

Well-being and occupational health in the 21st century workplace

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Over the last 40 years, major changes have taken place in the workplace. The growth in the use of information technology at work, the globalization of many industries, organizational restructuring, changes in work contracts and worktime scheduling have radically transformed the nature of work in many organizations. The workforce itself is also diversifying, with an increase in female participation, a growing number of dual-earner couples and older workers. The present paper discusses the impact of these workplace transitions on employee well-being. We focus on four issues that are current concerns for organizations and the workforce; job insecurity, work hours, control at work, and managerial style. For each topic, recent research is presented, with suggestions for future research and recommendations for practitioners working in the organizations of today. The paper concludes with some final considerations for researchers and practitioners that may benefit both employee well-being and organizational effectiveness.

Over the last four decades of the 20th century, the nature of work has changed dramatically for some people. The 1960s and 1970s saw the introduction of new technology, particularly the use of computers, into the workplace. This was followed in the 1980s by a huge shift towards globalization, with many organizations undergoing mergers, acquisitions, strategic alliances and privatizations. This entrepreneurial period resulted in increased economic competitiveness in international markets for those countries that embraced it (Cooper & Jackson, 1997). In the 1990s, a major restructuring of work started to take place. Organizations in countries hit by recession were downsizing or delayering in an effort to survive. During the last decade, this trend for restructuring and downsizing has continued in many organizations, together with an increase in sub-contracting and outsourcing, in order to compete successfully in the increasingly competitive global market. There has been a rise in short-term contracts, as a result, possibly, of the deregulation of fixed-term contracts and the limited requirements on permanent employment in many countries (OECD, 1999). Other changes include new patterns of working, such as teleworking, self-regulated work and team work, an increased reliance on computerized technology and a move towards a more flexible

workforce, both in number of employees and in their skills and functions (Cox, Griffiths, & Rial-Gonzalez, 2000). Many countries have seen a growth in female participation in the workforce, resulting in more part-time work, an increase in dual-earner couples, and a general growth in the number of older workers.

As the workplace has slowly transformed, research in organizational psychology has followed these trends. Studies have looked at the consequences of workplace changes, particularly their impact at both the individual employee level and the organizational level. The present paper focuses on research addressing occupational health and employee well-being, concentrating on four major areas in organizational psychology; job insecurity, work hours, control at work, and managerial style. Each of these issues has become a major concern as a result of the recent radical organizational changes. There are now fewer people at work, doing more and feeling less security and control in their jobs. Management in particular have increased pressures trying to keep pace and manage their workforce against a background of rapid change. This heightened pressure can impact on their behaviour towards employees.

For each of the four topics, research investigating the impact on employee health and well-being will be summarized, further research suggested, and the implications and recommendations that can be made for practitioners working in the rapidly changing workplace of the 21st century discussed.

Job insecurity

Researchers have found that the trend for restructuring and downsizing in many organizations has led to an increase in perceived job insecurity, particularly for white-collar workers (e.g. Pahl, 1993; Worrall & Cooper, 1998). Worrall and Cooper (1998), for example, found that over 60% of a national sample of 5000 British managers had undergone a major restructuring during the previous 12 months involving downsizing and outsourcing. The consequences of this change, even among an occupational group (middle and senior managers) supposedly in control of events, were that nearly two out of three experienced increased job insecurity, lowered morale, and an erosion in motivation and loyalty.

The growth in non-permanent employment contracts in many countries has also increased job insecurity (Bureau of Labor Statistics, 1995). Organizations are increasingly utilizing contingent workers as an alternative to conventional full-time employees. 'Contingent work' includes temporary and occasional part-time employment, often contracted from outside agencies or independents. In many developed industrial economies, such workers usually have fewer entitlements and protections within the organization compared to full-time employees. Hence, contingent workers have less job security as the organization considers this workforce to be on a contract basis selling their services as opposed to actually being an intrinsic part of the organization.

However, despite the increase in the use of a flexible workforce and contingent workers, objective data taken from OECD surveys show little change in job security levels over the past decade (OECD, 1999). Whilst this may conflict with

other findings (e.g. Bureau of Labor Statistics, 1995), a breakdown of the statistics indicates that tenure and retention rates in certain OECD member countries declined over this period, in certain occupations. Hence, job security may differ according to occupation. Furthermore, another survey in the UK indicated only a slight increase in temporary contracts over a 10-year period (1987–1997; Eurostat, 1997).

None the less, survey findings from several OECD member countries indicate that the *perception* of job insecurity has increased over the last decade (OECD, 1999), a finding replicated in other national surveys (e.g. Burchell *et al.*, 1999). This perception may be due to a greater spread across industries and occupations of temporary work and the associated longer spells of unemployment between contracts (Burke, 1998). Smithson and Lewis (2000) further argue that the perception of high levels of job insecurity may be fuelled by the fact that not only blue-collar occupations, but also professional and graduate jobs that were once deemed secure, are at risk now. Perceived job insecurity also seems to be more prominent amongst the youngest and oldest members of the workforce (Burchell *et al.*, 1999). Whilst objective data may suggest that job insecurity should not be a major concern for employees, research indicates that it is this *perception* of job insecurity that is the most important correlate with employee health and well-being. Recent studies have found that perceived job insecurity impacts negatively on employee well-being (e.g. Ferrie *et al.*, 1995). McDonough (2000), for example, found perceived job insecurity to be associated with lower scores in self-rated general health and increases in both distress and the use of medications among a national sample of Canadian workers. Borg, Kristensen, and Burr (2000) analysed data from 5001 Danish employees over a 5-year period and found that high levels of perceived job insecurity were significantly related to lowered self-rated general health. A study of over 2000 Swiss employees by Domenighetti, D'Avanzo, and Bisig (2000) found that psychosocial stress induced by perceived job insecurity had negative effects on 10 different self-reported indicators of health and health-related behaviours.

Organizations may suffer financially from heightened employee perceptions of job insecurity due to the associated costs of increased absenteeism and sickness resulting from lowered employee well-being. For example, a longitudinal study of Finnish government workers found a significant relationship between the degree of organizational downsizing and medically certified, long-term (i.e. greater than 3 days) sickness absence (Vahtera, Kivimaki, & Pentti, 1997). Other studies indicate that perceived job insecurity may impact on organizations in terms of less employee organizational commitment and lowered morale and motivation (e.g. Worrall & Cooper, 1998). King (2000) found that white-collar workers who reported a high job insecurity were less supportive of organizational goals, gave less effort to produce quality work and were more actively seeking alternative employment. However, an important factor for organizations to consider is whether employees voluntarily take up work that is perceived to be insecure. Pearce (1998) reports no differences in employee attitudes (job satisfaction, intention to leave, and organizational commitment) between a sample of contract workers and more secure employees and argues that choosing contingent work status (e.g. contracted

consultancy work) is more important than the actual status itself for employee attitudes.

The available research clearly suggests that perceived job insecurity is bad for employee well-being. This, in turn, can impact on organizations through increased sickness absence (Vahtera *et al.*, 1997). Given the reported increase in perceived job insecurity (e.g. Burchell *et al.*, 1999), organizations need to consider the financial costs associated with those employees who are reluctant to be working in jobs which they perceive to be insecure.

The long-term costs to both employee health and organizational performance of heightened perceptions of job insecurity are not known. If the present trend towards non-permanent work continues, researchers in organizational psychology will need to explore the impact of this through longitudinal studies. Methods for helping employees cope in their unstable work environments must be identified if negative health effects are to be minimized. Research also needs to identify the internal effects on organizations if they move to employing increased numbers of non-permanent staff. More secure employees may resent non-permanent staff who occupy positions that were once assumed by permanent staff (Pearce, 1998). Organizations should ensure that temporary staff are not isolated or alienated by permanent workers, as this would obviously affect the well-being and attitudes for both types of employees.

Employers must take measures not only for the health of their employees but also to reduce any financial costs in terms of employee performance and commitment associated with perceived job insecurity. Smithson and Lewis (2000) suggest that employers can, to some extent, compensate for high job insecurity by providing other benefits such as training and self-development opportunities, greater respect and adequate pay. Employees should be encouraged to learn transferable skills to improve their employment prospects. Open communication needs to be encouraged between managers and employees during periods of employment uncertainty in order to ameliorate any negative consequences (Cameron, Freeman, & Mishra, 1991). Organizations should develop and maintain trust and a good rapport with employees so that any assurances are seen as credible. Furthermore, HR managers need to be aware of how job insecurity can impact on an individual's life outside work. In a sample of young workers (aged 18–30), Smithson and Lewis (2000) found these individuals more accepting of insecure work compared to older workers, but only in the short-term. Long-term insecurity was seen to be more problematic, especially in combination with major non-work activities such as buying a house or starting a family. These life stages were often postponed or even avoided due to the lack of financial stability and parental leave rights associated with non-permanent work. Hence, if non-permanent work is to continue, employers need to consider ways of providing such entitlements to non-permanent staff, not least for the well-being of their employees but also to attract younger workers.

Work hours

In recent decades, the reorganization of working time arrangements has been a key feature of economic restructuring in many nations (Bosch, 1999). This is partly due

to advances in technology and industry but is mainly driven by employers' demands for greater flexibility in work schedules to cover extended operating or opening hours, predictable peaks in labour demand at different parts of the day, week, or year as well as less predictable requirements for additional cover due to market uncertainty (OECD, 1999). There has been an increase, for example, in the use of work days or work shifts longer than 8 h (Rosa, 1995). Some schedules compress the work week so that 36–48 h of work are completed in 3–4 days instead of 5. Other situations require frequent overtime work due to tight deadlines, understaffing or emergency contingencies. Industries such as mining, shipping, and oil-drilling, routinely schedule long work periods, followed by long rest periods. This is because frequent staff change-overs would be impractical due to the difficulties with travel to often remote work sites.

The use of other types of alternative work schedules is also increasing. For example, flexible worktime systems, based on weekly, monthly or yearly work hours, are now used substantially in organizations across Europe (Brewster, Mayne, Tregaskis, Parsons, & Atterbury, 1996).

In terms of actual weekly work hours, some countries have reduced worktime, whilst in others, it has been extended. The OECD (1999) report a gradual decline over the last few decades in annual working hours across all member countries as a result of voluntary agreements between employers and employees and in part, government regulations, for example the EU legislation on working hours (EC Working Time Directive, 1990). However, in some countries, work hours have been rising slowly, particularly in those nations where labour markets have been deregulated and income inequalities have widened (e.g. New Zealand, United Kingdom, and United States) (Bosch, 1999). In many developing countries, also, annual worktimes are increasing, often exceeding 2000 h or even 3000 h with overtime (compared with an average annual rate of 1500 h in industrialized countries) (Maddison, 1995).

The increase in work hours in some countries is in part due to the trend for restructuring and downsizing in many organizations. Reduced staffing can result in employees remaining in a downsized organization taking on increased workloads and having to work longer hours to cope with the extra demands (e.g. Worrall & Cooper, 1997). The heightened perception of job insecurity inherent with downsizing also makes many employees reluctant to refuse increases in their workload, enabling employers to set hours constraints above employees' preferences (e.g. Beatson, 1995). The huge expansion of the use of information technology has further resulted in information overload and accelerated the pace of work (Cooper & Jackson, 1997).

Working time has increased in some countries due to the stagnation or decline in real income levels, particularly among low wage earners (e.g. state countries) (Bosch, 1999). Furthermore, the minimum wage in many countries has fallen relative to the average wage in the last 10 years (OECD, 1999), widening income inequalities. Hence, many workers have to compensate for the drop in earnings by working more hours or taking on more than one job (Bosch, 1999).

The recent changes in the organization of working time have been investigated by organizational psychologists to assess the impact on employee well-being and

work performance. Numerous studies have addressed the effects of the compressed work week, particularly the change to an extended 10–12-h shift. Within an extended shift, Rosa, Colligan, and Lewis (1989) found a decreased reaction time and grammatical reasoning performance, with increased subjective fatigue after 7 months of 12-h shifts relative to the previous 8-h shift schedule. Performance, however, did not deteriorate overall across the work week, suggesting that the shorter work week compensated somewhat for the longer work shift. Rosa (1995) also found excess fatigue, sleepiness, and significant loss of sleep for workers on extended work shift schedules. Poissonnet and Veron (2000) reviewed studies on new forms of shift schedules for effects on health. They found that no particular work system was favourable, but evidence indicated that extended work days (9–12 h) should be avoided as much as possible to minimize fatigue.

None the less, compressed worktime schedules are often popular among shiftworkers, not only because of the reduction in commuting, but also because the extra non-work days allow larger blocks of time for recuperation from night work, for family and friends and for other leisure pursuits (Rosa *et al.*, 1989).

Research investigating the impact of flexible work hours has found advantages and disadvantages to its implementation (e.g. Christensen & Staines, 1990; Pierce & Newstrom, 1983). Major advantages claimed include lower stress levels, increased job enrichment, morale and autonomy, reduced absenteeism and tardiness, and improved job satisfaction and productivity. The major disadvantages identified include increased costs, problems with scheduling and work co-ordination, difficulties in supervising all employees due to differing work hours, and changes in the organizational culture. Flexible hours appear to have a positive impact on work–family balance and employee stress (e.g. Dunham, Pierce, & Castaneda, 1987), although these findings may be attributable to a reduction in work hours rather than alternative methods of work scheduling (Gottlieb, Kelloway, & Barham, 1998). There is little evidence to suggest that overall job satisfaction differs between employees working flexible systems and those with a more traditional schedule (McGuire & Liro, 1987). However, flexible work hours do appear to increase satisfaction with the work environment and the work schedule itself (McGuire & Liro, 1987).

One reason for these inconsistent findings may be a failure to account for whether employees have any choice or control over their flexible work schedules. Employees assigned to a particular schedule may find that its flexibility does not meet with their own needs and lifestyle. In contrast, other employees may have the opportunity to customize their flexible work schedules to match their own requirements.

Evidence for this comes from research investigating flexible work hour systems in Canada. A Canadian research group (e.g. CARNET, 1995; Work Family Directions, 1993) investigated the impact of flexible work arrangements on productivity and employee well-being. At first, they found inconsistent effects for performance, work–family balance, stress, and attitudinal outcomes. However, when accounting for choice over flexible work schedules, they found a compelling case for employees choosing their work hours. Employees who reported choosing their worktime schedules had higher performance ratings, reported less stress,

greater overall well-being and reduced work interference with family life, compared with employees assigned to their work schedule. Employee choice is clearly an important factor in the implementation of a successful flexible work schedule.

Given the increase in the actual number of work hours in some countries, researchers have also investigated the impact of prolonged work hours on employee health. Sparks, Cooper, Fried, and Shirom (1997), for example, conducted a meta-analytic review of the long work hours literature and found a relationship between prolonged work hours and employee mental and physical ill-health. The long duty hours of trainee doctors have also received attention, with a number of studies reporting both health and performance impairments (e.g. Scott, 1992). Leonard, Fanning, Attwood, and Buckley (1998) assessed the effects of a 32-h on-call shift on pre-registration house doctors in an Irish hospital; they found that prolonged periods of duty without sleep adversely affected psychological well-being and the junior doctors' ability to carry out simple tasks on alertness and concentration. Numerous studies have been conducted in Japan where employees work excessively long hours, with many workers not taking their full holiday entitlement (Blyton, 1989). These investigations indicate that prolonged hours of work are linked to ill health, including heart problems such as acute myocardial infarction (Sokejima & Kagamimori, 1998) and, more seriously, '*karoshi*' or 'death due to overwork' (e.g. Uehata, 1991).

Worryingly, employees who work long hours have been found to be more prone to poor lifestyle habits, such as heavy smoking, inadequate diet, lack of exercise (e.g. Maruyama, Kohno, & Morimoto, 1995), behaviours that can lead to health problems. Another growing concern is the effect of prolonged exposure to the increasing number of chemicals used in industry for employees working prolonged hours. Emmet (1991) reported that approximately 65 000 chemicals, in the US alone, are used in businesses with around 700 new chemicals being introduced into the workplace each year. Baker and Landrigan (1990) cite 35 different workplace illnesses with their causal agents and the industries where they are used.

There have been few longitudinal studies of the effects of prolonged work hours. However, recent research from the British Household Panel Survey (1998) involving 5000 households found that health problems were particularly manifest in employees who had worked persistently long hours over a 5-year period. Such individuals reported higher blood pressure, more problems with their limbs, more chronic headaches and sleepiness than those working shorter hours. Moreover, these health problems persisted even after a reduction in prolonged work hours, suggesting that some health impairments may be irreversible. Perhaps not surprisingly, this study also found that family relationships between parents and children were negatively affected by long working hours. Another longitudinal study on the after-effects of prolonged work hours (Falk, Hanson, Isacson, & Oestergen, 1992) investigated whether job strain affected mortality in a sample of elderly retired Swedish men. Exposure to job strain (demanding and hectic work) was found to be related to an increased risk of mortality after retirement. Thus, whilst individuals may not experience health problems during their working life, undue job strain (including long work hours) may present problems later in life.

The British Household Panel Survey (1998) found that long work hours can impact on homelife. Work stress can affect the psychological health, physical health, life expectancy and the marital satisfaction of employees' partners (Fletcher, 1988). Morrison and Clements (1997) found that the work overload of naval officers had a negative effect on the well-being of their partners. Galambos and Walters (1992) found that husbands in dual-earner couples, whose wives worked longer hours, were more prone to depression and anxiety compared with husbands whose wives worked fewer hours. The authors suggest that wives often play an emotional supportive role for the husband, so if they work long hours, they may be unavailable to provide a buffer against the stresses of work for the husband. This, in turn, may result in the husband experiencing more stress. The findings from such studies warrant concern in those countries with prolonged work hours, especially as the number of households with dual-earner couples is increasing (Bosch, 1999).

Overall, recent research on the changes in worktime schedules shows that prolonged work hours and work shifts have detrimental effects on employee well-being. However, most research has focused on only certain health outcomes, in particular mental health and cardiovascular disorders (Sparks *et al.*, 1997). Further studies are required to assess the effects of the different worktime schedules on other aspects of health, especially those associated with occupational stress (e.g. gastrointestinal disorders, musculo-skeletal disorders, etc.) and the longitudinal effects on poor lifestyle habits. The long-term effects of increased exposure to hazardous chemicals also need to be addressed. Investigations must encompass Third World and developing economies, given the often extreme number of work hours found in these nations. With the increase in dual-earner couples and the number of women entering the workforce, further study is required on the impact of domestic work hours on employee well-being. A high domestic workload can exacerbate any negative effects from work hours (Tierney, Romito, & Messing, 1990). The dual role of worker and carer can also lead to significant levels of anxiety (Field & Bramwell, 1998). This is a further research consideration given the aging population and the increase in employees caring for elderly relatives (Berry-Lound, 1993).

More studies are required on the effects of the different flexible worktime schedules. Annualized hour systems have received particularly little research attention (Gall, 1996). In a meta-analytic review of the literature, Baltes, Briggs, Huff, Wright, and Neuman (1999) found an overall waning effect with time, for flexible worktime schedules. Any positive outcomes decreased over time, at least for work-related criteria such as job satisfaction, productivity and performance. Further research needs to explore the effects of time on such schedules for employee well-being and also to clarify the influence of employee choice over schedules.

The current research on worktime schedules provides some recommendations for practitioners. The literature on compressed worktime systems suggests that prolonged work shifts (9–12 h) should be avoided to minimize risk to safety and health for employees. Where extended work shift schedules are to be implemented, these must be carefully evaluated and appropriate precautions made to reduce work overload and environmental exposure to chemicals and other hazards (Rosa, 1995).

Given the reported benefits in both work-related criteria and employee well-being, flexible worktime schedules are a worthwhile option in many organizations and industries. Some precautions are required, however. Flexible worktime schedules need to be economically viable to meet the interests of the employer but also need to take into account the home and family responsibilities of employees. Research has emphasized the importance of employee choice over worktime schedules for both performance and well-being (e.g. CARNET, 1995). Allowing employees to be involved in the design and implementation of a new flexible worktime schedule will benefit both the employee and the organization.

Flexible work schedules can be incorporated into 'Family Friendly' policies designed to help employees balance work and family demands. These policies reduce the strain of multiple roles and work-family conflict (e.g. Thomas & Ganster, 1995), can solve other organizational problems such as skill shortages, the need to recruit and retain women with family commitments (to meet equal opportunity requirements in some countries), and can also reduce absenteeism (Lewis, Watts, & Camp, 1996). Practitioners need to ensure, however, that the prevailing organizational culture does not prevent the full utilization of such schemes. For example, many employees may feel that owning up to having family responsibilities or commitments may be interpreted by their employer as a lack of job commitment, engendering a reluctance to use these schemes (Lewis, 1997). With the increase in dual-earner couples and their family responsibilities, and the rise in elderly dependents, organizational cultures need to change to adapt to the changing needs of their employees.

With so many studies highlighting the ill effects of prolonged work hours, organizations need to consider the costs of the associated raised sickness/absenteeism rates and the lower performance/productivity levels. Furthermore, employers may find themselves facing legal costs as more employees turn to litigation to seek compensation for stress-related injury (Earnshaw & Cooper, 1996). HR managers must encourage a reduction in working hours in organizations with a prolonged worktime culture. Senior managers, themselves, should set standards by reducing their own work hours and also enforce a lower expectation of employee work hours and availability. From an organizational perspective, this at first may seem rash given the widely held perception that such actions will be followed by economic losses. However, reductions in worktime do not always lead to financial losses for the organization concerned. Indeed, Thomas and Raynar (1997) found that prolonged work hours of 50–60 h a week resulted in a loss of efficiency in the construction industry. Other research has shown that a reduction in work hours has no effect on productivity (e.g. Richardson, 1993).

A further consideration for practitioners, particularly in organizations where employees have to cope with periods of very heavy workloads, is the provision of training in self-efficacy. A recent study by Jex and Bliese (1999) found that individuals with a strong self-efficacy (defined as 'an individual's beliefs regarding the likelihood that a particular course of action or behaviour can be carried out') reported less psychological and physical strain with long work hours and work overload compared with those with lower self-efficacy. In those situations where long work hours are unavoidable, training in self-efficacy for the

employees concerned may help to reduce any negative consequences from the work schedule.

Employers should consider the long-term costs and benefits of recruiting more staff to spread the workload, and improving standards of pay, both causes of long work hours. Such actions would benefit both employee performance and their health and safety. This is, of course, exactly the opposite of the downsizing trends discussed earlier. Organizations, therefore, need to question the policy of downsizing to improve efficiency.

Control at work

Over the past few years, many employees have perceived a gradual loss of control over their work lives and careers. Even those in managerial positions that are usually associated with some degree of control at work have been affected (e.g. Worrall & Cooper, 1998). This is a consequence of the heightened perception of job insecurity, the increased pace of work and the constant advances in technology in the workplace that many individuals have had to adapt to.

The concept of perceived autonomy or control has been extensively investigated in research. 'Perceived control' concerns the amount of control that an individual believes they have over their environment, whether direct or indirect, to make it less threatening or more rewarding (Ganster & Fusilier, 1989). A great deal of evidence from animal and human research indicates that the presence or absence of control has profound effects on health and well-being (e.g. Averill, 1973; Miller, 1979). Degree of control has also occupied a central position in theories of job design and organizational behaviour. Within the work setting, this concept concerns the extent to which an individual is free to decide how to accomplish a task or goals of the job. Considered a basic human need, it is also a motivational characteristic of work. Employees who perceive themselves as choosing to perform an activity, as opposed to being directed to do so, are intrinsically motivated and accept more personal responsibility for the consequences of their work (e.g. Hackman & Oldham, 1975). Very low levels of personal control have been found to be psychologically harmful, whereas greater control has been associated with better mental health (e.g. Evans & Carrère, 1991; Ganster & Fusilier, 1989). High levels of perceived control are associated with increases in job satisfaction, commitment, involvement, performance and motivation, and with low levels of physical symptoms, emotional distress, and absenteeism (e.g. Spector, 1986).

Much of the research in organizational psychology has stemmed from Karasek's (1979) job demands–job control model. This model proposes that the effects of job demands (psychological stressors in the work environment) on employee well-being are influenced by job decision latitude (the degree to which the employee has the potential to control their work). The model predicts that job decision latitude attenuates any negative effects of job demands on employee well-being. Early studies, using large heterogeneous samples, showed moderate support for Karasek's model (e.g. Karasek, 1979; Karasek, Baker, Marxer, Ahlbom, & Theorell, 1981). More recent investigations using Karasek's measure of job decision latitude and

other measures of work control have demonstrated that high levels of control are directly related to a range of positive health and work-related outcomes; for example, decreased anxiety and depression (e.g. Mullarkey, Jackson, Wall, Wilson, & Grey-Taylor, 1997), psychosomatic health complaints (e.g. Carayon, 1993), life satisfaction (e.g. Fletcher & Jones, 1993) and job performance (e.g. Greenberger, Strasser, Cummings, & Dunham, 1989).

The formulation of Karasek's model and other research on control provided the impetus for job redesign, with an emphasis on employee work control. One method used to increase perceived control for employees in many organizations is the introduction of participative decision-making, whereby those employees involved in carrying out any decisions also have some input into the actual formulation of the decision (Lowin, 1968). The rationale behind this method is that valuable insight often can be gained by the participation of employees who are involved in implementing a decision. Other methods of increasing perceived control include greater freedom over start and finish times, more discretion over how tasks are performed, and autonomous or self-regulated work teams. This last method involves groups of employees with overlapping skills who work together on a relatively discrete task (e.g. producing a particular product) whilst having a high degree of discretion over the way in which they work.

Whilst there are a plethora of studies providing evidence on the benefits of increased control for employee well-being and job-related criteria, there are also studies with conflicting findings. For example, recent research has failed to replicate the hypothesized interaction effect of high job demands and low job control on measures of strain in Karasek's demand-control model (e.g. Fletcher & Jones, 1993). Studies of autonomous work groups have found positive effects on productivity and other work criteria but a lack of improvement in well-being, motivation and absenteeism (e.g. Goodman, Devada, & Hughson, 1988). The mixed findings for Karasek's model may be due in part to specificity of the control measure used (Wall, Jackson, Mullarkey, & Parker, 1996). Individual differences between employees may further explain the discrepant findings. For example, studies have found considerable variation in the desire for control in the workplace (e.g. Hackman & Oldham, 1980). Hence, a perceived lack of control may be stressful to some employees but not to others. Some employees may want minimum control in their jobs, perhaps not wanting the increased responsibility that is often connected with greater job autonomy. In such situations, a greater degree of job control would not necessarily be associated with any positive effects on well-being or work-related criteria. De Jonge, Landeweerd, and van Breukelen (1994; cited in de Rijk, Le Blanc, Schaufeli, & de Jonge, 1998) found a negative relationship between job autonomy and both emotional exhaustion and health complaints only for those individuals with a high need for autonomy.

Another difference between individuals is their actual use of the control that they have in their job to cope with stressful situations. Some individuals may cope with a stressful situation by cognitively analysing or using concrete actions to reduce or solve the situation. In a study of Dutch nurses, de Rijk *et al.* (1998) found that overall job control was positively related to employees' well-being, but for nurses

who used active (or control) coping, high job control reduced the increase in emotional exhaustion due to job demands. In contrast, for nurses with low active coping, high job control overtaxed such individuals when faced with high job demands, resulting in a lowered well-being; having high levels of control acted as a stressor for these individuals.

In sum, the above research has highlighted the importance of perceived work control for employee well-being. However, further clarification is required on the impact of perceived control in the workplace. Most researchers have viewed work control as a unidimensional construct; it is, however, multi-dimensional, with employees perceiving different levels of control over different aspects of their work environment. Ganster (1988), for example, proposes several different types of work control, including task control, pacing control and scheduling control. Some types may be more important for well-being than others. Task control, for example, appears to act as a stress buffer, particularly when the stressor is task-related (Terry & Jimmieson, 1999). Future investigations need to identify which aspects of work control are the most beneficial to employee well-being. As the majority of work control studies to date are cross-sectional (Terry & Jimmieson, 1999), longitudinal research is also required. The influence of individual differences (e.g. desire for control) also warrants further attention. Several studies have identified social support as an important factor in the stress-buffering effects of work control (e.g. van der Doef, Maes, & Diekstra, 2000). This dimension must be considered in future investigations. Multiple methods and data sources (e.g. both objective and subjective measures) are also important when assessing work control (Jick, 1979). Overall, research needs to consider other factors in the workplace, such as individual and work-environment characteristics, to provide a clearer picture of the relationship between perceived control and employee well-being.

The above research emphasizes the importance for practitioners to be aware of the complexities of the relationship between perceived control and employee well-being. Increasing control in the workplace is not a pre-cursor to improved well-being. Individual differences, for example, in the desire or need for control, as well as in coping skills, must be taken into account when making changes in job autonomy or decision-making responsibilities. This ideally should be conducted with employee consultation and relevant training support. Where appropriate, problem-solving sessions should be held between supervisors and employees to identify job demands or stressors. Strategies should then be instigated that will increase the employees' perceived control so that they can cope more effectively (Spector, 2000). Although the recent major changes in the workplace have left many employees feeling that they have less control, at the same time, some individuals have found that they have increased work control due to the deregulation of the work force. Aside from whether this extra job control is wanted or not, this increase in autonomy is often not enough to meet the demands of the job, leaving such individuals vulnerable to stress (Houtman, 1999). Organizations need to address this issue, whereby any planned increases in employee control need to be adequate enough to meet the psychological demands placed on the worker.

Managerial style

There is evidence that the managerial job is a demanding one (Burke, 1988). Managers are usually at the forefront of any changes in an organization, actively involved in the decision-making process and responsible for the consequences of any changes made. In the present global economy, competition between industries across countries is increasing (Thurow, 1993), making the management of organizations especially challenging (Whetten & Cameron, 1995). This, together with the constant changes taking place in many workplaces, has resulted in managers being particularly prone to high levels of occupational stress. For example, Cartwright and Cooper (1993) found that 6 months after a merger in a UK building society, more than one-third of 157 middle managers reported mental-health levels comparable to, or worse than, psychoneurotic outpatients.

Increased managerial pressure can also impact on employee well-being. By virtue of their superior position in an organization, managers and supervisors, intentionally or unintentionally, can cause stress for their subordinates. For example, Ganster, Schaubroeck, Sime, and Mayes (1990) found that Type A behaviour patterns exhibited by supervisors were positively related to subordinates' physical health symptoms. When under pressure, many managers may react by exhibiting a negative managerial style. Managers who display an 'inconsiderate' management style may contribute to workers' reports of increased job pressure (Buck, 1972). In an investigation of organizational management style, Beehr and Gupta (1987) found greater levels of perceived stressors (under-utilization of skills and job overload) for employees in a traditional organization compared to those working under a more democratic management style. Managerial support, such as effective communication and feedback, also appears to be an important factor for employee well-being. Poor supervisor support has been linked with increased stress levels (e.g. Balslem, 1988; Kirmeyer & Dougherty, 1988) and symptoms of depression (Repetti, 1993). Lobban, Husted, and Farewell (1998) investigated supervisory style, job demands, decision latitude, and role conflict and ambiguity on self-reported job satisfaction. Their results indicated that good communication and direction from supervisors had a significant additional influence on job satisfaction, suggesting that supervisory style may, in fact, be a precursor of other job characteristics that have been associated with increased stress levels.

Some individuals may display a bullying management style with subordinates when under pressure. A recent survey of over 5000 employees in 70 UK organizations found managers to be the perpetrators for 74.7% of employees who reported being victims of bullying (Hoel & Cooper, 2000). Bullying at work has been linked with employee ill health, including psychosomatic stress symptoms, musculo-skeletal symptoms, anxiety, and depression (Hoel, Rayner, & Cooper, 1999).

The relationship between manager and subordinate is of course a two-way process. A negative management style can exacerbate stress levels for managers if their behaviour results in a deterioration in an employee's work performance or attitude towards them. Unfortunately, there are relatively few studies addressing the impact of negative management styles, with most research focusing on effective

management behaviour (Yukl, 1994). Few studies have assessed the effects of managerial stress on the manager–subordinate relationship and the consequences for employee well-being. Further investigations are needed to identify the consequences of a negative management style, for both the manager and the employee. The impact of managerial stress on the manager–subordinate relationship deserves attention. Researchers need to explore the efficacy of training in different managerial styles, which is aimed at increasing managers' awareness of their behaviour and the consequences when dealing with subordinates.

Until then, however, various studies have pinpointed possible ways forward for practitioners to combat or minimize the effects of a negative management style. Existing research has identified two types of leadership style that can benefit employee well-being and work performance, namely transformational and transactional leadership (Bass, 1985; Burns, 1978). Leaders using transformational skills promote inspiration, intellectual stimulation, individual consideration, participative decision-making and elective delegation among their subordinates. Such leaders encourage their employees to view their work from a higher perspective and develop innovative methods of dealing with work-related problems. Transactional leadership skills, however, encompass goal-setting, feedback, and reinforcement strategies that help employees to work effectively. Numerous studies have highlighted the efficacy of transformational leadership in developing employees (e.g. Bass, 1998; Yukl, 1994) and reducing employee stress (e.g. Seltzer, Numeroff, & Bass, 1989; Sosik & Godshalk, 2000). Transactional skills can also aid employee well-being by clarifying performance expectations, reducing uncertainty, and raising efficacy expectations (Sims & Lorenzi, 1992).

Practitioners therefore should encourage managerial training in transactional and transformational skills to enhance employee performance and well-being. The correct combination of these skills will vary according to the organization and the actual tasks being performed. The above research on managerial support provides further training recommendations for practitioners. Organizations should raise awareness amongst their managers of the importance of providing support for their employees. Jex (1998), for example, proposes that interpersonal skills training could benefit many managers and may be a more practical and effective option than attempting to change any personality traits (e.g. Type A behaviour) that may be deleterious in the manager–subordinate relationship. By being trained in different skills, and raising their awareness of their behaviour in the workplace, managers will benefit themselves. The resulting improved relations with their employees may help to allay managers' stress levels, in turn, by providing them with the support and co-operation of their workforce, an important outcome given the pressures many managers face in the workplace today.

An additional consideration for practitioners concerns the growing number of older workers in the workforce. This trend will increase competition for younger workers, and many employees may find themselves working for managers younger than themselves (Jamieson & O'Mara, 1991). Jex (1998) suggests that this may cause resentment in the older, more experienced, subordinate worker and at the same time increase pressures on the younger manager, who may not have sufficient experience to cope with managerial responsibilities and demands.

Conclusions

In this paper, we have attempted to present a brief overview of research and recommendations for employee well-being on four issues, job insecurity, working hours, work control, and managerial style, which are topical and pertinent to the present-day workplace. To conclude, there are a few final considerations that are relevant to both researchers and practitioners.

Firstly, a greater focus is required on the impact of the changing workplace for employees at the lower end of the organizational hierarchy. Many research investigations and workplace interventions for employee well-being are conducted at the managerial level, frequently excluding more subordinate employees (e.g. Neck & Cooper, 2000; Worrall & Cooper, 1998). Subordinate employees are often from lower social classes, which in turn are associated with poorer health (e.g. Chandola & Jenkinson, 2000). These individuals are often the most affected by changes such as organizational or work restructuring. Hence, there is a definite need for both researchers and practitioners to redress this neglect of subordinate workers.

Secondly, there are obviously other important workplace issues not discussed in this paper that increasingly may present problems for employee well-being in the future. The growing dependence on information technology in the workplace, for example, has resulted in many employees spending long periods at a computer terminal. Numerous studies have found that prolonged work at visual display terminals (VDTs) can impact negatively on employee health, in terms of musculo-skeletal problems, visual discomfort and other eye problems, general fatigue, and psychological stress (e.g. Aaras, Horgen, & Ro, 2000; Dillon & Emurian, 1996; Ekberg *et al.*, 1995). More research is required to investigate the long-term health effects of VDTs. However, organizations need to be aware of what hazards or stressors may be present in the workplace of the future and to take preventive measures not only to protect employee well-being but also to cover themselves against any potential legal action from injured employees.

Thirdly, when investigating potential stressors in the workplace both researchers and practitioners must consider employee perceptions. Some researchers have distinguished between positive and negative work experiences or stressors (e.g. Hart, Wearing, & Headey, 1995). Cavanaugh, Boswell, Roehling, and Boudreau (2000) found that work demands perceived as a challenge had positive outcomes for employee well-being, whereas those perceived as a hindrance had produced lower job satisfaction and increased turnover/job searching. Thus, distinguishing between perceived positive and negative stressors in the workplace is an important consideration for both practical interventions and research investigations.

As already mentioned in this paper, there have been major shifts in the demographic composition of the workforce, with an increase in older workers, women, and dual-earners. Another significant trend is the growth in cultural diversity (Kandola & Fullerton, 1996). This has important implications for practitioners. Organizations need to be fully aware of cultural differences in work values, dress code and religion, together with potential problems in communications due to differing proficiencies in the native language used in the

organization. Many individuals may require extra training to raise their competencies in skills required for their job. Managers may require further training also to raise their awareness of how cultural differences may impact on the workplace and on employee well-being. Individuals from ethnic-minority groups may be more prone to stress, given the problems they may have with a range of issues spanning the experience of racism and discrimination (e.g. Jones, 1993), potential language difficulties and cultural attitudes to aspects of work such as job control (Jamieson & O'Mara, 1991).

To cope with the increasingly diverse workforce, organizations need to become more flexible, not only in their worktime schedules, but in their procedures and practices as a whole (Kandola & Fullerton, 1996). Employers need to become responsive to individual needs to maximize employee well-being and also their commitment (Herriot, 1989). There is much evidence in support of such adaptable organizations. For example, the benefits of introducing flexible work hours have already been discussed. However, other research has shown that the provision of child-care and the introduction of flexible working options in organizations can help to reduce absenteeism, raise retention rates, and increase employee return after maternity leave (Hammond & Holton, 1991; *New Ways to Work*, 1993; Young-Blood & Chambers-Cook, 1984). A strategy for increasing flexibility is required, based on an assessment of needs within an organization. This assessment should involve employee participation and communication to address the real issues of the workforce and not just those envisaged by management.

A final consideration concerns the development of a healthy workforce in the 21st century through properly managed health-promotion schemes within the workplace. By offering such schemes, organizations may enhance not only employee well-being but also employee commitment and performance. Previous research has indicated favourable results for employees from the instigation of these programmes, such as improved diet, increased exercise, weight loss, smoking cessation, and the acquisition of stress-reduction techniques (e.g. Demmer, 1995; Dugdill & Springett, 1994). In turn, organizations have also benefited, with reductions in medical and disability costs, absenteeism and turnover, and raised levels of employee mental alertness, job satisfaction, morale, productivity, and an enhanced corporate image (e.g. Conrad, 1988; Daley & Parfitt, 1996; Neck & Cooper, 2000). Whilst these health-promotion schemes have produced positive results for both employees and organizations, a proper needs assessment, involving employee participation, is required to maximize the benefits of any intervention (Springett & Dugdill, 1999).

The issues discussed in this paper have repeatedly highlighted the importance for practitioners of good communications between employees and management. In today's constantly changing work environment, it is particularly important to develop and nurture the confidence of employees from all levels of the organizational hierarchy so that they are prepared to experiment with new working methods. In turn, an improvement in communications between managers and employees will enhance the success of any interventions planned that are aimed at improving employee well-being and ultimately improve organizational effectiveness.

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