The intervention was implemented by a steering committee made up of line management, personnel management, blue collar and white collar workers, as well as human resource managers. The conference consisted of two sessions with the first taking two working days and a half-day follow up.	The intervention sessions were arranged during working hours to ensure each individual had the opportunity to participate. Five hour training sessions for supervisors,	Pre and post-intervention questionnaires were used to measure the outcomes with a two year interval. The authors also looked at participation in the intervention. A survey feedback process was available, the attendants filled in questionnaires on a voluntary basis, and the response rate was between 86-90 percent. The German Coping Questionnaire for children and adolescents (Hampel et al., 2001) was used to measure the following nine coping strategies: minimization,	Conferences for; setting goals, planning, future action, and evaluating the improvements so far, were held to help create an awareness with employees about the organisations goals. Participating in the two year program improved flow of information and feedback from supervisors to employees and moderately participating groups. The program did not improve the	It has been suggested that the intervention took longer than anticipated and in the future the intervention should first work to improve communication and work climate first as opposed to a multi-modal approach. Changes in psychological work environment, in particular staff interaction, occur because of the organisational culture, in addition to the effects of individual contributions. An organisational stress management intervention can improve	Expensive and time consuming, hard to measure accurately. Pre and post tests were statistically highly significant (p=0.003) showing a decrease in workplace stress.

necessary for the program to work.			distraction/ recreation, situation control, positive self-instructions, social support, passive avoidance, rumination, resignation, and aggression.	psychological work environment, although reorganisation of work can be considered a prerequisite for improving this. This needs to be integrated into a individual-focused intervention to see significant changes in the work environment.	communication and the work climate but the effect on individuals is limited. However, the changes in psychosocial work environment and in well being were aided by supervisor support, feedback, and justice. The supervisor's behaviour also correlated with work climate. Emotional exhaustion and stress symptoms were associated with work ability.	
Holeman, Axtell, Sprigg, Totterdell, & Wall, 2009	Job redesign intervention consisting of two important features: the participation of multiple stakeholders to	The first questionnaire was completed by n=188 out of the 215 possible employees. At	Assessment and redesign were conducted in a one-day workshop off-site facilitated	A questionnaire was handed out one month before the six month long intervention. One month after the	In four out of five instances the intervention increased job resources and reduced job demand in the	The paper demonstrates the effect of job redesign interventions on employee well-being, the	No control group. No change management employed to guide staff through the

improve the redesign solutions, and the introduction of job design theory so that all involved can make better, well-informed decisions. The intervention was broken into two phases: assessment and redesign, and implementation. At the conference teams were asked to suggest changes after evaluation of the current state, and then the suggestions were rated.

the second stage n=173 of 203 possible participants completed the questionnaire.

by the research team and repeated to ensure all could attend. The intervention was then implemented in five stages over three months.

implementation of the intervention another questionnaire was handed out. The results were measured by Warr's (1990) job-related, twelve item well-being scale. All job design measures were based on employee perceptions.

experimental group but not the control group. Job characteristics increased over time in the treatment group, not the control group. These changes in job resources and job demands were found to be strongly associated with employee well-being.

intervention was mediated by multiple improvements in job characteristics, i.e. job control, skill utilisation, participation, and feedback. Participative job redesigns have the capability to achieve multiple changes in job characteristics and as a result improving employee well-being.

changes made, it may signal to employees that it is an unacceptable alteration of what is already working well. Changes in job resources and job demands were confirmed to be associated with changes in employee well-being (p=<0.1). The results were marginally significant.

Chronicle: February 2010 – May 2010

February 2010

Signals of more proposed changes to employment legislation became apparent in February. Both the *Dominion Post* and the *Press* reported that the Government was considering a 'revamp' of personal grievance legislation. These proposed changes would also see a control of 'frivolous claims' and rules to control advocates who were 'seen to be ramping up claims against employers'. Minister of Labour the Hon Kate Wilkinson stated that she had an 'open mind' on the necessity for change but she announced the release of a discussion document and a questionnaire to survey what changes, if any, were required. Prime Minister John Key also become involved in the discussion and stated that the Government "share]d] concern from many quarters about the fairness and consistency of personal grievance claims". It was claimed that employers were forced to pay out to 'no win no fee' advocates and that some frivolous claims were clogging the system. Wilkinson did concede that industrial relations law was generally working well, and did not need radical change. Combined Trade Union (CTU) President Helen Kelly noted that the no win no fee advocates tended to operate amongst non-unionised workers and that the CTU was not too concerned about moves to regulate them. However, she did express concern over a Government who viewed procedural fairness and natural justice as an impediment when an employee was dismissed and added that the remedies that were won through personal grievances were too low. Business NZ chief executive Phil O'Reilly said that for many years, New Zealand businesses had complained the personal grievance system was too bureaucratic and there was too much emphasis on form over substance.

A later *Independent Financial Review* article quoted Wilkinson as saying that she had anecdotal evidence that the law might not be working. New Zealand Law Society (NZLS) Employment Committee convenor Michael Quigg said that the NZLS would support a system that allowed meritorious personal grievance claims, but discouraged frivolous ones saying that "[w]e do not want a system clogged by frivolous claims made by speculative individuals, or groups, just to claim 'go-away' money." Business New Zealand chief executive Phil O'Reilly even claimed that frivolous claims discouraged companies from hiring new employees, especially those who were unskilled or unqualified. He was quoted as saying that "[w]hat we need to be careful about is that we don't exclude people from the workforce unnecessarily because of fears that if things go wrong they're going to get an ambulance-chasing lawyer or representative after them."

In a timely article on employment disputes taken to the ERA the *Dominion Post* provided a summary of the numbers of cases taken since 2007. In 2007, 295 claims were taken to the ERA, 62 per cent were successful, with an average payout of $5998. In 2008, there were 328 claims, with 58 per cent being successful with an average payout of $5063. In 2009, there were 363 claims, 47 per cent were successful and received an average payout of $5116. The figures showed in fact that although there

was an increase in cases, the success rate was dropping and the average payout was less, contradicting the claims made by employer representatives that there has been a steady increase in the level of personal grievance payouts issued by the ERA to employees.

The *Waikato Times* also reported on the trends in ERA cases and noted that the figures, along with other factors, indicated that there were likely to be changes to the way personal grievance cases were administered by the ERA for a number of reasons. Firstly, Prime Minister John Key, in a speech to the Combined Trade Unions conference, noted the potential for abuse and costly nature of personal grievance processes. He indicated that the Minister of Labour would be looking at the personal grievance processes. Secondly, employers may well be able to recover losses attributable to poor performance from employees. The article cited a case as an example where an employee who was found to be unjustifiably dismissed was awarded over $5,000. On appeal, the Employment Court found that he employee had been responsible for shoddy work that cost the employer a considerable amount of money to rectify and ordered the employee to pay $12,000 in compensation. However, the article did note that while employers often complained about the perceived imbalance in favour of employees, the statistics from a survey (refer to *Dominion Post* article above) showed that the ERA ruled in favour of employees 66 per cent of the time. Also recent case law suggested that the Employment Court was taking a more pragmatic approach and that minor procedural errors did not necessarily undermine an otherwise justifiable dismissal.

The *Sunday Star Times* published an article claiming that employer groups wanted the 90 day probation rule (which originally applied to just small businesses) to be extended to all businesses employing more than 20 persons. The reasoning behind this was that it would stimulate job growth and hasten the country's economic recovery. According to the press release, from an employer's point of view, the ability to hire staff on a trial basis without risk of a personal grievance had proved very successful. Employers and Manufacturers Association (Northern) employment relations manager David Lowe claimed that: "…[the trial period] is something that has eased the mind of employers. This just gives them the confidence and the ability to get on with their business and hire people when they may not have hired at all." The Minister of Labour the Hon Kate Wilkinson said that there were no current plans to extend the legislation but the government was willing to look at anything that encouraged business to give people a chance to succeed. Wilkinson said that anecdotally she had heard good things and that the hysteria surrounding its introduction was unfounded.

The usual procession decisions of the Employment Relations Authority (ERA) during February were reported. The most noteworthy being the case of the former CEO of the Tainui administrative body who claimed that he was unjustifiably dismissed. Reports on this case received extensive coverage in the *Waikato Times* over February. The *NZ Herald* also reported on the case of the ANZ bank which took a complaint to the Employment Relations Authority (ERA) regarding one of its former employees who fled to Australia after authorising a number of over inflated mortgages. The fraud cost the bank over $3.5m and the ERA found that the employee had breached his duty to apply bank credit risk policy in 18 transactions and fined him $54,000.

The dispute between Ministry of Justice Court staff and their employer continued on through the month of February. Provincial papers reported the frustration that Court users were experiencing because of the disruption. For example, the *Southland Times* said that a trial had to be delayed. The *Nelson Mail* reported on chaos in the local Court as 144 cases were affected by a one day walkout by Nelson Court staff. When news of the strike was announced there was an angry outburst in the public gallery of the Court which in turn prompted calls from the staff for increased security at the court to deal with frustrated defendants and supporters in the event of future walkouts

Once again Air NZ was in the news regarding accusations from company management and unions that the Police were making 'unsubstantiated and ill-considered' claims about a drink-drive culture amongst staff. The *Dominion Post* reported that according to Police at least seven Air New Zealand staff had been convicted of drink-driving since 2007. At least two of the employees were caught driving to work with an excess blood alcohol reading. In particular for one pilot it was the fourth time he had been caught drink driving. In a *NZ Herald* article internal Police memos revealed concerns over an Air New Zealand culture that "... accepts alcohol consumption, prior to working, as acceptable". Air NZ CEO responded in a letter to the Police claiming that the claims were 'unsubstantiated and ill-considered' and criticised the 'loose language' of the Police.

March 2010

A *Dominion Post* editorial argued that 'both employers and employees would benefit from a regime that attached more weight to the substance of dismissals and less to legal technicalities'. The current system created a legal minefield for employers who want to dismiss an employee. A case where an employee was dismissed for stealing from his employer but was subsequently found to be unjustifiably dismissed because the employer had not followed a proper process was used as an example. In its ruling the Employment Court ordered the employer to pay $12,000 lost wages and $7,000 costs. While the editorial did concede that there are also poor employers, it welcomed the proposed review by the Minister of Labour of the personal grievance provisions of the Employment Relations Act.

A further *Dominion Post* article reported that unions and the Government were at 'loggerheads' over the review. CTU president Helen Kelly stated that she was also concerned about potential changes to the definition of 'justified dismissal' and the option of reducing the importance of bosses following correct processes when dismissing workers. Kelly was quoted as saying that there were some "... pretty nasty proposals for consideration..." The Minister of Labour the Hon Kate Wilkinson insisted that she was "...open-minded about it. I want to really see what comes out of this discussion, and we'll take it from there." Business New Zealand CEO Phil O'Reilly said that employers regularly complained about the weight given to procedures compared to the substance of complaints. He said that while natural justice mattered, the relative weight given to process was what caused the trouble for employers. Labour party employment relations spokesman Trevor Mallard questioned the need for the review saying that there was no evidence that the present system was not working.

The debate about the proposed changes continued on throughout March. Helen Kelly of the CTU wrote a *Dominion Post* comment starting with the example of 'Andrea' who was a night manager at a hotel in charge of a staff member who inadvertently went into a room where a guest was asleep. The resultant attempt at dismissal by her employer was avoided by the requirement for the employer to follow a fair and proper process and to listen to her version of events. The article surmised that without these protections in place an unscrupulous employer would have dismissed her instantly. Once again statistics were used to show how the current system was working. Only 2500 cases went to the ERA on average with a thousand of these reaching the first stage investigative meeting. These figures were compared to the estimated 800,000 workers who change jobs every year. Arguably the average compensation paid to works at around $2,800 was dismal given the economic and reputational consequences of a dismissal. In a counter to the Government view that payouts for personal grievances are made to make the worker go away, Ms Kelly stated that payments are made before personal grievances escalate because both parties are being pragmatic. In many cases the employee has been treated unfairly and the employer has often breached their rights. She once again confirmed that unions had no problem with the regulation of the 'no win no fee' advocates who typically do not work for unions and are often insufficiently trained to bring about a settlement. In conclusion, she argued that unions would not pursue a personal grievance case purely for monetary reasons where the employee clearly does not have solid evidence. She added that fellow workers often resented their trade union representing workers who clearly were poor performers. As noted previously, Kelly's argued that the current system is working well and that instead of trying to reform the system, New Zealanders should be concerned about the Government's moves to reduce the rights that workers enjoyed for decades.

Left wing commentator Chris Trotter added his view in an commentary written for the *Independent Financial Review* in which he condemned the short sightedness of the proposed changes. Trotter questioned why the Government seemed to be implementing its 'employer driven agenda incrementally' rather than with a 'king hit' Employment Contracts Act type response. The article argued that Government policy was short sighted and had forgotten the crucial role that universal personal grievance mediation played 'in bedding in the Employment Contracts Act and making it work'. Trotter argued that the universal availability of personal grievance mediation played a vital role in the 'de-unionisation of the New Zealand workforce'. Trotter stated that the rationale for de-unionising New Zealand was that individualistic, self-confident workers did not need to join a union as the disputes resolution and mediation procedures outlined in the Employment Contracts Act and strengthened under the Employment Relations Act, 2000, gave employers a strong incentive to act fairly towards their employees. Moreover, such procedures denied the unions horror stories which were needed to maintain and strengthen their membership. Viewed objectively, Trotter claimed that the employers' demands to weaken the legislative guarantees of personal grievance mediation appeared to be self-defeating. He said that it was 'deeply troubling that 20 years after the passage of the Employment Contracts Act' that Business NZ could claim that the elimination of what few protections were left for workers would lead to an improvement in economic performance. It suggested that the business community had learned nothing from the experience of the Employment Contracts Act and that there was a group within the business community who were willing to 'deprive their fellow citizens of their rights' for personal gain.

The article concluded that while short term gains could perhaps be made by adopting a regime where workers 'toil harder for less', an exerted, continuous, downward pressure on wages was not going to achieve the goal of parity with Australia by 2025.

The dispute between the Ministry of Justice and court staff continued with the Employment Court ruling that pay negotiations should resume after they stalled in late 2009. The latest industrial action resulted in staff walking off the job for 23 hours. Public Service Association (PSA) general secretary Richard Wagstaff said that the action stemmed from the Ministry's failure to resume negotiations after the court ruling.

The *Waikato Times* reported on a series of planned strikes at Waikato Hospitals involving radiographers and attendants. The radiographers belonging to the Association of Professional and Executive Employees (Apex) planned to strike for twelve hours. The Waikato District Health Board also received notice from Unite Incorporated that its hospital attendants would strike for 24 hours. According to District Health Boards New Zealand (DHBNZ) spokesperson Phil Cammish, it is estimated the Association of Professional and Executive Employees pay claims would increase the DHBNZ's wage and salary bills for the radiographers by 15 per cent per annum.

The *Nelson Mail* reported on a nationwide strike by community support workers in IHC homes. The community support workers (who normally slept over as part of their job) began a staggered series of strikes. The Service and Food Workers Union had been negotiating on behalf of it members for a 2 per cent pay increase with IHC since October 2009. The IHC management countered offered with a 12-month pay freeze. A Union spokesperson said that the staff supported a vulnerable section of the community and "deserved to be valued for the valuable work that they're doing". The IHC's general manager of human resources, David Timms, stated that: "[w]e simply can't afford to do what the union is asking".

Once again there was a raft of cases from the Employment Relations Authority during March. The more noteworthy ones included two cases reported in an article in the *Waikato Times* that focussed on the change of law surrounding 90 day trial periods introduced in 2009. The first involved a Napier Bar Manager who had a one month trial period. The terms of the probationary period included a chance to respond to any concerns voiced by her employer about her performance and her employment would not be terminated unless she was advised of any required improvements to be made in her performance a week prior to the review. She was later contacted by telephone and informed that she was dismissed. The ERA found that the calculation of the probationary period started when she commenced employment and found that she was dismissed outside of her probationary period and therefore her employer did not meet the obligation under the employment agreement. The ERA concluded that the employee was unjustifiably dismissed and was awarded lost wages and compensation. In a fairly similar fact case an office worker was also dismissed effective immediately by her employer without any reason given and one month into her employment. The ERA found that regardless of a trial period being in place, employers were not exempt from the duty of good faith and should provide an employee with an opportunity to be heard when dismissal was contemplated. In this case, the employer failed to do so and the employee's claim was upheld.

The *Press* ran an article on the case of a highly regarded Christchurch firefighter, who claimed he was dismissed because of his history of mental illness. The former firefighter claimed to the ERA that he was unjustifiably dismissed by the NZ Fire Service in 2008 after an investigation showed he had not disclosed his history of depression and post-traumatic stress disorder on a pre-selection form. The ERA found that the NZ Fire Service was entitled to screen for mental illness and to dismiss an employee who misled it. The man joined the service in 2003 and was an exemplary employee but in 2008 his supervisor became concerned that he was a suicide risk and spoke to police, who visited the man at home. He convinced them they should not intervene, but he later made an attempt on his life and required hospital treatment. Subsequent reports requested by the Fire Service showed a history of mental illness and the failure to declare his previous health issues when he was recruited. The man argued that the questions breached the Human Rights Act prohibition on employers discriminating against candidates with mental health problems but the Fire Service said it used its questionnaire not to discriminate, but to assess whether a candidate's condition was consistent with them safely carrying out all parts of the job. The ERA accepted that mental health was an important consideration in whether a person can properly and safely perform the role of firefighter.

The *Herald on Sunday,* the *Nelson Mail* and the *Press* reported on the Marlborough labour hire company that paid vineyard workers as little as $2 an hour lost a legal battle over unpaid wages. The Department of Labour took a case against New Zealand Vines Ltd to the Employment Relations Authority who awarded them back pay. It was the second time in seven months that the company had been caught paying wages below the legal minimum rate. The manager of the company claimed that most cases were down to misunderstandings and that some of the employees had complained to the Department of Labour before he had a chance to pay them. He claimed that the workers were not fast enough to earn the equivalent of the minimum wage. The Department of Labour had experienced ongoing problems with the company managers who had failed to keep proper employment records and to abide by New Zealand employment law. Marlborough wine grower's spokesperson said that his organisation was fighting to get rid of rogue operators.

April 2010

The *Nelson Mail* reported that the Employment Relations (Workers' Secret Ballot for Strikes) Amendment Bill passed its first reading and was sent to the industrial relations select committee for public submissions. The private member's bill drafted by National MP Tau Henare was supported by the Labour opposition with MP Trevor Mallard sating that Labour had no problems with it because it largely reflected current practice.

The decision by the ERA to intervene in the dispute between the IHC and its support workers was reported by the *Nelson Mail*, the *Manawatu Standard* and the *Dominion Post*. The ERA granted an application by the Service and Food Workers Union that would allow it to make a non-binding decision on the matters involved in the pay dispute which had lead to five weeks of industrial action.

Some regional papers namely the *Northern Advocate* and the *Marlborough Express* reported on the withdrawal of threatened strike action by radiographers. The removal of the threat did cause logistical problems as plans had been implemented to manage the disruption which left hospital officials struggling to return to normal operating capacity.

The education sector, which had been relatively quite, was back in the media with a threat that teachers would strike within a month. The threatened strike, (reported in the *Dominion Post*) was in reaction to the Minister of Education the Hon Ann Tolley who insisted that Post Primary Teachers Association' demands must reflect the economic climate. The Association voted to push for a 4 per cent rise in the upcoming employment negations with the Ministry of Education. Ms Tolley, the Minister of Education, claimed that every 1 per cent increase for primary, secondary and early childhood teachers would cost taxpayers an extra $50 million a year.

In a noticeable trend a number of articles in the media relating to employment are written by leading employment lawyers using case law to illustrate a particular issue. The following articles illustrated the trend. Susan Hornsby-Geluk from Kensington Swan (voted the best dressed lawyer in 2008) wrote an article in the *Dominion Post* about what to wear at work stating that as companies move further away from the traditional white collar/blue collar moulds, work wear was becoming increasingly contentious. The point was illustrated by the case that went before the ERA about a shop assistant in a fashion store who was told to wear makeup. The ERA found that the requirement to wear makeup was not in the employee's employment agreement therefore the employer had no right to insist that she wore it. The article concluded that if a dress code is necessary on health and safety grounds then it may still be justifiable even though it is potentially discriminatory. A case in point would be hygiene reasons which would require staff in a food factory to be clean shaven could be justifiable even though such a rule arguably discriminates against certain religious groups. Andrew Scott-Howman an employment law specialist at Luke, Cunningham and Clere wrote an article in the *Dominion Post* on employee absenteeism through sickness and argued that a contract of employment prohibits an employer from taking disciplinary action as a result of being frustrated that the employee is unable to work due to illness. Instead an employer must accommodate the employee's illness and incapacity to work and can only terminate the relationship for reasons of 'frustration' when he or she can (in the words of the Arbitration Court) "freely cry halt". The case of the Air NZ flight attendant who was addicted to party pills and eventually was dismissed was cited as an example. In this case the employee's recovery plan went on for two years before Air NZ finally dismissed her. Howman said that the case operated as an indication to employers of the need to indulge medically incapacitated employees prior to reaching a decision to dismiss.

The subject of bullying in the workplace is still a subject of newspaper reporting. The *Dominion Post* published extracts on a report of a joint university research team on bullying in the workplace. The team from the Universities of Auckland, Waikato, Massey and London surveyed more than 1700 workers from the health, education, hospitality and travel sectors. One of the findings was that at least one in five New Zealand workers had at one stage suffered from workplace bullying. The highest incidence occurred in the education and health sectors, and the hospitality industry. The types of bullying included managers harassing employees, workers harassing

colleagues and even employees intimidating their managers. It was estimated that the cost of bullying including absenteeism, high staff turnover, lower staff satisfaction and investigation bullying claims was 'a billion-dollar problem'. The findings of the survey were questioned by David Lowe of the Employers and Manufacturers Association (Northern). Citing one of the self report questions whether respondents felt they were being bullied either 'several times a week' or 'almost daily' yielded the far smaller figure of 3.9 per cent. Lowe claimed that what people would normally describe as bullying and two negative acts in the workplace are not one and the same. He argued that the definition of 'bullying' used in the survey was too wide. The Department of Labour which commissioned the survey accepted the findings and intends to develop resources for employers and staff, to assist workplaces to manage bullying issues as they arose.

The exploitation of foreign workers by a 'minority of employers' was raised in a *Southland Times* article. The report quoted a Citizens Advice Bureau (CAB) worker who said that Queenstown was the main culprit with an increase in employment related problems being recorded. A previous article reported that the CAB had urged foreign workers to make sure they signed employment contracts, after several complaints a day were being received from disgruntled workers. The CAB had seen a number of mainly foreign workers, who had been told by employers in the hospitality industry that they were not entitled to holiday pay because they had not worked for a year. A young Chilean man had informed that New Zealand public holidays did not apply to foreign workers' pay rates.

In yet another article on workplace stress a medical expert was quoted as saying that the onset of workplace stress was like twilight – 'you can't see it coming, or identify at what point it happened - but when evening falls, you know it'. Lawyer Susan Hornsby-Geluk wrote that most employers would struggle to describe workplace stress, and may not be able to recognise it until after the damage has been done. It was a 'massive issue requiring lots of sensitivity'. Two landmark cases which cost employers hundreds of thousands of dollars were cited: (a) the police photographer who suffered post-traumatic stress disorder after taking crime scene photographs; and (b) the probation officer who suffered stress due to the high volume of his work stress was related to volume of work. Business New Zealand's manger of employer relations and policy, Paul Mackay, stated that subsequent employer awareness about stress meant that there had been no other significant awards for work related stress claims. He went on to say that there was awareness that stress itself is not the problem, but 'the harm caused by stress'. The article went on to say that for many staff, overwork became an issue during a recession and quoted a recent PSA survey of almost 2000 public servants that revealed that 40 per cent of those surveyed were working at least an additional three unpaid hours per week. Almost half of those surveyed felt their workload was negatively affecting their family life or other responsibilities. Some of the reasons given for this increased workload included loss of experienced staff, unfilled vacancies, slow staff replacement and lack of administrative support. Employment lawyer Barbara Buckett said the crucial factor in Personal Grievances taken by employees for stress is the way the staff member is managed and the attitude of the employer. She said that people under performance regimes could raise the bully or stress card added that there were "ways of flushing that out" with a medical opinion. Her view was that a lot of employers think that people use stress when it is not genuine and it made it much worse if an employer denied that the employee was

under stress which could be devastating. At the end of the day, Ms Hornsby-Geluk said a stress claim came down to was the damage foreseeable and caused by the employer?

May 2010

The *Daily Post* reported on a speech in Parliament by the local Member of Parliament for the Waiariki electorate Te Ururoa Flavell. In the speech during the first reading of the Employment Relations (Rest Breaks and Meal Breaks) Amendment Bill he claimed that one element of the Bill could create a "real, big, enduring problem for New Zealand industrial relations." The Bill had the provision where the duration of rest and meal breaks should be agreed between the employer and the employee. If this does not occur then a stalemate would ensue, thus creating a significant on-going problem. However despite that misgiving the Maori Party gave support to the Bill at its first reading. Flavell did indicate a concern that young workers in particular who were not covered by a collective agreement including those in the hospitality sector, hotels and food outlets would be affected.

The stakes were raised in the education sector with both teacher unions, Post Primary Teachers Association and NZEI, threatening industrial action over their latest pay claims. Two separate items in the *Dominion Post* identified the issues. The first item in the paper stated that the Post Primary Teachers Association, (PPTA) which represented 18,000 secondary teachers, was planning strike action in support of their 4 per cent pay rise. The Government responded that the request was unrealistic. However, the PPTA spokesperson stated that they had a clear mandate from the teachers to take industrial action and indicated that teachers were prepared for the long haul and reiterated that the last long running contract negotiations in 2001/02 included strike action and lasted for 16 months.

At the same time the primary school teacher's union the NZEI which covers 27,000 primary school teachers was to presents its claims to the Government. NZEI Negotiations leader Frances Guy said that teachers were keen to avoid strike action striking was an option if the government played 'hard ball'. The union was still finalising its claim, a figure of 2 per cent pay was discussed at stop work meetings. The response from the Ministry of Education was that the claim was unrealistic and that teachers like other state servants must accept that they are subject to the same constraints as other state servants.

In another *Dominion Post* article, the NZEI lodged a claim before the ERA over the refusal of the Ministry of Education to introduce an agreed pay model. The Ministry claimed that the model was introduced on a trial basis and more work was required before it was implemented. The model was to ensure that 7000 of 27,000 primary teachers with a teaching diploma, rather than a degree, were entitled to higher pay scales. If the legal action was successful it was likely that the top pay scale for a teacher with a diploma would rise from $54,000 to $65,000. The Ministry of Education claimed that evaluation had shown that a more sophisticated system was required and claimed that it was made clear to the NZEI that if the trial was not successful further implementation would not go ahead.

The usual reporting of decisions by the ERA brought up the more sensational and newsworthy cases. The *Herald on Sunday* and the *Sunday News* reported on the 'Shakespearean tragedy' that had become 'high farce' after a Christian high school in Kerikeri dismissed a teacher for using a 'morally defiling' King Lear text in class. The teacher had used a modern text of the play which she failed to check with school officials who found it embarrassing, corrupting and morally defiling. The ERA while expressing sympathy for the teacher was forced to uphold the dismissal. Yet another personal grievance issue involving an Air NZ employee was reported. The *NZ Herald* reported on an Air NZ flight attendant who was dismissed, for mistakenly sending a 'highly derogatory and offensive' about a manager to the man himself. The man was dismissed for serious misconduct and appealed to the ERA on the basis that the dismissal was harsh and failed to consider his length of time working for the company. Although the contents of the email were not revealed the ERA described them as vitriolic and deliberately constructed to be offensive. The employee was seeking urgent reinstatement but the ERA ruled that it was not appropriate the ERA reserved the case for a later substantive hearing.

In another *NZ Herald* article prominent business communication company Ogilvy New Zealand was ordered by the ERA to pay a former deputy managing director nearly $350,000 after it made her redundant. The woman had been employed by Ogilvy and its predecessors since 1993 but was told in July 2008 by the managing director Greg Partington that he had appointed a new deputy managing director. She was offered a seat on the Ogilvy board if she relinquished her job title but some days later she was told through her lawyer that she had never been deputy managing director, and the offer of a directorship was withdrawn. The ERA found that the woman's employment agreement had been seriously breached by a unilateral variation, unreasonably terminating the consultation process, and the claim that she never did the deputy's job, despite her having filled the role for more than three years.

Employment in the viticulture industry featured again in the media. The *Marlborough Express* reported on a vineyard contractor New Zealand Vineyard Estates Limited who was ordered to pay compensation to four employees because of maltreatment. The ERA did not accept the claim that they were full time employees rather than casual but found they had been disadvantaged in their employment as they were not treated fairly and in good faith. The workers were told they were no longer employed as their work performance was not a good as the other casuals but had not been previously informed of the concerns over their performance. Moreover, they were not told how they could have either improved their performance to the standard expected and/or at least not have been left without an understanding as to why work was no longer to be offered to them. In a later *Marlborough Express* article the chairman of the New Zealand Winegrowers Association claimed that 'the good apples will squeeze out the bad in the labour contracting game' but the union representing vineyard workers said that it was the bad employers who have the upper hand. The dispute highlighted the wider issue of the employment of illegal workers in which the Central Amalgamated Workers Union Marlborough organiser Steve MacManus stated that while practices had been tidied up there were still a number of unscrupulous sub-contractors who employed only illegal migrant labour. He added that good contractors were being undercut and could not complete with those non-compliant employers who paid illegal migrant workers very little (if at all).

The *NZ Herald* and the *Dominion Post* reported on a simmering dispute amongst the country's firefighters and the Fire Service with several senior officers facing disciplinary action for refusing to follow orders over the storage of fire appliances in fire stations. The officers claimed the diesel fumes posed a health risk. The Professional Firefighters Union said they had been working for years to get extractor systems to deal with diesel fumes inside fire stations. There was an agreement with the Fire Service under which the extractor systems will be installed but the union was upset at local area managers taking disciplinary action. Fire Service employment relations manager Larry Cocker said the measures were taken after some firefighters refused to take the vehicles inside even after the agreement was reached. He said that the Fire Service had done everything it could to meet the concerns of the union over a health risk and considered it a minimal risk.

In yet another dispute the *Dominion Post* reported that firefighters were defying a new operation procedure that restricted the response of fire appliances to buildings with sprinkler systems. The Fire Service was reported to be implementing disciplinary procedures for employees who failed to follow the orders. Professional Firefighters Union vice-president Peter Hallett claimed that the 'bizarre' new policy was endangering lives. Fire Service assistant national commander Bill Butzbach said 26 officers, had been spoken to about breaking the rules - though opposition had begun to quieten down.

The *NZ Herald* printed a number of articles about the case of an immigrant from South Africa who was offered a job with a $55,000 salary but was asked by her employer to pay her own taxes and wages in order to stay legally in New Zealand. The allegation was made before the Employment Court. The woman claimed the arrangement was in order to deceive Immigration officials into thinking that she was being employed at $55,000, as an associate consultant which was the minimum salary for her to meet skilled migration requirements. The recruitment company claimed that the allegations were false and that the woman had full knowledge and was in agreement of the arrangement between them. The case sparked a wider debate on immigrants who entered these scam agreements with employers to pay their own taxes and wages in order to obtain New Zealand permanent residence. The illegal scheme even had its own name PYO (pay your own). Employment advocates and the National Distribution Union claimed that the practice was rampant and had been going on for years, with possibly hundreds gaining residence by paying their own way to meet immigration requirements for skilled migration. Some suggested the practice was kept quiet because much of the arrangements occurred within migrant communities. The woman who sparked the original media attention lost her case before the ERA and was forced to return to South Africa.

The long running issue which involved Air Nelson employing replacement workers during a strike by its employees reached its zenith with a decision by the Supreme Court. The Court stated that Air Nelson acted within the law to bring in the replacement workers. Engineering, Printing and Manufacturing Union secretary Andrew Little said the decision was significant in that the ruling was the last place the argument could go and secondly the decision was very confusing and it was hard to discern what it would mean in practice. The appeal in the Supreme Court centred on several sections of the Employment Relations Act intended to prevent employers from

using strike-breaking techniques, such as engaging contractors or new employees during industrial action.

Counsel for Air Nelson, Christopher Toogood QC, said the strike-breaking provisions did not apply in instances where striking and non-striking workers routinely carried out similar tasks. The Supreme Court said the approach adopted by the Employment Court, that the contract engineers had not been performing the work of striking employees but had been performing their own work, was correct.

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