



# **Mental health: overemployment, underemployment, unemployment and healthy jobs\***

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**\*First published in:**

**Morrow, L., Verins, I. and Willis, E. (2002). *Mental Health and Work: Issues and Perspectives*. Adelaide, AUSEINET: The Australian Network for Promotion, Prevention and Early Intervention for Mental Health**

**Re-published for the Australian e-Journal for the Advancement of Mental Health (AeJAMH), Vol. 1, Issue 3, 2002 [www.auseinet.com/journal](http://www.auseinet.com/journal)**

## **Abstract**

*Globalisation and regional economic imperatives have no doubt led to modern work environments increasingly characterised by ‘too much work’, ‘not enough work’ and ‘no work’ rather than optimal ‘healthy-productive’ work. Besides negative implications for national economies, there is a strong belief that mental health problems and stress-related disorders are the biggest overall cause of premature death in Europe (WHO 2001; Levi, 2002). Income inequality arising from such disparate work states seems to have negative health consequences for all members of society as social cohesion that characterises healthy egalitarian societies progressively breaks down (Wilkinson, 1996).*

*This paper explores the various work states, and draws upon a range of work stress and unemployment theories and empirical evidence to describe possible relationships between the meaning of work, work states, their features, and mental health. It also explores the ‘holy grail’: the balance between healthy work and productivity.*

## **Mental health and work**

There is increasing awareness of the fundamental importance of mental health in a range of life arenas – for physical health, quality of relationships, family life, work and education. The focus of this paper is the link between work and mental health. The Australian National Action Plan for Promotion, Prevention and Early Intervention for Mental Health (Commonwealth Department of Health & Aged Care, 2000 p20) noted ‘there is evidence of significant increase over recent years in the level of reported workplace stress and an associated increase in related mental health problems and mental health costs’.

The term ‘mental health’ is often used interchangeably with social, emotional, and spiritual wellbeing (Lehtinen, Riikonen & Lahtinen, 1997). Recently, the Victoria Health Promotion Foundation proposed a

new definition of mental health (VicHealth, 1999) as:

*...the embodiment of social, emotional and spiritual wellbeing. It provides individuals with the vitality necessary for active living, to achieve goals, and to interact with one another in ways that are respectful and just (p4).*

Mental health covers broadly the areas of emotions, behaviours, relationships and cognitions. For example, a person may be physically healthy but have difficulty with aggressive behaviours.

A particular definition of health adopted by the Department of Health in the United Kingdom, which embodies emotional wellbeing centrally and is understandable by most people is ‘being confident, and able to cope with the ups and downs of life’ (Stewart-Brown, 1998, p1608).

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**Citation:** Dollard, M. F. and Winefield, A. H. (2002) Mental Health: overemployment, underemployment, unemployment and healthy jobs. *Australian e-Journal for the Advancement of Mental Health* 1(3) [www.auseinet.com/journal/vol1iss3/Dollard.pdf](http://www.auseinet.com/journal/vol1iss3/Dollard.pdf)

### **Social determinants of mental health**

It has long been recognised among researchers that there are a number of social determinants important in the development and maintenance of mental health. A landmark publication by the World Health Organisation, *Social Determinants of Health* (Wilkinson & Marmot, 1998) presents a summary of evidence-based findings linking social determinants such as social status, stress, early life, social exclusion, work, unemployment, social support, addiction, food and transport, and health in its broad sense.

Based on such considerations, the European Council of Ministers (15<sup>th</sup> Nov. 2001) concluded that:

*stress and depression related problems ... are of major importance ... and significant contributors to the burden of disease and the loss of quality of life within the European Union.*

Further, they underlined that such problems are:

*common, cause human suffering and disability, increase the risk of social exclusion, increase mortality and have negative implications for national economies (cited in Levi, 2002, piii).*

The work stress and unemployment literature is therefore very important to help understand the link between work and mental health.

### **Income inequality**

Associated with the growing gap between 'good' and 'bad' jobs has been an increase in income inequality. Wilkinson (1996) has argued from international epidemiological statistics that increased income inequality has negative health consequences (reduced life expectancy) for all members of society – both rich and poor – and he proposes the

underlying mechanism for this is the breakdown of social cohesion that characterises 'healthy egalitarian societies'. In such societies, according to Wilkinson, there is 'a strong community life'; and 'people are more likely to be involved in social and voluntary activities outside the home' (p4).

Wilkinson's conclusions have been criticised by Catalano (1998) who argues the epidemiological case is weak and that the main cause of concern should be growing economic insecurity, even among the more affluent. He points out that a 1996 USA survey found that 37% of American households reported they were 'economically insecure' and 43% with an annual income of more than \$50,000 feared that one of their members would be laid off in the next three years (Catalano 1998, p168). Another criticism of Wilkinson's thesis is that he puts forward no evidence, other than anecdotal, to support the view that increased income inequality leads to a breakdown in social cohesion.

Employment has also become more precarious as workers are employed increasingly on contract (Schalk, Heinen & Freese, 2001; Winefield, Montgomery, Gault, Muller, O'Gorman, Reser & Roland, 2002) and the permanent job itself has become more insecure, leading to predictions that by 2020 a quarter of the workforce will be in non-traditional employment arrangements (Judy & D'Amico, 1997).

### **Developing identity**

Work has long been regarded as an important facet to mental health and the developing identity (Erikson, 1982). It has been argued that employment (even bad jobs) can provide latent benefits, including:

- a time structure for the waking day
- regular contact with people outside the nuclear family
- involvement in shared goals
- a sense of identity
- enforced activity (Jahoda, 1982).

Extensive research has shown that job loss results in a significant deterioration in affective wellbeing (Cobb & Kasl, 1977; Linn, Sandifer, & Stein, 1985) and re-entry leads to significant improvements in mental health (Warr & Jackson, 1985; Payne & Jones, 1987). However, researchers also argue that satisfaction with employment is the key ingredient differentiating employment and unemployment experiences. Being satisfactorily employed enhances psychological growth and self-esteem, but being unsatisfactorily employed is detrimental to psychological health and is psychologically as bad as being unemployed (Winefield, Tiggemann, Winefield & Goldney, 1993; Winefield, 2002). Clear empirical links between psychological and physical ill health and work have challenged the taken-for-granted assumption about the positive mental health benefits of work.

### **Current work context: psychological and health costs**

There are major changes occurring today in various aspects of work that are impacting on the experience of work in Australia:

1. The workforce is increasing in diversity and complexity. The domination of the workforce by men is declining and there is an increase in the proportion of women and people from ethnic minorities in the workforce. The Australian population is becoming increasingly educated. School retention rates have increased dramatically within the last two decades.
2. There is a relative decrease in the number of full-time jobs and a relative

increase in the number of part-time jobs available. In addition, there is an increasing reliance upon casual and contract labour.

3. The increased number of women participating in the workforce means there is also an increase in dual-career couples.
4. Those employed full-time are working longer hours according to the Australian Bureau of Statistics (2002). It remains to be seen whether this trend can be reversed as in France, the world's fourth largest economy, where the government recently enacted laws restricting the working week to 35 hours. (Even if the French succeed, it is difficult to see how overworked professionals whose working hours are not recorded might benefit).
5. There is a shrinking supply of paid work compared to the growing numbers of people seeking it. No matter how much national and global economies attempt to grow there appear to be inevitable environmental limits to such growth, as well as recent demonstrations that economic growth occurs fitfully and unreliably, and does not always result in a proliferation of job opportunities.

### **Changes in the workplace**

The nature of the workplace is changing rapidly with increased demands from globalisation of the economy and the rapid development of communication technology (Cascio, 1995b; Schabracq & Cooper, 2000). Computers, telecommunication systems, robotics and flexible manufacturing operations have led to a decreasing reliance on direct human labour, while at the same time productivity is increasing (Winefield, Montgomery *et al.*, 2002). Routine tasks are increasingly being performed by automation, freeing employees to take on more varied and challenging tasks. This means that employees' skills are becoming obsolete

more quickly, necessitating an increasing focus on continuing training and education.

Technological changes have also led to an increasing amount of poor-quality work – ‘work not fit for a machine to do’ – that is unsatisfying, offering low pay, low job security and unreliable hours. This ‘labour work’ such as house-cleaning, waitressing and casual clerical work is often undertaken by women and cultural minorities (Winefield, Montgomery *et al.*, 2002). Many jobs in the fast expanding service sector require workers to adopt a smiling and friendly manner to consumers, which makes demands similar to those involved in ‘emotional work’.

Under the pressure of economic rationalism, workforce numbers have been reduced, although the amount of work to be done often has not. *Overemployment* means that many workers in full-time jobs are experiencing increased pressure and faster pace (Bousfield, 1999), increased workload (Townley, 2000), longer shifts and longer hours (Heiler, 1998; Winefield, Montgomery *et al.*, 2002), as well as demands for high organisational performance (Kendall, Murphy, O’Neill & Bursnall, 2000).

### **Work-related risks to health and family functioning**

Two apparently opposite trends in work practices seem to have similarly deleterious health effects, *overemployment* and *underemployment* (Winefield, Montgomery *et al.*, 2002). Overemployment has been linked to cardiovascular disease for some time (Breslow & Buell, 1960). The risk of heart attack for those working long hours (for example, 11 hours) is 2.5 times the risk of those working an 8-hour day (Sokejima & Kagamimori, 1998). The resulting increases in workload and in job insecurity have deleterious effects on both the remaining workers and the organisation. The stress of overwork can lead to psychological

problems, including depression, burnout and breakdowns, to health problems, including heart attacks and hypertension, and to organisational problems, including workplace violence or accidents (Quick, Quick, Nelson & Hurrell, 1997). All of these problems can result in increased costs to the organisation that cancel out the short-term cost savings made by downsizing, resulting in no real improvement in long-term profitability (Cascio, 1995a).

The increased costs of occupational stress in the form of absenteeism, reduced productivity, compensation claims, health insurance and medical expenses has led to a growing interest by researchers into its causes, both in Australia and internationally (e.g. Cooper & Payne, 1988; Quick, Murphy & Hurrell, 1992; Cotton, 1995; Dollard & Winefield, 1996, 1998). Even jobs traditionally regarded as relatively stress-free, such as university teaching, are becoming increasingly stressful (Winefield, A., 2000; Winefield & Jarrett, 2001; Winefield, Gillespie, Stough, Dua & Hapuarachchi, 2002).

Quinlan (2002) describes the results of recent reviews on the health effects of precarious (casual, short-term, temporary, self-) employment in 11 countries, from 1986 to 2000 (Quinlan, Mayhew & Bohle, 2001), and also on the health effects of downsizing/restructuring and job insecurity published in the international literature between 1966 and 2001 (Bohle, Quinlan & Mayhew, 2001). Overwhelmingly the reviews found a measurable deterioration in health effects for precarious and survivor groups. The latter review found that those most affected among surviving workers were committed workers, older workers, and those subject to ongoing insecurity.

Workers are now being required to perform multiple tasks, learn new skills, and self-manage to meet competitive demands.

According to Kendall *et al.*, (2000) this has led to jobs that are more fluid (Cooper, Dewe & O'Driscoll, 2001), possibly exacerbating role ambiguity and role conflict, and leading in turn to work stress and illness (Dunnette, 1998).

For many workers the amount and scope of work has diminished with technological advances leading to *underemployment* (Cooper *et al.*, 2001) and this can also be risky. Research has found that those working less than 6 hours per day have 3 times the risk of heart attack than those working an 8-hour day (Sokejima & Kagamimori, 1998). Winefield, Montgomery *et al.* (2002), however, point out that those working lower hours may have been doing so because they were already suffering from the stress of too high a workload.

Organisations have downsized and restructured to improve flexibility and competitiveness or as a result of economic recession (Kawakami, 2000) leading to both mental and physical ill health (Chang, 2000). Flatter organisational structures are hazardous as workers find career options limited (Kasl, 1998). Belkic, Schnall, Landsbergis & Baker (2000) argue that modern work demands are squeezing out 'passive' and 'relaxed' jobs (for example, scientists increasingly compete for funding; general practitioners participate in settings of corporate managed care) which may lead to two classes of occupations: those with high control and low control, but *all* with high demands.

### **Emotional work**

Emotional work refers to all the time and energy consuming activities that help others to regulate their emotional states (for example, peace-keeping and social skills training with children, negotiation of needs for dependent elderly relatives, building cohesion in family and workplace units etc). These activities are usually unpaid (and

performed by women), although vital to the harmony and effective psychological functioning of many communities and their individual members (Strazdins, 2000).

Until the age of 60, women outnumber men as carers, reaching a peak in numbers about age 50 (Phillipson, 1982). Most of these, if no longer caring for children now grown up, care for spouses, elderly parents or handicapped relatives. Overall, women are more likely to be carers than men, but after age 60 caring for partners predominates, with slightly more men than women likely to be the 'principal resident carers' as wives become frail (McCallum & Geiselhart, 1996; Fallon, 1997).

The work of caring for disabled relatives can be isolating and burdensome. Greater recognition from professional carers, and more training and support resources, are some of the policy initiatives that might increase family caregivers' satisfaction from this work (Winefield, H., 2000).

Except in rare instances (such as the payment of a 'stipend' by a husband to a wife), work in the home is not regarded as paid work in the same way as is payment for domestic labour (for example, housekeeper, cleaning service). The latter is included in estimates of Gross National Product (GNP), whereas the former is not. Although much work in the home is tedious, repetitive and laborious (in spite of technological innovations), much familial work involves elements of benefit to others, interpersonal 'caring' and reciprocity that are not demanded to the same extent by any other workplace (Goodnow & Bowes, 1994).

Surveys in Australia (Bittman, 1991, 1994) indicate women spend more time on work in and about the home than men, in some studies more than four times as much as men. A common pattern often reported is the division of household work into 'outside'

(car, garden, repairs) and ‘inside’ (everything else), with occasional sharing of shopping and child-care. The patterns of engagement by men and women in household work are, however, changing (Bittman, 1994). Women are cutting back on time spent in the kitchen and laundry, and are contributing more of their time to traditional male ‘outside’ duties. Men are spending less time in unpaid tasks than women still do, but are spending more time on childcare.

Research has shown that Australian couples who share housework and are prepared to change conventional work roles attribute their success to flexibility, appropriate styles of ‘talk’, and ability to negotiate and ‘see another’s point of view’ (Goodnow & Bowes, 1994). Equity, sharing and turning a united face to the world were common values enunciated by the partners.

### **Correlates of poor mental health at work**

Explorations of mental health issues at work are generally conducted under the rubric of work stress. A generic definition of *job stress* given by the US National Institute of Occupational Safety and Health (1999) is:

*...harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury (p6).*

Stressors may be physical or psychosocial in origin and both can affect physical and psychological health, and may interact with each other (Cox, Griffiths & Rial-Gonzalez, 2000). Physical stressors may include biological, biomechanical, chemical and radiological, or psychosocial hazards. Psychosocial hazards (stressors) are ‘those aspects of work design and the organisation and management of work, and their social and environmental contexts, which have the

potential for causing psychological, social or physical harm’ (Cox & Griffiths, 1996, p87).

Exposure to stressors does not necessarily cause health problems in all people. In many cases while exposure to the stressors taxes the psychophysiological mechanisms involved, within normal homeostatic limits the stressor need not cause lasting damage (Cox *et al.*, 2000). While the experience may be accompanied by feelings of emotional discomfort, and may significantly affect wellbeing *at the time*, it does not necessarily lead to the development of a psychological or physiological disorder (Cox *et al.*, 2000). In some cases however, the stressor could influence pathogenesis: stress may affect health (Cox *et al.*, 2000). Further, the health state itself may act as a stressor, as it may sensitise people to other sources of stress by reducing their ability to cope (Cox *et al.*, 2000) and ‘the common assumption of a relationship between the experience of stress and poor health appears justified’ (Cox *et al.*, 2000, p76).

*Strain* refers to reactions to the condition of stress. These reactions may be transitory, but short-term strains are presumed to have longer-term outcomes (Sauter, Murphy & Hurrell, 1990). Occupational strain may include psychological effects (for example, cognitive effects, inability to concentrate, anxiety, depression), behavioural effects (for example, use of smoking, alcohol), and physiological effects (for example, increased blood pressure).

Work stress research in general attempts to draw links between taxing aspects of the work environment (stressors), perceptions and appraisals of these, and manifestations of strain including physiological, psychological, and behavioural changes that may result (Baker, 1985; Greenhaus & Parasuraman, 1987). Strain has consequences for both the work and non-work domains and can affect work

performance, and result in absenteeism, industrial accidents and staff turnover all at considerable cost (Greenhaus & Parasuraman, 1987).

According to WHO (2001), mental health problems and stress-related disorders are the biggest overall cause of premature death in Europe. In Australia, the Australian Workplace and Industrial Relations Survey (1995), reported that 26% of people rate work stress as the second largest cause of work-related injury and illness behind physical strains and sprains, 43% (see extract from the 'Comparison of Workers' Compensation Arrangements in Australian Jurisdictions', July, 2000).

### **Cost of poor mental health at work**

In Australia workers are generally entitled to workers' compensation for stress when the claimant's employment significantly contributed to stress, not including situations where reasonable disciplinary action or failure to obtain a promotion, transfer or other benefit in relation to employment occurred. In South Australia and most other states, the 'stress' condition is required to be 'outside the bounds of normal mental functioning' (Workcover, 1999, p14), or is a psychiatric condition listed in the 'Diagnostic and Statistical Manual of Mental Disorders', 4<sup>th</sup> edition, revised (American Psychiatric Association, 2000) or the 'International Classification of Diseases: Classification of Mental and Behavioural Disorders', 10<sup>th</sup> edition (WHO, 1993). Examples include post-traumatic stress disorder, stress adjustment disorder, clinical depression and anxiety.

The cost and prevalence of such claims vary from state to state. The following details are drawn from the 'Extract from the Comparison of Workers' Compensation Arrangements in Australian Jurisdictions', July, 2000, to give some insight into the

prevalence, cost, and peculiarities of stress claims. In New South Wales in 1999/2000, there were 1,577 new claims comprising 17% of all occupational disease claims, each at an average cost of \$20,617 per claim, with the total gross cost being \$33 million. The largest proportion of claims (20%) was from Health and Education where large groups of professionals coalesce. In Victoria, 5% of claims were for stress in 1997/98 (1,587 new claims). Apart from circulatory disease and back injury claims, stress claims *were most costly* and represented the highest average payment per claim. The Victorian Workcover Authority declared stress as a *significant* cause of 86 deaths since 1985, *including* 15 suicides.

In South Australia, there were 162 claims in 1998/99 accounting for 2% of all injuries and 3.5% of all income maintenance costs. In Western Australia, 601 claims were lodged in 1997/98 for work stress, 2.2% of all claims with a claim cost of \$23,399 twice that of other claims (an increase of 34% from 1996/97). In Queensland, an increase of 19% was found in 1999/2000 and an increase of 28% in 2000/2001. The average cost of the claim was \$17,249 over *twice* that of the next most expensive. A striking statistic is that the average duration of time off for psychological/psychiatric claims was 96.1 days compared to 28.9 days for other claims.

In sum, most states report an increasing number of stress claims per annum, and although the percentage relative to all other claims is low, the cost per claim is generally much higher. It is difficult to derive a GDP figure for stress at work in Australia, as data sets between state jurisdictions are incomplete. However, excluding Victoria and Australian Capital Territory data, estimates are around \$49 million in 1995/96 (National Occupation Health and Safety Commission, 1998) with an *additional* \$38 million for Commonwealth workers in

1995/96 (Australian National Audit Office, 1997).

### **Too much work**

Work stress theories attempt to describe, explain and predict when work stress will occur. A range of different theories has been proposed and each has a different emphasis which, as will be seen, leads to different implications for intervention. In summary, there is a plethora of theories used as guiding frames for the interpretation of work stress problems (see Cooper, 1998), and we have canvassed but a few here. As work stress has multiple origins, various theories and aspects of them have found empirical support in the literature. However, the dominant view based on empirical evidence is that work stress and its attendant mental health issues are firmly grounded in the way jobs are constructed, constituted and managed. In other words, they are socially determined.

### ***Demand Control Support Model***

This model of work stress emphasises social determinants of mental health at work. It argues that work stress primarily arises from the structural or organisational aspects of the work environment rather than from personal attributes or demographics of the situation (Karasek, 1979). According to Karasek, Baker, Marxer, Ahlbom & Theorell (1981):

*...strain results from the joint effects of the demands of the work situation (stressors) and environmental moderators of stress, particularly the range of decision-making freedom (control) available to the worker facing those demands (p695).*

Faced with high levels of demands and a lack of control over decision-making and skill utilisation, the associated arousal cannot be channelled into an effective coping response (for example, participation in social activities and informal rituals).

Unresolved strain may in turn accumulate and, as it builds up, can result in anxiety, depression, psychosomatic complaints and cardiovascular disease. In this way mental and physical health outcomes are socially determined by the way in which jobs are constructed.

According to the model, workers such as those in machine paced jobs, assemblers, and service-based cooks and waiters, experience the highest levels of stress because they are in jobs high in demands and low in control. Executives and some professionals on the other hand are more commonly in jobs combining high levels of demands, but also high levels of autonomy. Therefore they do not experience high levels of stress despite popular suggestions (that is, executive stress). Presumably high status workers have the opportunity to regulate high levels of demands through frequent opportunities to use control, and mobilise resources (Karasek & Theorell, 2000). Social support at work is also a key buffer to work strain (Johnson & Hall, 1988). There is a considerable body of evidence on the beneficial effects of social support, in particular emotional support on aspects of mental health such as depression and anxiety, and physical health such as cardiovascular, endocrine and immune systems (Uchino, Cacioppo & Keicolt-Glaser, 1996). Jobs with high demands, low control and low support from supervisors or co-workers carry the highest risk for psychological or physical disorders (high strain-isolated jobs) with:

- increased risk of psychiatric disorder over time (Stansfeld, Fuhrer, Shipley, & Marmot, 1999)
- job dissatisfaction, burnout, depression and psychosomatic symptoms (Landsbergis, 1998)
- lower vitality and mental health, higher pain, and increased risk of both physical and emotional limitations (Amick,

Kawachi, Coakley, Lerner, Levine, & Colditz, 1998).

### ***Burnout Theory***

‘Burnout’ is a term commonly used to describe intense emotional exhaustion and has been commonly associated with the taxing emotional demands associated with working with (troubled) people. Human service work is argued to impose special stressors on workers because of the client’s emotional demands (Maslach, 1978, 1982). Some studies have found, however, that stressors such as clients’ emotional demands, or problems associated with the professional helping role (such as failure to live up to one’s own ideals), were less potent in predicting stress than those associated with non-helping professions (Shinn, Morch, Robinson & Neuner, 1993; Collings & Murray, 1996). Moreover, organisational variables were more strongly associated with job satisfaction and burnout than were client factors (Jayaratne, Himle & Chess, 1995; Barak, Nissly & Levin, 2001). The overwhelming empirical results indicating that organisational and job factors are the key influences on burnout are further supported in Australian research on ( $N=813$ ) human service workers (Dollard *et al.*, 2001) and a longitudinal study of ( $N=123$ ) rural social workers (Lonne, *in press*). The origin of burnout (occupational stress) is therefore ‘fundamentally a systemic issue that involves serious conflicts and tensions, but which manifests itself in psychological and health strains for individual workers’ (Lonne, *in press*, p301).

### ***Effort-Reward Imbalance Model (ERI)***

This model (Siegrist, 1996, 1998) derives from sociological and industrial medical frameworks, and emphasises the social framework of the job (for example, social status of job). Workers expend effort at work and expect rewards as part of a socially (negotiated) organised exchange process. In adult life the work role provides a crucial

link between self-regulatory functions such as self-efficacy and self-esteem and a social structure within which to access opportunities for fulfilment. When a worker puts in an effort at work that does not seem to be adequately rewarded, strain results. Similarly when workers experience a threat to their job security (status) an imbalance results that can lead to strain. In addition to important socially structured aspects of the job, ERI further identifies the importance of intrinsic efforts – a personal characteristic of coping, a pattern of excessive striving in combination with a strong desire for being approved and esteemed. Like Type A behaviour, over-commitment may predispose a high need for control and immersion in the job, and probably a personal perception of low rewards. Effort/reward imbalance and over-commitment are found to be important in explaining adverse health effects such as gastrointestinal disorders, psychiatric disorders and poor subjective health (see Siegrist & Peter, 2000).

### ***Person-Environment Fit Model***

The Person-Environment (P-E) Fit Model (see French, Rogers & Cobb, 1974) emphasises the extent to which 1) individual skills and abilities match the demands of the job and 2) personal needs are supplied by the job environment. When misfit of either kind is present, strains such as job dissatisfaction, anxiety, depression and absenteeism can occur.

### ***Cognitive Phenomenological Theory***

Stress is defined in this approach as a relationship between the person and the environment that is appraised as taxing or exceeding resources, and endangers wellbeing (Lazarus & Folkman, 1984). Appraisal of stress is necessary. ‘[F]or threat to occur, an evaluation must be made of the situation to the effect that a harm is signified’ (Lazarus, 1966, p44). If a situation is perceived as stressful and important then

the worker mobilises different coping strategies either to modify the person-environment relationship (that is, problem focused coping) or to attempt to regulate resulting emotional distress (that is, emotion-focused coping). The situation is then reappraised and the process repeated. If the situation is resolved, coping ceases. If it is unresolved then psychological and physiological strain persist resulting in longer-term negative effects on health and wellbeing (Lazarus & Folkman, 1984). The theory has limitations in the work stress context as it cannot specify which aspects of the work environment would be stressful because, according to the theory, different individuals might see the environment in different ways (Baker, 1985).

### **Evaluation of work stress theories**

Overall, empirical research has generally shown that job factors are more strongly related to job strain and burnout than are biographical or personal factors (Maslach & Schaufeli, 1993). Job related stress and adverse psychological states appear to be determined situationally rather than pathologically. A major criticism of the work environment approach is that it is simplistic and promulgates the notion of the individual as passive, ignoring the strong mediation effects of cognitive as well as situational (contextual) factors in the overall stress process (Cox *et al.*, 2000).

On the other hand when stress is understood in terms of perception and individual differences it is likely to be viewed as an individual problem and re-organisation of work processes may be avoided. These opposing views highlight the potential conflict between broader notions of health and safety in the workplace and the economic goals of business and industry in the investigation of work stress (Baker, 1985).

### **Not enough work**

Unemployment has become a major social issue during the past 20 years. Even countries where unemployment remained low during the 1983 recession have experienced increased unemployment since 1990, although by the end of the decade official rates in many countries had declined. Globalisation has led to restructuring and downsizing in many industrialised societies and a shift, for many workers, from the prospect of secure, long-term employment, to unemployment or inadequate or insecure employment. There is growing evidence that the negative consequences of this shift are not merely economic, but also psychological. This section reviews the recent research literature examining the psychological effects of unemployment and inadequate employment on mature job losers and on school leavers. Finally, it speculates declining birthrates in many countries are a likely consequence of an increasing shift from secure to insecure employment and the possibility that in the future, society might need to encourage older retirees to re-enter the workforce so they do not become an excessive burden on younger workers.

Many economists view unemployment (or inadequate employment) as an economic not a psychological problem. The rejoinder to this view is that although the causes of unemployment may be economic, the psychological consequences go beyond the economic (that is, financial disadvantage). But this rejoinder needs to be supported by empirical evidence.

Winefield (1995) presented a comprehensive review of the literature on psychological costs of unemployment. Research literature has demonstrated there are substantial costs, both to the individual and family, which cannot be attributed solely to economic deprivation. Psychological researchers have had to address two issues in arriving at these

conclusions. The first has been to demonstrate the psychological effects of unemployment cannot be attributed to economic/financial factors alone, and the second has been to establish the causal link underlying the observed correlation between employment status and psychological wellbeing.

Much published psychological research on unemployment has concentrated on the possible damage to mental health or psychological wellbeing caused by unemployment, with the 'selection vs exposure' issue a major pre-occupation (e.g. Hammarström & Janlert, 1997). That is, given the common observation that employed individuals are less depressed and show higher self-esteem than their unemployed counterparts, can we attribute the difference to employment status ('exposure'), or does a pre-existing difference in psychological wellbeing influence whether one will obtain and/or retain employment ('selection')? Sophisticated longitudinal studies have been carried out designed to tease out selection and exposure effects (e.g. Winefield *et al.*, 1993). The evidence seems to suggest when jobs are plentiful, unemployed individuals tend to be generally unemployable or else 'workshy' (Tiffany, Cowan & Tiffany, 1970) in support of the selection hypothesis, whereas when jobs are scarce there is clear evidence supporting the exposure hypothesis (Winefield, 1995, 1997). Presumably the same considerations would apply to the effects of underemployment.

## **Psychological theories of unemployment**

### ***Stages Theory***

Eisenberg and Lazarsfeld (1938) published a review article summarising much of the pre-World War 2 literature on the psychological effects of unemployment. They concluded the psychological response to unemployment could be described in terms of the following

discrete stages:

*First there is shock, which is followed by an active hunt for a job, during which the individual is still optimistic and unresigned; he (sic) still maintains an unbroken attitude. Second, when all efforts fail, the individual becomes pessimistic, anxious, and suffers active distress; this is the most crucial stage of all. And third, the individual becomes fatalistic and adapts himself (sic) to his new state but with a narrower scope. He (sic) now has a broken attitude (p378).*

Although subsequent commentators have agreed about the stages, Fryer (1985) has published a highly critical review in which he argues the empirical evidence does not support the view that job losers progress through them in a unidirectional way, as assumed by the theory.

### ***Frustration Theory***

Dollard, Doob, Miller *et al.* (1939) proposed the frustration-aggression hypothesis that assumes a) frustration always leads to aggression, and b) aggression always presupposes the existence of frustration. The theory was originally developed to explain reactions to economic deprivation during the Great Depression, and has recently been applied to explain reactions to job loss (e.g. Catalano, Dooley, Novaco *et al.*, 1993).

### ***Life-span Developmental Theory***

Erikson (1959) proposed 8 stages, each with associated conflicts that need resolution for healthy psychosocial development:

1. Infancy – trust vs mistrust.
2. Early Childhood – autonomy vs shame.
3. Play Age – initiative vs guilt.
4. School Age – industry vs inferiority.
5. Adolescence – identity vs identity diffusion. Identity refers to a) sexual identity, and b) occupational identity.

6. Young Adulthood – intimacy vs isolation.
7. Adulthood – generativity vs stagnation.
8. Old Age – integrity vs despair.

In relation to adolescence, some researchers have reported evidence suggesting that youth unemployment retards healthy psychosocial development, as predicted by the theory because it prevents the acquisition of occupational identity (e.g. Gurney, 1980).

### ***Deprivation Theory***

Based on Freud's view that work represents our strongest tie to reality, Jahoda (1981) has proposed a theory that distinguishes between the manifest benefits of employment (e.g. earning a living) and its assumed latent benefits that serve to maintain links with reality. She identifies five latent benefits:

9. Time structure.
10. Social contact.
11. External goals.
12. Status and identity.
13. Enforced activity.

Jahoda also believes that even bad jobs are preferable to unemployment, 'even unpleasant ties to reality are preferable to their absence...Leisure activities...are fine in themselves as a complement to employment, but they are not functional alternatives to work' (1981, p189). This belief has not been supported by the research evidence, with studies by O'Brien & Feather (1990), Winefield *et al.* (1993) and Dooley & Prause (2000) showing that inadequate employment can be just as psychologically damaging as unemployment. Some researchers have attempted to measure access to the five latent benefits of employment and have claimed that in unemployed people, access (through leisure activities) is correlated with psychological wellbeing (Evans & Haworth, 1991).

### ***Agency Restriction Theory***

Fryer has proposed what he calls an Agency Restriction Theory as an alternative to Deprivation Theory (Fryer & Payne, 1984; Fryer, 1986). He criticises Jahoda's Deprivation Theory on the ground that the five supposed latent benefits of employment are all too often costs rather than benefits. He writes of 'Arbitrary time structure without regard for human needs; autocratic supervision; activity for unclear or devalued purposes; a resented identity; [and] the vacuous nature of imposed activities' (Fryer 1986, pp12-13).

The theory assumes that people are agents who strive to assert themselves, initiate and influence events and are intrinsically motivated. In short, agency theory assumes that people are fundamentally proactive and independent, whereas deprivation theory, by contrast, assumes them to be fundamentally reactive and dependent.

According to Agency Restriction Theory, the negative consequences of unemployment arise because they inhibit the exercise of personal agency. The restrictions imposed by economic deprivation make it difficult or impossible for people to plan and organise personally satisfying life styles. Most people work for the manifest benefit of employment without regard to its so-called latent benefits. The regular income enables them to plan and organise personally satisfying leisure activities and to save for, and plan for a satisfying retirement. Fryer (1986) argues that the role of poverty has been under-emphasised in much of the contemporary research on unemployment compared with the research carried out in the 1930s.

### ***The Vitamin Model***

Warr's (1987) Vitamin Model assumes that nine features of the environment (opportunity for control, opportunity for skill use, externally generated goals, variety,

environmental clarity, availability of money, physical security, opportunity for interpersonal contact, and valued social position) affect mental health in an analogous manner to the way vitamins affect physical health.

Some of the environmental features are assumed to resemble vitamins A and D in that very high levels not merely cease to be beneficial, but are actually harmful (AD is a convenient abbreviation for 'additional decrement'). Others are assumed to resemble vitamins C and E in that very high levels, while ceasing to be beneficial, are not actually harmful (CE is a convenient abbreviation for 'constant effect'). Warr suggests that three of the environmental features – availability of money, physical security and valued social position – may reasonably be regarded as falling within the CE category, whereas the remaining six are regarded as falling within the AD category.

Like Agency Restriction Theory, but unlike Deprivation Theory, the Vitamin Model draws no sharp distinction between employment and unemployment but rather sees the overall quality of the environment (assessed in terms of nine characteristics) as important for mental health. It goes beyond Agency Restriction Theory in specifying which features of the environment are important. On the other hand, most of the features (e.g. opportunity for control, opportunity for skill use, availability of money, physical security, opportunity for interpersonal contact, and valued social position) would obviously facilitate the exercise of agency and are thus implied by Agency Restriction Theory.

Although Warr's Vitamin Model differs from Jahoda's Deprivation Theory in that it assumes no qualitative distinction between employment and unemployment, Warr nevertheless acknowledges the importance of Jahoda's theorising and its influence on

his own thinking. For example, Jahoda's second and fourth latent functions (contact with people outside the nuclear family, and personal status and identity) appear as environmental features 8 and 9 in the Vitamin Model (opportunity for interpersonal contact and valued social position) and her other 3 latent functions are incorporated within 'externally generated goals'.

### ***Relative Deprivation Theory***

Relative Deprivation Theory (Crosby, 1976; Walker & Mann, 1987) has recently been applied by Feldman, Leana and Turnley (1997) to explain reactions to unemployment and underemployment. In relation to employment status, relative deprivation may be defined as a perceived discrepancy between an individual's actual status and the status that he/she expects and feels entitled to. It involves two cognitive components: a perception of violated expectations and a judgment as to the legitimacy of the violation (Walker, personal communication), both of which can be operationalised and measured.

### **Coping with organisational change**

The increasing globalisation of the Australian economy means that we are more economically exposed to events taking place in other countries. Globalisation has meant increased competition and opportunity for Australian business. Successful businesses are the ones that can best adapt in response to competition. Being able to adapt means relying on a flexible workforce that manages change successfully. Yet people are generally more comfortable continuing to work in accustomed ways. People have an understandable need for job security and, because of the fear of job loss, tend to resist rationalisation, new technologies, and new procedures. Organisations may resist change because of group inertia and the threat that change poses to established modes of

decision-making. Negative reactions to change, especially imposed change, include distress in the form of anxiety and depression, decreased job satisfaction, decreased organisational commitment, resistance to change, deterioration in organisational morale, reduced job performance, increased voluntary resignations, and absenteeism (Collins, 1998).

There is now abundant evidence identifying the key role played by open communication in successfully managing organisational and workplace changes. Traditional management preferences for hierarchical and secretive decision-making create an environment for gossip and rumour-mongering, which have demoralising effects on workers. Informing workers openly and fully, even of problems facing an organisation, facilitates their participation in solving those problems and coming to terms with necessary changes (Gowing, Kraft & Quick, 1997). There is little evidence, however, of an increase in open communication surrounding workplace change. There is a continued use of secretive and autocratic decision-making in the recent highly public workplace changes (the 1998 Melbourne waterfront dispute for example). The increasingly global economy may increase this trend as decisions about workplace closures are made outside of the plant or section that is to be closed.

The continually changing face and nature of work today requires adaptive coping strategies that allow for easier and expected transitions from one type of work to another, in a context of life-long learning and change. This may entail less dependence on defining who one is exclusively in terms of what one 'does for a living'.

The traditional practice of obtaining one job for life is disappearing and it is increasingly the pattern of employment for one person to have a sequence of jobs, which may differ in

skill requirements, with possible periods of unemployment in between. There is, therefore, a need for young people to learn work-related skills, but these are increasingly likely to be generic skills rather than preparation for a particular job.

These skills would require young people to view change as an inevitable part of life. This would entail seeing job security as a readiness and an ability to adapt rather than expecting to learn a certain set of skills that will guarantee life-long employment. However, the development of such an optimistic attitude requires some opportunity to experience a sense of mastery. Our young people have a basic right to reasonable levels of respect, support and security within which a realistic 'can-do' attitude can be fostered, particularly during transitional periods such as leaving school.

The nature of employment in Australia in the future will require a readiness on the part of employees to manage change both while in the workforce and when moving in and out of employment. Research has revealed several factors influencing people's ability to cope with change. Different styles of coping are required as a function of situation, time and person - that is, what works in one situation may not work in another. A distinction is often made between problem-focused coping and emotion-focused coping (Kinicki, McKee & Wade, 1996). Persons employing problem-focused coping strategies are likely to deal with the stressful situation by taking action that directly helps to find a solution to the problem being faced. For a person who is unemployed, this might mean taking steps to re-skill or to apply for new positions. A person employing emotion-focused coping is likely to deal with personal feelings and reactions to the problem and may avoid solving it. The second strategy may be less adaptive in an unstable employment market and is more likely to lead to related health problems.

However, emotion-focused coping may be more effective than problem-focused coping when a situation cannot be changed, such as a bereavement. For some job-seekers, this may be a realistic assessment of the employment market.

Research has suggested that those who are more likely to use problem-focused coping are characterised by a greater sense of optimism and sense of mastery (Armstrong-Stassen, 1994). Optimism can be defined as a generalised expectancy that good things will happen. Sense of mastery can be described as having a belief that one's life chances are under one's own control in contrast to being determined by fate. A person with a strong sense of mastery and high level of optimism is likely to approach change in a positive way. In addition, employees with these characteristics are likely to exhibit a high level of work commitment, even in the face of uncertainty.

Is it possible to increase the level of optimism and sense of mastery that people possess? An individual's attitude to life and work, in particular, is influenced by personal upbringing, dispositional traits, life experiences and cultural factors. Research has shown that children whose disposition tends towards the pessimistic can be guided into thinking more optimistically (Seligman, 1997).

### **Cross-cultural aspects of work**

Many of our traditional ideas about 'work' and 'non-work' are culture-bound. Westerners live in largely industrialised societies and cultures with clearly demarcated domains of 'work' or 'gainful employment' that is highly valued, which can dramatically impact on individual identity and status, which largely determines residential location and often education, and which takes up a large part of people's lives. The other side of this western

institutionalisation of work and the work ethic is that not to 'have work' is to see oneself as a failure: to have an indeterminate identity and status; to be perceived as 'carried' by the work of others; to be dependent; and to have an uncertain future. While it can and has been argued that 'work' simply differs from culture to culture, with different types of economies, the reality in terms of cultural assumptions and meaning systems is that the very construct of 'work' differs profoundly from culture to culture.

Even in western European cultures, which are superficially homogenous, work values differ markedly (e.g. Hofstede, 1980). The domain of work and cultural values is of particular interest in Australia, given the cultural heterogeneity of the population (including indigenous people and immigrants), the high work aspirations of migrants, and a popular conception of Australia overseas that, in Australia, people 'work to live' as distinct from America and parts of Europe, where people basically 'live to work'. There are also differences across generations, with Australia's young people occupying a different cultural space from their parents, and often having different values with respect to self, life and nature and importance of work (Frydenberg, 1994)

We need to keep in mind that western cultural value stances and assumptions are in part responsible for a number of unfavourable stereotypes with respect to differing rates of paid employment in other cultural contexts. For example, high rates of unemployment in Aboriginal communities are regularly cited as negative social indicators, yet these reflect both pervasive structural inequalities as well as a very different cultural value system. While there has been some research on 'work values' among indigenous Australians, it has been almost always in the context of non-Aboriginal and largely western cultural assumptions and in the context of

community development initiatives aimed at providing an 'economic base' and 'self-sufficiency', based on values alien to indigenous culture. Similarly, perspectives on health inequalities for women and ethnic minorities closely reflect income inequalities:

*Indeed, there seems to be a 'culture of inequality', which is characterised by the exercise of patriarchal power by men over women, as well as high levels of collective prejudice against racial minorities. The health status of subordinated groups in society thus seems to be inextricably linked to the general quality of the social environment, and hence to economic inequality (Kawachi, Kennedy & Wilkinson, 1999, p447).*

In western cultures we have tended to isolate and reify 'work' as a self-defining life context, as the subject of intellectual and popular discussions, as part and product of a motivational and economic engine that drives society and progress. We work 'at work' and work 'at home', it's what we 'do' for a 'living'. While many are questioning increasing incompatibilities between having a life and having a career, what drives and defines the cultural ideal in Australia is a self-defining, self-satisfying 'job'. These are relatively strange and alien notions in many non-western cultures, where 'work' is a more integral part of living and being and is not a reflective object of consideration, study, and cultural elaboration.

A cross-cultural perspective allows us some intellectual purchase on where and how and what we identify as 'work' impacts on people's lives. This is particularly valuable at a time when cultures and, indeed, the nature of self and society (e.g. Sampson, 1989; Gergen, 1991) are changing rapidly. It is true at both ends of the generational continuum, with many older persons bridging a further generational divide and

living far past the traditional age of 'retirement'. Such a perspective cautions us against seeing alternative life styles as necessarily problematic, while at the same time understanding the self-defining, esteem-providing, and dignity-enhancing dividends that culturally valued 'work' can provide in particular cultural contexts. We clearly need some different ways of understanding and thinking about 'work'. We are entering a millennium in which 'work' may become a less central part of who and what people are. We need to accommodate better new cultural understandings of personhood, and connections, and of meaning and self-fulfilment. The experience of other cultures allows us to broaden, redefine and reconstrue (e.g. Davidson & Reser, 1996) the nature of 'work' and its relation to life satisfaction and quality of life.

### **The balance: healthy productive work**

Although the negative aspects of jobs seem highlighted, there are positive combinations of job elements with potential to lead to satisfaction, efficacy, and high performance. A study of Australian correctional officers ( $N=419$ ) by Dollard and Winefield (1998) showed that the level of active coping (seeking feedback from supervisors, seeking support) was significantly higher in jobs combining high demands and high control than in passive jobs (not enough demands) – consistent with the idea that workers experiencing passive jobs, with little opportunity for control, will show reduced motivation to tackle new problems. Another Australian study of human service workers ( $N=812$ ) found those involved in active jobs also had higher levels of efficacy, namely satisfaction, personal accomplishment (Dollard *et al.*, 2001), and this in turn was negatively associated with strain (psychological distress, emotional exhaustion, physical health symptoms). A study of Australian clergy ( $N=359$ ) also

found a negative relationship between strain on the one hand, and efficacy on the other (Cotton, Dollard, de Jonge & Whetham, *in press*). Taken together, these studies provide some support for the dynamic associations between job strain and feelings of mastery (Karasek & Theorell, 1990). The higher the levels of efficacy experienced by workers the lower their levels of experienced psychological distress and physical ill health. This may be due to emotional and physiological toughening that occurs when workers have opportunity for both challenge and recovery in active jobs (see Dienstbier, 1989). When faced with new challenges, active workers will have a positive perceptual set that will enable them to meet new challenges, but without the negative consequences of accumulated strain.

Another study found increased worker motivation in 381 insurance company workers in active jobs (Demerouti, Bakker, de Jonge, Janssen & Schaufeli, 2001). However the researchers also found greater health impairment, leading to the conclusion that the levels of demands were in fact too high, that they could not be reduced by increasing control, and that neither too few or too many demands are good for employees (see Warr's Vitamin Model, 1987).

Recent meta-analytic studies from the United States suggest that the relationship between job satisfaction and job performance is much higher than had previously been assumed (Judge, Thoreson, Bono & Patton; 2001; Harter, Schmidt & Hays, 2002). Moreover, Koys (2001), using longitudinal unit-level data, has shown that human resource outcomes such as employee satisfaction, organisational citizenship behaviour and turnover, affect organisational outcomes such as productivity and customer satisfaction, rather than *vice versa*.

The importance of social support at work from colleagues and supervisors is underscored as it is consistently shown to be linked to better mental health outcomes for those who experience it. Particularly important appears to be the reaction of organisations, especially supervisors, when employees become either mentally or physically taxed, and also in return to work outcomes (for example, a phone call from the supervisor) should the employee need to be absent from the work environment (Linton, 1991; Dollard *et al.*, 2001). Workers also need protection from violence at work including bullying (in many cases perpetrated by supervisors), harassment and other intimidating behaviours, and the responsibility for preventing these behaviours rests mainly with supervisors. The policy section below outlines further ideas for the ideal work environment.

### **Research program for environmental and health action**

An overall program for research and environmental and health action recently outlined by Levi (2002, px) should aim at being:

- Systems oriented, addressing health-related interactions in the person-environment ecosystem (e.g. family, school, work, hospital, and older people's home)
- Interdisciplinary, covering and integrating medical, physiological, emotional, behavioural, social, and economic aspects
- Oriented to problem solving, including epidemiological identification of health problems and their environmental and lifestyle correlates, followed by longitudinal interdisciplinary field studies of exposures, reactions, and health outcomes, and then by subsequent experimental evaluation under real-life conditions of presumably health-

promoting and disease-preventing interventions

- Health oriented (not merely disease oriented), trying to identify what constitutes and promotes good health and counteracts ill health)
- Intersectoral, promoting and evaluating environmental and health actions administered in other sectors (e.g. employment, housing, nutrition, traffic, and education)
- Participatory, interacting closely with potential caregivers, receivers, planners, and policymakers
- International, facilitating transcultural, collaborative, and complementary projects with centres in other countries.

Levi (2002) further emphasises the importance of evaluating such interventions, to ensure harmful interventions are prevented, to safeguard human rights, to estimate costs-benefit of public expenditure, and advance knowledge of the future. Within this larger framework the following ideas for policies to improve mental health and wellbeing at work are offered.

### **Policies to improve mental health and wellbeing at work**

A number of key policy implications from the evidence base, along with a philosophical framework as well as processes to deal with new stressors as they emerge were advanced as part of the National Occupational Health and Safety Symposium on the Occupational Health and Safety Implications of Stress, Melbourne 2001 (Dollard, 2001). The participation of a range of stakeholders in dialogue and research activities seems critical in the development of policy that is responsive to new insights from the field. A notable feature of the literature in the area is a dearth of large Australian national studies or indeed systematic organisation of the Australian

evidence. This raises possibilities both at the national and organisational level. The following excerpt is from the NOHSC Symposium (Dollard, 2001, pp3-57):

### **National level**

Policies that could be pursued at the national level include:

- providing further organisational support and funds to enable greater dialogue between all stakeholders, and to enable meaningful national engagement and participation in international discussion about work stress and its solutions
- convening further national conferences and workshops on work stress in which government, social partners, workers and researchers can participate
- undertaking research comparing Australian regulations, policies and practices with those in other countries (Kompier, De Gier, Smulders & Draaisma, 1994)
- promoting whole organisational approaches, healthy organisations, sustainable organisations and ethical action
- developing a national network of work stress researchers
- establishing a national monitoring system for identifying risk factors and risk groups in the working populations (Kompier *et al.*, 1994)
- making a systematic attempt to benchmark organisational performance on work stress management, so that intervention efforts can be more economically focused, e.g. to sponsor research of national risk factors and risk groups (Kompier *et al.*, 1994)
- making work stress research a priority for National Health and Medical Research Council
- supporting research that promotes positive or productive aspects of work such as morale (e.g. Hart & Cotton,

2002) and engagement (Maslach, 1998), and explores emerging issues e.g. emotional and cognitive demands (Houkes, Janssen, de Jonge & Nijhuis, 2001) and workplace violence, its causes and consequences

- developing more comprehensive national databases, e.g. NOHSC's database of workers' compensation statistics includes figures for work stress, but there is no breakdown of the data to reflect public vs private sector experience, and some jurisdictions' data are omitted
- conducting more research on the effect of new legislation on rates of acceptance or rejection of stress claims
- systematically identifying gaps between research evidence and policy
- providing more education and training on work stress and interventions for all stakeholders to enable fuller participation in participatory processes for prevention.

To date, most Australian case studies have essentially focused on individual approaches to intervention (Williamson, 1994) in comparison to European efforts. In contrast to research about what *causes* stress and burnout, very little gold standard research, with case controls and randomised approaches, has been conducted on *interventions that reduce work stress* or burnout. It is therefore recommended:

- Australian organisations be encouraged to use best practice principles in implementing interventions. At the same time there is an urgent need to conduct an evidence-based meta-analysis of Australian work stress prevention and interventions
- government, social partners, and researchers participate in television programs and videos on identification and prevention of stress at work

- development of a clearing house for all relevant information and other educational materials to be placed on www.

### **Organisational level**

At the organisational level other measures are relevant, for example:

- focusing on primary prevention of work-related stress and ill health rather than on treatment
- promoting 'internal control' approaches to healthier workplaces (see below best-practice)
- ensuring proper training and career development for better person-environment fit
- ensuring optimum conditions for the introduction and uptake of new technologies, and integrating such introductions with stress prevention and health promotion
- promoting workers' motivations and adaptability through increased involvement in planning and implementation of change
- promoting equal opportunities and fair treatment of men and women, including selection and re-entry of women into the workforce and combining family and work responsibilities, to ensure the 'high level of human health protection' called for in the Treaty of Amsterdam (European Communities, 1997, p39)
- amending the education and training curriculum of various professionals to promote both the modernisation of organisational work and the prevention of work-related stress in an integrated manner (e.g. in business schools, schools of technology, medicine, behavioural and social sciences) (European Commission, 2000)
- improving work design, organisation and management (e.g. 360 degree evaluation of supervisors'/managers' styles)

specifically to improve communications and staff involvement, and to enhance team working and control over work; develop a culture in which staff are valued; structure situations to promote formal and informal social support within the workplace; evaluate work demands and staffing; reduce violent exposures; define roles more clearly; avoid ambiguity in job security and career development; design work schedules to be more compatible for non-work responsibilities; and design forward, stable rotating shifts.

- using local information to inform the exploration of stress. In a workplace context it is never sufficient to limit the exploration to general global variables. There is also a need for 'local' and more focused information specific to the organisation
- providing secondary and tertiary support as necessary.

**Guidelines for best practice in organisational implementation suggest they:**

- need to be stepwise and systematic
- require an adequate diagnosis or risk analysis
- combine both work-directed and person-directed measures
- use a participatory approach (worker involvement) (Schefflen, Lawler & Hackman, 1971)
- have top management support (Kompier *et al.*, 1994)
- are evaluated for costs and benefits of the intervention and in terms of health and productivity outcomes (European Commission, 2000).

These recommendations are relevant and applicable in the Australian work environment today.

## **Conclusions**

Recent modern work environments are increasingly characterised by 'too much work', 'not enough work' and 'no work' due to economic rationalism and local imperatives. Each of these unfavourable work states, emerging themselves from the way jobs are constituted, constructed and managed, has been associated with economic and social costs (for example, family issues), and increased risk for stress-related disorders and mental health problems. Further, the latter are significant contributors to the burden of disease, and are putatively linked to loss of quality of life and premature death (Wilkinson & Marmot, 1998; WHO, 2001). Income inequality arising from such disparate work states has negative health consequences for all members of society as social cohesion, which characterises healthy egalitarian societies, progressively breaks down (Wilkinson, 1996). Income and work inequalities (for example, emotional, care and house work) appear mirrored in health inequalities particularly apparent in women and ethnic/cultural minorities, clearly implicating a 'culture of inequality' characterised by 'patriarchal power by men over women as well as high levels of collective prejudice against racial minorities' (Kawachi *et al.*, 1999, p447) in the workplace.

In addition to workplace redesign and a redistribution of working hours among a greater number of employees without discrimination, building capacity within workers to cope is also an important ideal given the rate of change to the nature of work. Aspects of the ideal work environment have been explored in the chapter along with an agenda for research and evaluation, and policies for implementation at the national and organisational level.

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