### **IN-DEPTH REVIEW**

# Designing and managing healthy work for older workers

#### A. Griffiths

Institute of Work, Health & Organisations, Nottingham University Business School, Nottingham, UK

Throughout many countries in the developed world, largely because of increasing life expectancy, the population is ageing. One of the economic implications of this demographic change is that workers may need to work longer and retire later than they have done in recent years. Much needs to be done to ensure that work remains a positive experience for workers throughout their career trajectories, and that it does not damage their health. The major contemporary challenges to health at work are those associated with the way work and work organizations are designed and managed. This is especially true for older workers. This paper focuses on the relationships between age and work performance, between age and work-related health, and between age and work-related stress. It concludes that there remains considerable scope for designing optimal work systems to harness the potential and protect the health of older workers. This important initiative will require a co-ordinated and multidisciplinary occupational health strategy.

Key words: Ageing; management; occupational health; psychosocial factors; stress; work design.

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#### INTRODUCTION

Many countries in the developed world are now facing a positive situation in which many of their citizens will live longer than ever before. However, in societies that aim to sustain a basic level of welfare for their entire populations, the economic implications of these demographic changes are considerable. In Great Britain, for example, whilst there were 4.4 workers for every retired person in 1990, current projections suggest that by 2030 this ratio will drop to 3.2 workers per retired person. With these changing dependency ratios, the burden on the pensions, welfare and health care systems will become substantial. This is the so-called 'demographic time-bomb'. Various solutions for reducing the possible fiscal deficits are technically possible but it has been suggested that one of the least unpopular options will be to keep workers at work for longer.<sup>2</sup> There are two other arguments for people working longer. First, without a rise in the usual

age of retirement, many individuals will not be able to ensure the material quality of their 'third age'. Second, many organizations, to their surprise, are now experiencing skills shortages. Some are actively recruiting older workers, usually referring to those aged 45 years and above, to compensate for these shortages.

There is a need to ensure that any increased involvement in work for the older members of society is framed within informed and appropriate expectations, and that it is productive, safe and healthy. There is also a need to establish that it is not unnecessarily stressful and has no adverse implications for health in retirement. Much needs to be done to protect against the 'empty prize' of longevity without quality of life.<sup>3</sup>

To achieve a situation that will be satisfactory for individuals, their employing organizations and government, a coordinated occupational health strategy is required. So far, attention has been largely focused on the individual; for example, improving work equipment and coaching healthier lifestyles. There is value in both such approaches. However, what has been missing is a consideration of the design, organization and management of work as potential risks to health.

Of course, it is recognized that work can be a source of much satisfaction. It can provide purpose, meaning and challenge, a vehicle for learning, creativity and growth, opportunities to use skills, to demonstrate expertise, to

Correspondence to: A. Griffiths, Institute of Work, Health & Organisations, Nottingham University Business School, Jubilee Campus, Wollaton Road, Nottingham NG8 1BB, UK. Tel: +44 (0)115 846 6637; fax: +44 (0)115 846 6625.

exert control and to achieve success-many of the same features as are offered by games and sports.4 Many people currently report that work plays a significant part in their lives, providing psychological as well as material benefits. However, it can also be damaging. The major contemporary challenges to health at work are those associated with the way work and work organizations are designed and managed.<sup>5-7</sup> The work-related problems currently reported by workers reflect this trend, away from exposure to the traditional, physical hazards of work, and towards the psychosocial and organizational. It is clear that to ensure the quality of working life and to protect the health of working people as they grow older, close attention needs to be paid to these problems. They challenge the health of organizations as well as that of their employees.

In order to improve the design work and work organizations for the older worker, there are several important questions that need to be addressed. What is known about the performance and health of workers as they age? Can work for older workers be designed and managed so that it does not challenge their psychological and physical health? Are those aspects of work that are stressful or satisfying to older workers understood? Are these different from those experienced by younger workers? Do managers have an informed understanding of older workers' needs and abilities? Are older workers subject to discrimination? How can work be designed to be more appealing to older workers and persuade them to remain in, or return to, work? How can advantage be taken of their strengths without disadvantaging them in terms of their weaknesses? The remainder of this paper considers these questions and draws conclusions in relation to an occupational health strategy for older workers.

#### AGE AND WORK PERFORMANCE

Most reviews and meta-analyses in the scientific literature report little consistent relationship between ageing and work performance.8-12 Overall, older workers perform as well as younger workers. The evidence also suggests that older workers demonstrate lower turnover, fewer accidents and more positive work values than younger workers. 9,12 There are many methodological challenges in this type of research.<sup>13</sup> For example, the interpretation of performance measures is not straightforward. Some research has identified increases in performance with age when using objective measures, but decreases when using supervisor ratings, perhaps because supervisors' reports reflect a general bias against older workers.<sup>11</sup> Discrimination against older workers is common,<sup>14</sup> and much of it may result from ignorance about their potential. Supervisors' attitudes, in particular, have been identified as a crucial element in maintaining the working ability of older workers.<sup>15</sup> Even enlightened human resource policies can be stifled by stereotypical attitudes and discriminatory actions of supervisors and managers, 16,17 and discrimination may contribute significantly to the experience of stress.

Despite an overall failure to find age-related declines in work performance in 'real world' research, population or laboratory-based studies do reveal age-related declines in cognitive abilities, such as working memory capacity and information processing speed. Age-related deterioration in various physiological systems is well established. Given the evidence for deteriorating cognitive and physiological systems, how do older workers continue to perform effectively at work, and where they do not, why should that be? Is it only chronological age that accounts for such variations? Recent models of ageing and work propose that various mediating factors (e.g. knowledge, skills, training, disposition, motivation, organizational systems and work equipment) should be examined.<sup>13</sup> Chronological age should be viewed as a dimension along which these factors exert their influence, rather than a sole influence in itself. For example, examining the role of experience and job knowledge, two of the advantages that only age can endow, may prove interesting. It could be that despite decreases in certain cognitive abilities, there is no observable decrease in the overall performance of older workers because what they lack in cognitive abilities they compensate with an increase in job knowledge, skills,10 and various coping strategies, such as better anticipation or more economical search strategies - all useful for problem-solving. In other words, the composition of competence may vary as a function of age. In the absence of any hard evidence of a relationship between age and work performance, except in certain well-defined jobs, organizations may have a hard time defending any discriminatory policies and practices. Whilst currently governed by a voluntary code of practice, there are increasing calls for legislation against age discrimination in the UK, as already exists in other countries.

#### AGE, WORK AND HEALTH

Incapacity benefit figures reveal how many people of working age, who have recently worked for a specified period, are unavailable for work because of ill-health. In Great Britain in 1997, the two most prevalent types of claim, each representing a quarter of all claims, were (1) mental and behavioural disorders, including what could be described as 'stress-related' symptoms; and (2) diseases of the musculoskeletal system and connective tissue. 18 However, these figures do not detail the workrelated nature of these illnesses, such as whether they are caused or made worse by work, but only tell us that those who have recently worked have suffered them and, as a result, are absent from work. There are two other potential sources of useful information: surveys of work-related ill-health and data on early ill-health retirements.

As part of the Labour Force Survey in Great Britain, a stratified random sample of 40,000 people who were working or who had worked were asked whether they had suffered in the last 12 months from 'any illness, disability or other physical problem' that they thought was caused or made worse by their work. Those who responded

positively to this question were asked to contribute to a further survey where they were asked about the nature of their illness, the job which they considered to have caused it or made it worse, how many working days were lost (self-reported), and about their perceptions of certain aspects of their work.

The survey revealed that an estimated 19.5 million working days were lost to work-related illness in Great Britain in 1995. This represents an estimated 2 million people suffering from a work-related illness. In addition, whilst the numbers of most disease categories had fallen since the previous survey in 1990, 19 the contributions of work-related stress, anxiety and depression, and of musculoskeletal disorders had increased. Twice as many cases of psychological ill-health (stress, depression and anxiety) were found in older workers (i.e. those aged between 45 years and retirement age) compared to younger workers. However, very few cases were reported from the retirement age group, which might imply a reversible effect. A cohort effect is less likely since the same trend was observed in the previous survey.<sup>19</sup> Musculoskeletal disorders are widely considered by researchers to be significantly associated with 'stressful' working conditions.<sup>20</sup> Once again, twice as many older workers as younger workers were affected. Furthermore, twice as many older workers reported other physical conditions that they attributed (unprompted) to 'stress at work' (e.g. hypertension, heart disease, stroke or digestive disorders) than did younger workers. Where contacted, GPs concurred with their patients about the work-relatedness of these conditions.

Another source of information on the health of older workers is ill-health early retirements. In Great Britain, there are no definitive, centralized records. According to the General Household Survey, the number of early ill-health retirements rose by 66% between 1972 and 1996.21 Interpreting any trends in such data in relation to actual differences in the health of the working population is not straightforward. Part of any increase may be attributable to people's changing perceptions of health and to changes in corporate objectives and pension scheme policies and practices. However, some indication of the current picture is revealed by a recent survey of over 50,000 employees taking retirement from a cross-section of blue-chip employers in the UK. Of these, 14% retired early on the grounds of ill-health.<sup>22</sup> The nature of the ill-health from which early retirees are suffering cannot be exactly determined. However, data from other countries, such as the Netherlands and Sweden, indicate that ill-health early retirements are increasingly made on the grounds of stress or musculoskeletal disorders. 23,24 This much is clear—the largest causes of work-related ill-health amongst the working population of Great Britain today are stress and musculoskeletal disorders. These are both known to be strongly associated with the way work is designed, organized and managed. 20,25-27 Older workers appear to be most vulnerable. Clearly, there is a need to examine why work design, organization and management may be less than optimal for older workers.

#### AGE AND WORK STRESS

Occupational health psychologists are particularly interested in workers' own judgements of the way their work is designed, organized and managed and how those perceptions drive their emotions, their workrelated and health-related behaviours and, ultimately, their health. One of the main pathways by which work and the work environment are thought to affect health is what is commonly referred to as 'stress'. This begins as a 'psychological' mechanism involving workers' perceptions of work.<sup>28</sup> Workers' appraisals of their working conditions, and the meanings they ascribe to them, are fundamental in understanding any relationship between those conditions and health outcomes.<sup>29</sup> Self-reports have been found to predict health outcomes equally well or better than independent assessments. 30-32

A closer examination of those factors known to be associated with stress in older workers is called for. Research has identified, in very broad terms, what characteristics of work can be detrimental for most people. These largely concern difficulties with workload, workpace, working hours, organizational culture, participation and control, interpersonal relationships, career development, role-related issues and the homework interface.<sup>28</sup> It may be necessary to add other problems to this list, such as excessive working hours, lack of feedback, unsuitable or non-existent appraisal mechanisms, poor communication with senior management and inappropriate target-setting. However, most research into the relationship between work design, management and health has not explored 'age' as a variable in its own right. Age, when it has been considered, has been treated as a potential confound, has usually been 'partialled' out statistically or simply ignored. It has consequently been assumed that what is bad for one age group is bad for all. This assumption must be challenged. The 'big picture' that is available from the scientific literature concerning harmful work characteristics may be masking important age-related differences. The common assumption is that older and younger workers think about their work in similar ways, and make judgements on it in much the same way, and subsequently that any models based on a full age range will be meaningful. Recent research suggests that there are specific characteristics of work that are regarded as particularly problematic by older workers and therefore are likely to be particularly stressful for them. These problems are different from those reported by younger workers, even when doing the same job.33 They largely reflect high level contextual issues such as management systems and procedures and the knock-on effects of work on home life. Younger workers' concerns about their work appear more immediate and focused on task content. In similar vein, other research has found that older workers experience particular problems with lack of recognition, devaluing behaviours of supervisors and colleagues, and disappointment with management: all high level contextual issues.34

The pioneering longitudinal studies conducted at the Finnish Institute of Occupational Health, 35,36 have suggested that for older workers, certain aspects of work design and management are significantly associated with decreasing 'work ability', notably role conflict, fear of making mistakes or of failure, lack of influence over one's work, lack of professional development and lack of feedback and appreciation. These are all management issues. As well as predicting ill-health and sickness absence, such potential stressors have been found to be more powerful in the prediction of early retirement than physical problems. 34

## AN OCCUPATIONAL HEALTH STRATEGY FOR OLDER WORKERS

Because older workers have certain known vulnerabilities, employers have an increased duty to take reasonable care for their health and safety. Work should be designed to suit their abilities. For example, it should not require fast information processing, nor be very demanding on working memory, nor physically taxing. Older workers will not perform well in these types of work, and recognition of this fact may cause them stress. Most 'inevitable' age-related deteriorations may be variously countered by modern technology, equal access to training, age-appropriate training systems, flexible and individual work designs, support from wellinformed management, and health promotion activities. 13 Employers would be well advised to capitalize on older workers' job knowledge, to make more use of them as mentors, to encourage horizontal as well as vertical mobility, and to allow greater flexibility. Age awareness programmes are important for all sections of the workforce, but especially for supervisors and managers. Above all, because many of the origins of stress for older workers may be local and contextspecific, employers need to consult their own employees. The disadvantages of relying solely on broad, context-free definitions of what is 'good' and 'bad' are becoming clear.37

As yet, many traditionally managed organizations do not represent optimal systems for older workers and much remains to be done to instigate good practice.38 Perhaps organizations might take better care of their workers if they were more financially responsible for their former employees. In some European countries, this has been recognized in recent legislative changes.<sup>39</sup> Without supportive organizational cultures and management it cannot be expected that older workers remain healthy, satisfied and productive at work, nor to outperform younger workers. Once steps are taken to remove current barriers to their successful participation, a healthier, less stressful and more productive future for older workers can emerge. This will require a coordinated, multi-disciplinary and focused occupational health strategy. It will demand a re-investment in occupational health research, practice and education.

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