The SAGE Handbook of Human Resource Management

COPY made on behalf of
ANU
23 MAR 2010
BY UNIVERSITY OF
TECHNOLOGY, SYDNEY

Edited by
Adrian Wilkinson,
Nicolas Bacon, Tom Redman
and Scott Snell

SAGE

Los Angeles | London | New Delhi
Singapore | Washington DC

01-11-2023

Contents

ISBN 978-1-4129-2629-8

First published 2009

Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act, 1988, this publication may be reproduced, stored, or transmitted in any form, or by any means, only with the prior permission in writing of the publishers, or in the case of reprographic reproduction, in accordance with the terms of licences issued by the Copyright Licensing Agency. Enquiries concerning reproduction rights should be sent to the publishers.

SAGE Publications Ltd
1 Oliver's Yard
55 City Road
London EC1Y 1SP

SAGE Publications Inc
2325 Teller Road
Thousand Oaks, California 91320

SAGE Publications India Pvt Ltd
B-17, Mohan Cooperative Industrial Area
Mayapuri Road
New Delhi 110 041

SAGE Publications Asia Pacific Pte Ltd
33 Pekin Street 402-01
Furze Square
Singapore 048763

Library of Congress Control Number: 2009020727

British Library Cataloguing in Publication data
A catalogue record for this book is available from the British Library

ISBN 978-1-4129-2629-8

Typeset by LHPH Imaging Pvt Ltd, Bangalore, India
Printed in Great Britain by MPG Books Group, Bodmin, Cornwall
Printed on paper from sustainable resources

Acknowledgements viii

Notes on Contributors ix

PART I THE FRAMING OF HUMAN RESOURCE MANAGEMENT 1

1 Field of Human Resource Management 3
Adrian Wilkinson, Tim Redman, Scott A. Snell and Nicolas Racon

2 Human Resources Management: A Historical Perspective 12
Howard Gussel

3 Models of Strategic Human Resource Management 31
Saba Colakoglu, Ying Hong and David P. Lepak

4 The Employment Relationship 51
John W. Budd and Devanveesh Sivney

5 The Regulatory Framework for HRM 71
Michael Berry

6 The Evolution of HR Strategy: Adaptations to Increasing Global Complexity 84
Shad S. Morris and Scott A. Snell

7 Strong Situations and Firm Performance: A Proposed Re-Conceptualization of the Role of the HR Function 100
John J. Huxquerty and Patrick M. Wright

8 International and Comparative Human Resource Management 115
Richard Hall and Nick Wailes

PART II FUNDAMENTALS OF HUMAN RESOURCE MANAGEMENT 133

9 Recruitment and Selection 135
Filip Lievens and Derek Chapman

10 Training and Development in Organizations 155
Phyllis Tharenou

11	Management and Leadership Development <i>Christopher Mabe and Tim Finch-Lees</i>	173
12	Understanding Performance Management and Appraisal: Supervisory and Employee Perspectives <i>Michele Brown and Victoria S. Lim</i>	191
13	Compensation <i>Burly Gerhart</i>	210
14	HRM and Equal Opportunities <i>Anne-Marie Greene</i>	231
15	Involvement and Participation <i>Graham Dixie, Adrian Wilkinson and Tom Redman</i>	245
16	Extending the Reach of Job Design Theory: Going Beyond the Job Characteristics Model <i>Sharon K. Parker and Sandra Ohly</i>	269
17	Occupational Health and Safety in the Modern World of Work <i>Rahceer Loudon and Richard Johnstone</i>	286
18	Industrial Relations and Collective Bargaining <i>Thomas A. Kochan and Greg J. Hammer</i>	308
19	Discipline and Grievances <i>Brian S. Kiers</i>	322
20	Downsizing and Redundancy <i>Wayne F. Cawston</i>	336
	PART III CONTEMPORARY ISSUES	349
21	Strategic Human Resource Management: Where Do We Go From Here? <i>Brian E. Becker and Mark A. Huselid</i>	351
22	The Employee Experience of Work <i>Francis Green, Gary Hussey and Keith Whitfield</i>	377
23	Human Resource Management in Developing Countries <i>Parvati S. Budhwar and Yaw A. Dzorku</i>	393
24	HRM and National Economic Performance <i>Jonathan Mellen</i>	407
25	Human Resource Management and the Resource Based View <i>Fred Boselli and Jaap Poutsma</i>	421

26	Complexity-Based Agile Enterprises: Putting Self-Organizing Emergence to Work <i>Lee Dyer and Jeff Erickson</i>	438
27	Human Resource Management across Organizational Boundaries <i>Mick Marchington, Fang Lee Cooke and Gail Hibson</i>	460
28	Ethics and HRM <i>Chris Provis</i>	475
29	Working Time and Work-Life Balance <i>Janet Walsh</i>	490
	PART IV SECTORAL PERSPECTIVES	507
30	Human Resource Management in the Service Sector <i>Jody Hoffer Gittell and Rob Seidner</i>	509
31	HRM in Small Firms: Respecting and Regulating Informality <i>Paul Edwards and Mander Ram</i>	524
32	HRM in Multinational Companies <i>Anthony Ferner</i>	541
33	Human Resource Management in the Public Sector <i>Stephen Bach</i>	561
	Index	578

17

Occupational Health
and Safety in the
Modern World of Work

Rebecca Loudoun and Richard Johnstone.

INTRODUCTION OVERVIEW DATA ON
HAZARDS, ILLNESS AND INJURY

According to the principles of the United Nations (UN), World Health Organization (WHO) and the International Labor Organization (ILO), 'every citizen of the world has a right to healthy and safe work and to a work environment that enables him or her to live a socially and economically productive life' (WHO, 1991, 1). Only a few citizens are afforded this right, however, as evidenced by the high numbers of occupational illnesses, diseases and fatalities in most countries.

The ILO estimates that over 2 million people die every year from occupational accidents and diseases, some 270 million people suffer serious non-fatal injuries every year and another 160 million fall ill for shorter or longer periods from work-related causes (Takala, 2005). In economic terms the loss of capital and associated costs caused by accidents, occupational and work-related

diseases as well as stress and lack of motivation is equally worrying. Looking at organisational losses arising from accidents and more especially, chronic ill-health, it is now estimated that between two and ten per cent of the workforce is absent from work every day; the ILO estimates that in total these costs amount to approximately 4–5 per cent of the world's GDP.

Although some industrialised nations have achieved substantial reductions in the number of occupational deaths and injuries (Stout and Lunn, 2002), very few (5–10 per cent) workers in developing countries and 20–30 per cent of workers in most industrialised countries have access to occupational health services (WHO, 2003). As a result work related injuries, illnesses and deaths remain at unacceptably high levels and many workers and their families experience significant hardship and suffering. As outlined by WHO (1995) this health burden, suffering and economic loss is unnecessary and largely preventable.

It is important to note that these figures vary by gender, age, industry, country and sector. With, for example, young workers and those in developing countries experiencing higher injury rates than older workers and those in developed countries. Figures also vary over time. In part this is because of changes in employment patterns, technology and production techniques but they are also affected by current understandings about the scope of occupation-related health problems, which depend on many factors, including the definition of health that is employed, the existing state of medical knowledge and the effectiveness of reporting agencies such as workers' compensation schemes. The purpose of this chapter is to consider these intervening factors and their effect on health and safety performance, management strategies and enforcement strategies. The chapter starts by exploring the broadening meaning and focus of workplace health and safety as well as the forces driving this change. Following this, international developments affecting work and production are examined, together with their influence on occupational injury and disease. The chapter finishes by exploring developments in strategies to manage and regulate health and safety along with current and future challenges for policy makers, workers and managers of health and safety.

INTERPRETING OCCUPATIONAL
HEALTH AND SAFETY AND
WELLBEING AT WORK

A general definition of health and safety at work usually describes it as dealing with illnesses, diseases, accidents and injuries that occur in the workplace, or are attributable to workplace processes (Lloyd, 2002). What this means in practice, however is more problematic. At a joint meeting of the WHO and the ILO health was considered as the 'development and promotion of healthy and safe work, work environments and work organizations' and 'an individual's physical, mental and social well-being, general health and personal development' (WHO, 1995, 41).

Although the last two decades have seen countries progressively embracing this broader view, nearly all, except perhaps the Nordic countries, have relied on a more traditional view of health and safety that focuses on the absence of disease and deformity and (in)ability to consider the working environment (Bohle and Quinlan, 2000: 7). The 'working environment' now generally includes hazard specific issues as well as more general issues such as the organisation and conditions of work and an express recognition that things such as the length, scheduling and organisation of working time have an impact on workers' physical and psychological health.

The broadening definition of health and safety at work has been driven by progress in research aimed at understanding the causal links between workplace variables and occupationally related illness. However, along with this understanding comes recognition that relationships between the array of psychological, physical and chemical hazards and occupational ill-health are complex, interconnected and often affected by variables outside the workplace. Bohle and Quinlan (2000: 8) illustrate this point further.

The simultaneous exposure of workers to excessive heat and noise, to two or more hazardous substances (say lead and diesel fumes) or to excessive hours of work and supervisory pressure or sexual harassment will have health outcomes which cannot be deduced by simply adding those associated with exposures to each hazard individually. Further, physical, chemical and organisational risks like the examples just given and may interact. Indeed it is relatively easy to conceive of a workplace, such as a lead-acid foundry, where all these factors just mentioned can be found.

Establishing causal links is likely to become more difficult, however, as multiple job holdings are increasingly common and the divide between work and non-work activities is becoming less distinct for many workers (Sullivan and Lewis, 2006). The intrusion of work into other areas of an employee's life is illustrated in the recent ILO study of employment in the EU with almost 20 per cent of European workers reporting working at least a quarter of the time from home (Parent-Thurion et al., 2006). Similarly, almost a

quarter of all workers reported taking work home in an Australian study; an increase of four per cent since 2000 (CCH, 2006).

Establishing these causal links and estimating the extent of workplace illness and injury is also likely to become more difficult if workers' compensation and other accident and disease recording systems fail to take account of changing employment patterns. As outlined in the following section the last two decades have seen the expansion of employment in areas that are not generally recorded for the purposes of accident and diseases statistics (such as self employees and contractors) or employment that leaves workers with less job security (such as highly casualised, transitory or unlawful employment relationships), which usually results in workers failing to report injuries or lodge claims for compensation. This mismatch between statistical gathering techniques and employment patterns will result in official statistics becoming progressively less representative of the incidence of occupational injury and disease (Fishback et al., 2000).

It is also important to note that recognition of emergent occupational health and safety (OHS) hazards is influenced by a range of social, economic and political factors (Levenstein and Winsting, 1997). Some accident and disease recording systems – particularly workers' compensation systems – have been slow to recognise some types of injuries, and especially diseases (which are often only partly the result of work), and as such they can understate work-related diseases such as mesothelioma and stress related illnesses.

It is also the case for decisions about health policy such as priorities for reform and intervention. These decisions are rarely neutral, value-free or objective; they are currently governed by two (often) opposing goals: workers' health and economic rationality (Benish et al., 2002). Determining which of these goals takes priority at the workplace, state and national level depends on the political ideology, values and power of key actors involved in the decision making process (Walt, 1998).

Interactions between these actors and resulting strategies to eliminate or minimise

workplace health and safety risks must consider the increasingly rapid rate at which workplaces are changing. Economic integration and the liberalisation of international trade has intensified over recent years and, together with the rapid expansion in information technology, is bringing about radical changes in our workplaces and society more generally. The most influential of these changes for OHS is a significant and widespread change in labour markets and work organisation, which in turn has produced fundamental changes in the nature of work, organisations, work relationships and risk. These and other developments affecting safety and health at work are examined in the next section.

INTERNATIONAL DEVELOPMENTS AFFECTING OHS

Overview

Changes at work affecting health and safety can be grouped into three interrelated strands: changes in employment structures and work arrangements; changes in industry and occupation distribution; and changes in the demographic makeup of the workforce. The impact of work changes on health and safety is usually complex, generating some positive consequences but also major challenges for OHS managers, regulators and those administering workers' compensation and rehabilitation regimes.

Changes in employment structures and work arrangements

One of the most significant changes affecting work globally over the past 20 years is changes in employment structures which have altered the timing, location, intensity and security of employment. At the broadest level there has been a pronounced expansion in what used to be considered 'non-standard', 'atypical' or 'untypical' employment, namely self employment, casual/intermittent and part-time and fixed term or temporary employment. These work arrangements,

typically labelled 'precarious' employment or 'contingent' work are characterised by formally short-term, temporary or insecure work achieved by, decreasing the expected period of the employment, increasing its uncertainty, or weakening the claims that workers and employers can make on one another by virtue of the altered employment relationship (Johnstone et al., 2005). There is some debate in the literature about the inclusion of some work arrangements as precarious work (such as permanent part-time employment and self employment) as they don't share all of these features, but central to all arrangements is a reduction in commitment required in employment. For workers at the disadvantaged or lower end of the spectrum this has resulted in jobs that are highly insecure and lacking in control over work processes and timing. For others, such as highly educated and valued flexible knowledge workers and some teleworkers, changes have resulted in employment practices that leave workers independent and empowered to determine their own working arrangements. These workers are still contingent to the extent that organisations do not make explicit or implicit guarantees of ongoing employment but they generally have a great deal of control over when, how and where to perform their work (Fragoso and Kleemer, 2003).

Reduced security in employment can also be extended to non-contingent work, however, which is why some commentators argue that these jobs have also become more precarious or uncertain in their continuity. In general these commentators argue that widespread layoffs, replacement of full time jobs with part-time jobs and the increase of temporary work have led to most workers feeling less secure about their employment (Auer, 2006; Probst, 2000). Looking at precarious employment narrowly defined, there is a rapidly expanding body of research recording the spread of this type of work in most advanced economies, including Europe (De Grip et al., 1997; Brewster et al., 1997), North America (Bureau of Labor Statistics, 1995 and Hipple, 2001) and Australia (Burgess and de Ruiter, 2000a; Campbell and Burgess, 2001). As an

example Quinlan and Bohle (2004: 83–84) use a combination of unpublished OECD statistics and findings from a study comparing Australia and Europe to show that the proportion of the workforce holding temporary jobs in Australia and 14 EU countries grew by 43.67 per cent between 1983 and 1999. Similar increases can be found for Canada (see Lowe, 2001) and the USA (Hipple, 2001). By 1999 workers holding a casual or temporary job and non-employees (self-employed, subcontractors, etc.) constituted 30 per cent of the workforce in the US (Hipple, 2001) and 48 per cent in Australia (Burgess and de Ruiter, 2000b: 252).

The growth of precarious employment has seen a corresponding decline in permanent/tenured full-time jobs, especially for males (Ferdie, 1999: 59) and a growth in multiple job holdings. For example, in the most recent European Working Conditions Survey nearly five per cent of all EU workers (except those in France, UK, PT and CY) reported having a second paid job, with this figure increasing to nearly 15 per cent for the Scandinavian countries, the Netherlands and Eastern Europe (Parent-Thurion et al., 2006).

The most important provider of new jobs has been small-scale enterprises and self-employment. Indeed most workers in Europe are now employed in small businesses (Parent-Thurion et al., 2006). This trend has been driven by repeated rounds of downsizing by large public and private organisations as well as a greater resort to outsourcing and labour hire (Walters and Lamm, 2004).

There have also been changes to the timing of work, with a growth in shiftwork – including night work and compressed work schedules – and long work hours brought about by the introduction of systems involving flexible scheduling, reduced staffing levels and paid and unpaid overtime (Harrington, 2001). In total, an estimated 22 per cent of the global workforce is working more than 48 hours per week, with this figure being even higher in some countries and industries. For example working hours are particularly high in certain service industries, such as wholesale and retail trade, hotels and restaurants, and

transport, storage and communications, all of which also commonly involve shift work and work at night or (Lee et al., 2007).

Implications for health and safety

There is now a substantial body of international research indicating that employment arrangements involving a high degree of insecurity and limited control over work processes and timing are associated with inferior standards of health and safety performance. In particular, evidence links high job insecurity to poorer mental health outcomes, bullying and other forms of occupational violence, higher injury and illness rates and less knowledge of and compliance with legislative requirements (For a review of these studies see Lewchuk et al., 2003). In a large-scale, meta-analysis of research on the effects of job insecurity and work, Quinlan et al. (2001) found a clear adverse association between precarious employment and OHS, with almost 90 per cent of studies finding a measurable adverse effect in terms of at least one of a range of indices (including higher injury and illness rates, occupational violence, cardiovascular disease and psychological distress/mental illness and less knowledge of and compliance with legislative requirements). Later and more industry-specific reviews report similar findings (see Syvæke et al., 2002).

Where new forms of employment arrangements have resulted in workers having more capacity to decide on working arrangements – that is, to alter the timing, location or amount of paid work that they do to accommodate personal preferences – arrangements have resulted in reduced work–family conflict (Berry and Rao, 1997) and increased health (e.g. Gillespie et al., 1993). Some research also shows that workers in these types of employment – usually those with skills in high demand areas such as information technology and medical services – report reduced total work hours achieved through greater productivity and reduced commuting (Murelandini, 1998).

Explanations to explain the adverse effects of precarious employment tend to centre on markedly inferior employment conditions

provided to precarious workers compared with permanent workers. For example, in most industrialised countries casual, temporary and part time workers are less likely to be unionised and find it more difficult to access regulatory protection (Campbell and Burgess, 1997). This means that they are less likely to receive training – including training in OHS – and they are more likely to lack job specific knowledge and experience, leading to increased disorganisation in the workplace. There is also likely to be more ambiguity about coverage of workers in some work situations and uncertainty about responsibility for OHS. Furthermore, the competitive pressures on subcontractors and other small business owners mean that concerns to maximise profit and production can be superior to worker health (Winters and Frick, 2000).

Looking at the health and safety effects of work hours, research indicates that shiftworkers experience a broader range of negative health symptoms more frequently and more severely than day workers (Folkard and Lombardi, 2006). There is a large body of evidence indicating that shiftworkers, in general, and nightworkers, in particular, suffer acutely and chronically impaired health and well-being, including sleep problems, headaches, anxiety, poor concentration, nervousness, mild depression, and mood disturbances, cardiovascular and musculoskeletal problems (Costa, 2003). Shiftwork is also linked with peptic ulcer disease, coronary heart disease and compromised pregnancy outcome (see Knauth, 2003 for a review of this research).

Changes in industry and occupation distribution

The last three decades have seen marked intersectoral shifts in employment with, for example, a significant decline in the proportion of the workforce employed in traditional, physically demanding sectors such as manufacturing, forestry mining and construction and a growth in the helping professions and service industries such as hospitality, health, education and tourism, finance and information services (Takala, 2005). Using the UK as

an example, 1.6 million new jobs were created in business and miscellaneous services in 2001 while 795,000 jobs were lost in primary industries, utilities and manufacturing (Institute for Employment Research, 2001). Primary industries and manufacturing are expected to account for less than 14 per cent of total employment in England by 2010 while business and miscellaneous services are expected to account for over 30 per cent.

Implications for health and safety

The changing nature of work and employment has brought a changing pattern of occupational injury and ill-health. For example, as a result of developments in production and employment patterns, the nature of the hazards faced by workers today has changed. While this has resulted in a reduction in the number of work related health problems in some industries, many problems have migrated to the other sectors, albeit in another form and new risks – such as repetitive strain injuries, exposure to new biological and chemical agents and radiation – have emerged.

Evidence indicates that the last two decades, have seen a favourable decline in fatal accident trends in industrialised countries due, in part, to the change in patterns of employment described above, most notably the shift out of manufacturing. Even within these traditionally hazardous industries, however, changes in production and management techniques have resulted in changes in patterns of occupational injury and disease. Automation in general is a common feature of working life with over two thirds of all workers now using a computer in their daily work (Parent-Thurion et al., 2006). As a result patterns for injury have shifted towards musculoskeletal disorders such as backache, muscular pains in the neck and shoulders. These disorders arise as a result of a combination of interrelated factors, including workstation design, work organisation, job content and working time patterns.

Work in the new areas of employment also differs from work in more traditional industries in that the pace and intensity of work is determined by human demands from clients, passengers, patients and colleagues

rather than machinery and production targets (see Parent-Thurion et al., 2006). As a consequence, injury and disease patterns have shifted towards psychosocial or mental health and well-being problems such as occupational stress and anxiety. Violence and harassment at work and its negative impact on psychological well-being is also now recognised as an emerging epidemic in most industrialised countries (Peterson and Mayhew, 2003).

Changes to workforce demographics

Workforce demographics have changed significantly in the last 30 years. Of particular importance for OHS is an ageing of the workforce, a long-term increase in female participation rates and changes to the youth labour market.

In many ways this group of changes is inter-related with changes in work arrangements and industry and occupation distribution as the growth in these areas has depended on increasing participation from groups that have traditionally played only a minor part in the labour force. For example, the growth of temporary and part-time work has depended on increasing female participation in the workforce. Although part-time employment has always been a possibility, it developed in the 1960s as a response to labour shortages and the need to conscript women who had child-care responsibilities. It developed particularly in the new service industries where temporal patterns of demand made part-time employment a cost-effective option for employers. The strategy was very successful with, for example, participation rates for married women increasing from 33 per cent in 1971 to 59 per cent in 2003 (ABS, 1972, 2003a). On average, women now make up about 42 per cent of the estimated global paid working population (WHO, 2004) and are expected to fill over 65 per cent of all newly created jobs over the period to 2010 (Institute of Employment Research, 2003).

Looking at young people, the picture is much the same. The growth in service industries has largely been filled by young workers who are willing to accept casual part-time employment scheduled outside traditional

daytime work hours (Campbell and Burgess 1997: 27; Mccook and Davis, 1996: 153). Looking at the Australian example, labour force participation rates for teenagers have increased by nearly 10 per cent in the last three decades to 61 per cent in 2003 and the rates for males and females have become almost equal (ABS, 2003b). This increase is entirely in the part-time and casual labour force where non-standard work hours have become the norm. Indeed, the percentage of teenagers with a casual job in Australia has doubled since 1984 (Campbell and Burgess, 2001) and participation rates for 15–19 year-olds in the part-time labour force have increased from 5 per cent in 1971 to 41 per cent, while the full-time participation rate has fallen from 49 per cent to 21 per cent (ABS, 1971: 2003b). A similar pattern can be found in most industrialised countries (see Mayhew, 2005).

The position of older workers in the labour force is somewhat different. Owing to demographic changes, changes in industrial relations policies and advances in health care, these workers are now making up a larger share of the labour force across a wider spread of industries and occupations (Green, 2003). Although some countries have seen an average lowering of retirement age, other countries are increasing the age of retirement and encouraging experienced workers to continue in their employment. Workers aged 60 years or more now comprise over 5 per cent of the labour force, the number of older workers increases threefold if workers aged 50–59 are included (Takala, 2005). This trend is expected to continue in industrialised and developing countries over the coming decade at an increasing rate (WHO, 2004).

Implications for health and safety

Research has identified marked health and injury differences amongst workers based on age and gender. For example, the increased labour force participation of adolescents is coupled with a growing realisation of their vulnerability in the labour market. It is continually accepted in the literature that young people are an especially high-risk group in terms of occupational injury and

disease, with some research indicating that they are at the highest risk of lost time injuries compared to all other workers (Dupre, 2000). There is also evidence that workers over 65 years-old are more at risk of accident and injury, especially males in these age groups (Leigh et al., 2006; Takala, 2005). Furthermore, some groups of older workers, particularly those that work on shifts or at night, have greater ill-health symptoms such as gastrointestinal and sleep problems (Tepas et al., 1993).

Looking at gender differences, women and men generally report different physical and psychological stressors such as repetitive work, heavy lifting and monotony (WHO, 2004). Further, owing to their physical makeup women report gender specific problems such as miscarriages, low birth weight and malformations arising from exposure to pesticides, solvents and organic pollutants, heavy workload, postural factors and shift work (WHO, 2004).

Younger workers and females also report different patterns of occupational injury as a result of the generally narrow industry sub-groups that they work in. For instance, in youths, work with deep layers resulted in a substantial number of severe burns in the fast food industry. Similarly, a large proportion of workers are employed in services, particularly health care and as such they are disproportionately exposed to risks of infection (including needle-stick injuries), violence, musculoskeletal injuries and burnout (Forastieri, 2000; WHO, 2004). Women also suffer discrimination, mobbing and harassment more often than men, especially if they enter non-traditional occupations (WHO, 2004).

The causes for these different patterns of injury and illness are varied. Explanations for adolescents generally centre on organisational and individual factors related to the physical and psychological development of adolescents and the type of work they perform. Looking at developmental factors, adolescents tend to have higher risk taking behaviour and less job experience than adults and they generally use equipment designed for adult proportions (Knight et al., 1995;

Loughlin and Frone, 2004). The causes for these increases amongst older workers usually involve a combination of psychophysical, psychosocial and stress-related factors, as well as muscular-skeletal and other ageing factors (Takala, 2005). By far the most persuasive explanation for young workers and female workers relates to their precarious position in the labour force. As mentioned, women and youths are concentrated in part time and casual positions and as such they disproportionately suffer from growing competitive pressures, limited possibilities for training and promotion, and inadequate social benefits (e.g. sick leave and holiday leave) (Knight et al., 1995; Takala, 2005).

Summary

This section has outlined global changes affecting the incidence and severity of injuries, diseases and fatalities in modern workplaces. These changes have been brought about by change in labour markets and work organisation driven by globalisation and developments in communication technologies. The employment shifts discussed are expected to increase and become more widespread in the future. Although some positive developments have occurred, particularly in traditionally hazardous industries, there is a large and compelling body of evidence that many modern work arrangements pose a serious threat to the maintenance of existing standards of OHS and present major challenges for OHS management and regulation.

It must be noted, however that the changes discussed have not happened to all groups in the labour market to the same extent and at the same time. As mentioned throughout the section, employment changes vary by country, by gender, by age, by sector and by industry, with particularly adverse consequences for vulnerable groups in the labour force such as women and young people. For example in some countries, such as The US, Australia, France and Spain, there has been a significant increase in temporary employment among young workers brought

about by the expansion of work in service industries. Indeed, fast food employs more young people in Australia and the US than any other industry. Looking at male workers, the decline in full-time employment has impacted mostly on this group; their jobs have largely been replaced with temporary and part-time workers which have been filled disproportionately by female workers. At the same time men have traditionally occupied the more hazardous jobs in traditional industries (up to 86 per cent in high income countries) so the shift to more service based employment has had a beneficial impact on the incidence of occupational deaths amongst this group (Takala, 2005).

Although changes in working and production techniques have occurred on a reasonably global scale, countries have responded to the changes in very different ways. In some instances compliance with international standards, including OHS management (OHSM) standards that are increasingly demanded by supply chain partners and governments alike, have resulted in similar working conditions and outcomes for health and safety management across country borders. In other instances, however, different ideological values of government officials, unions, employers, corporations, scientific experts and agencies and power relationships between them have resulted in very different regulatory frameworks for managing OHS. The rest of this chapter is directed at exploring these frameworks. Traditional models for managing OHS are briefly examined first before moving on to key features of OHS statutes and provisions for worker involvement in the advanced market economies.

REGULATORY DEVELOPMENTS AND RESPONSES TO THE CHANGING WORLD OF WORK

It is generally accepted that the first attempts to regulate health and safety at work is to be found in the early nineteenth century British Factories Acts, beginning with *Health*

and *Morals of Apprentices Act 1802*. An *Act for the Regulation of Cotton Mills and Factories 1819* (amended in 1825 and 1831), *Factory Regulation Act 1833* and the *Factories Amendment Act 1844*. While the earlier statutes were principally concerned with regulating the length of the working day for children and young people, the 1844 Act introduced, for the first time, minimum safety standards and the 'traditional model' of OHS regulation. This traditional model relied upon detailed, highly technical specification standards, principally focused on specifying safeguards for dangerous machinery. It was enforced by an independent state inspectorate vested with broad inspection powers, and relying on negotiated compliance utilising informal enforcement methods (advice, education and persuasion), coupled with formal prosecution using the criminal law in the last resort. The great advantage of this traditional specification standard approach was that duty holders knew exactly what to do, and OHS inspectors found the legislation relatively easy to enforce.

In the second half of the nineteenth century and the beginning of the twentieth, this model of OHS regulation was adopted not only in the various British colonies, but in most of Europe, North America, and in other parts of the world. The weaknesses of this traditional approach are now well known. It frequently resulted in a mass of detailed and technical rules, often difficult to understand, and difficult to keep up to date. Standards were developed *ad hoc* to resolve problems as they arose, and concentrated mainly on factory-based physical hazards, resulting in uneven coverage across workplaces. Specification standards did not encourage or even enable employers to be innovative and to look for cheaper or more cost-efficient solutions. They also ignored the now well accepted view that many hazards do not arise from the static features of the workplace, but from the way work is organised. The traditional factory legislation created a climate of dependence on state regulation with little involvement in OHS by workers and unions.

By the late 1960s, the weaknesses in this traditional model, based as it was on the British model, coupled with political and economic developments, created a policy environment in which the recommendations of the 1972 British Robens Report appeared attractive. The report proposed a modification of the regulatory model, based on two principal objectives, each of which responded to the criticisms of the traditional model.

The first was the streamlining of the state's role in the traditional regulatory system, through the 'creation of a more unified and integrated system' (Robens Report, para 41). This involved bringing together all of the OHS legislation into one umbrella statute, containing broad 'general duties' covering a range of parties affecting workplace health and safety, including employers, the self-employed, occupiers, manufacturers, suppliers, and designers of plant and substances and employees. The skeleton statutory general duties were to be 'fleshed out' with standards in regulations and codes of practice. A unified OHS inspectorate was to have new administrative sanctions (improvement and prohibition notices) to supplement prosecution. Prosecutions were to be brought against corporate officers, as well as against the corporate employer.

The second objective, recognising the practical limitations of external state regulation, was the creation of 'a more effectively self-regulating system' (Robens Report, para 41). In the Robens vision, self-regulation involves workers and management, at workplace level, working together to achieve, and improve upon, the OHS standards specified by the state. The most important element in the Robens' model of self-regulation was that 'there should be a statutory duty on every employer to consult with ... employees or their representatives at the workplace on measures for promoting safety and health at work, and to provide for the participation of employees in the development of such measures' (Robens Report, para 70). The principal vehicle for employee representation was to be the health and safety representative, who was,

in the pure Robens model, to be consulted by employers. Employees were also to be represented on health and safety committees. The Robens model also envisaged greater co-operation between the OHS inspectorate and employee representatives, an obligation upon employers to develop OHS policies and rules, and a requirement for Boards of Directors to lodge prescribed OHS information with corporate regulators.

The so-called 'Robens model' and variations on that model were adopted in the UK in 1974, and in other countries, particularly Australia and Canada from the late 1970s and the 1980s. In both Australia and Canada, for constitutional reasons, OHS regulation is principally the concern of the states and territories in Australia (although there is a federal statute covering federal government employees), and the provinces in Canada. In the United States until 1970 OHS was regulated at state level. In 1970 Congress used its powers to regulate interstate trade and commerce to enact the *Occupational Safety and Health Act 1970*. The Act is a form of co-operative federalism, in which standards are largely set by the federal government, and responsibility for administering the standards is delegated to the states. In Sweden, the new style regulatory model was to be found in the *Work Environment Act 1977* and in Denmark in the *Working Environment Act 1975*.

An important development, particularly on OHS regulation in Europe, has been a series of European Community (EC) directives on OHS since 1989, which are now required to be introduced into the domestic law of community members. Directives bind member states as to the result to be achieved, but leave to each national authority the choice of form and methods. Most important is the 1989 Framework Directive for the *Introduction of Measures to Encourage Improvements in Safety and Health of Workers* which sought to improve and harmonise the conditions of health and safety for European workers, and establishes OHS principles to be followed by employers. The key provisions of the Directive impose a duty on employers: 'to

ensure the health and safety of workers in every aspect related to the work' (Article 5(1)); and 'to take the measures necessary for the safety and health protection of workers, including prevention of occupational risks and provision of information and training, as well as provision of the necessary organisation and means' (art 6(1)). Article 6 sets out a series of important principles of prevention, which include (art 6(2)): '(a) avoiding risks; (b) evaluating the risks that cannot be avoided; (c) combating the risk at source; (d) adapting the work to the individual ...; (e) developing a coherent overall prevention policy which covers technology, organisation of work, working conditions, social relationships and the influence of factors related to the working environment' and '(g) giving collective protective measures priority over individual protective measures'. Article 6(3) requires the employer to 'evaluate the risks to the safety and health of workers inter alia in the choice of work equipment, the chemical substances or preparations used, and the fitting out of workplaces', and then, 'subsequent to this evaluation and as necessary, the preventive measures and the working and production methods implemented by the employer must:

- assure the improvement in the level of protection afforded to workers with regards to safety and health;
- be integrated into all the activities of the undertaking and/or establishment and at all hierarchical levels.'

Further, Article 7 requires the employer to designate one or more workers to carry out these preventive functions, and, if there are no competent personnel, the employer must enlist competent external services or persons. Article 9 requires the employer to be in possession of an assessment of the risks to safety and health at work and to decide on the protective measures to be taken. Article 11 requires employers to consult workers and/or their representatives and to allow them to take part in discussion in relation to all areas of OHS.

As Winkler and Jensen (2000, 87) observe, the provisions of the Directive implement:

legislative strategies for the regulation and control of the work environment: 'the specifications and performance standards; with active intervention of legislative measures in processes which had been previously assumed to be within the prerogative of managerial or systems based standards. Also implied in this approach is a relationship between effective prevention strategies on health and safety in enterprises and the wider issue of the control of quality in all aspects of the management of work. It may also imply a close relationship between health and safety management, traditionally a fairly peripheral issue, and the management of quality - normally central to the concept of management.'

Developments in OHS standard setting

The new OHS statutes notably impose broad ranging general duties on employers, covering all workplaces (although there are some exceptions for industries regulated by other statutes, such as aviation, fishing and shipping in Denmark and mining in some Australian states), in contrast to the traditional approach, which focused only on designated premises (such as factories), processes or activities.

In the US, the OSHA Act 1970 imposes a specific duty on employers to comply with a myriad of detailed occupational safety and health standards promulgated under the Act. In all cases not covered by specific standards, employers must comply with the OSHA Act's general duty clause (section 5(a)(1) which requires that each employer 'furnish ... a place of employment which [is] free from recognised hazards that are causing or are likely to cause death or serious physical harm to his employees. Self-employed persons (who might be contractors or subcontractors) neither have duties imposed upon them, nor are they protected by the employer's duty. Since 1993 there have been various unsuccessful attempts to introduce a requirement that all employers provide a written safety and health programme, the purpose of which would be to identify and control hazards

before injury or illness occurred. Nevertheless health and safety programs are required in some OSHA standards, most notably the construction industry.

The general duty provisions are better developed in the UK, Scandinavian and Australian OHS statutes. The *Health and Safety at Work Act 1974* (UK) and the Australian OHS statutes impose broad ranging general duties on employers and employees, and also on a wide range of other parties, such as self-employed persons, persons in control of workplaces, manufacturers, suppliers and importers of plant and substances, and designers, installers and erectors of plant. The duties are usually qualified in that duty holders need only implement reasonably practicable measures. The great benefit of this formulation of the duty is that they cover all sources and types of risks, from physical to psycho-social. Recent judicial interpretations of the general duties emphasise that they require a duty holder to take positive, proactive, comprehensive and systematic steps to search for and eliminate any possible areas of risk to OHS, which some commentators suggest it requires a risk management approach (see Bluff and Johnstone, 2005: 212-214). In any event, duties to take proactive risk management approaches are amplified in regulations (see, for example, the *Management of Health and Safety at Work Regulations 1992* (UK)) and codes of practice under all of these statutes, most of which contain general requirements for risk management; and all have hazard specific provisions.

The Swedish *Work Environment Act 1977*, amended in the early 1990s in response to the EU framework directive, states OHS standards very broadly and with considerable sophistication, and is essentially 'framework' legislation in that it sets goals and outlines systems and techniques and allocates responsibilities in general terms for the working environment. It is notable for its focus on the broader working environment, and the emphasis on systematic OHS management. It also illustrates a common Scandinavian regulatory provision: that of requiring an

employer to engage an occupational health service. Chapter 2 of the Act (for example, specifies in section 1) that:

The working environment shall be satisfactory with regard to the nature of the work and social and technical progress in the community ... Working conditions shall be adapted to people's differing physical and mental aptitudes. The employee shall be given the opportunity of participating in the design of his own working situation and in processes of change and development affecting his own work. Technology, work organisation and job content shall be designed in such a way that the employee is not subjected to physical or mental strains which can lead to ill-health or accidents. Forms of remuneration and the distribution of working hours shall also be taken into account in this connection. Closely controlled or tedious work shall be avoided or limited. Efforts shall be made to ensure that work provides opportunities of variety, social contact and co-operation, as well as coherence between different tasks. Furthermore, efforts shall be made to ensure that working conditions provide opportunities for personal and vocational development, as well as for self-determination and professional responsibility.

Part 3 of the Act sets out general obligations, which include requiring the employer and employee to 'co-operate to establish a good working environment'. Further (sections 2 and 2a):

The employer shall take all the precaution necessary to prevent the employee from being exposed to health hazards or accident risks. One basic principle in this connection shall be for everything capable of leading to ill-health or accidents to be altered or replaced in such a way that the risk of ill-health or accidents is eliminated.

The employer shall systematically plan, direct and control activities in a manner which leads to the working environment meeting the requirements for a good work environment.

To the extent which the activity requires, the employer shall document the working environment and measures to improve the same. Action plans shall be drawn up in this connection.

Regulations (ordinances) may be promulgated to specify in more detail what is required of employers or others under the Act.

The 1977 Act (Part 3 section 2b) requires employers to 'be responsible for the availability of the occupational health services

which the working conditions require'. An occupational health service is 'an independent expert resource' in relation to the 'working environment and rehabilitation', which works 'for the prevention and elimination of health risks at workplaces', and has 'the competence to identify and describe connections between the working environment, organisation, productivity and health'. The core of the occupational health service is born by employers.

The Danish *Working Environment Act 1975* imposes broad duties on employers to ensure safe and healthy working conditions, and to ensure that work is performed safely and without risks to health. Since 1997 the Act has institutionalised systematic OHS management in the form of workplace assessments - as required by the EU Directive. Section 13a of the Act now provides that:

1) The employer shall ensure the preparation of a written workplace assessment of the safety and health conditions at the workplace, taking due regard to the nature of the work, the work methods and work processes which are applied, as well as the size and organisation of the enterprise. The workplace assessment shall remain at the enterprise and be available to the management and employees at the enterprise, as well as the Danish Working Environment Authority. A workplace assessment shall be revised when there are changes in work, work methods, work processes, etc., and these changes are significant for safety and health at work. The workplace assessment shall be revised at least every three years.

The 1975 Act also obliges employers engaged in hazardous work and in other specified industries to participate in occupational health services, a local and private system which operates at three levels to provide individual company services, industry-wide services and services for local centres.

The UK and Australian statutes are also notable in extending the duty of the employer and self-employed person to cover persons who are not employees. Many of these provisions (including the those in the UK, Victoria and Queensland) are so broadly drafted that they afford protection to all kinds of workers (including contractors, sub-contractors, labour hire workers

and outworkers), however engaged (see Johnstone, 1999, 2006). These provisions have the potential to protect contractors and their employees, temporary workers, workers in supply chain arrangements, and other kinds of contingent and precarious workers (see, for example, Jørges et al. 2007).

As workers bear the brunt of failure to manage OHS, and because they are likely to have first hand knowledge of hazards, and ways of abating them, there are ethical and practical reasons to ensure that workers are engaged in participatory mechanisms. Most states have provisions to ensure this participation at varying levels. These provisions are considered in the following section.

Worker participation in OHS

A growing body of evidence demonstrates the positive benefits of worker participation in OHS (for a summary see Walters and Frick, 2000; Nichols et al., 2003), including a relationship between objective indicators of OHS performance (such as injury rates or hazard exposures) in workplaces where structures of worker representation are in place (union presence, joint safety committees or workplace safety representatives). This evidence comes from many countries, including those where participatory mechanisms are not mandated by legislation. Further, evidence suggests participatory mechanisms with higher levels of worker involvement are superior to those where involvement is more unstructured. The OHS statutes in many countries recognise that workers, as the group most affected by workplace hazards, have an important contribution to make to systematic OHS management by identifying workplace hazards, being consulted over workplace changes affecting OHS, receiving OHS information, working with employers and regulators to implement OHS programs, and, when necessary, to take direct action to protect themselves from danger.

As noted above, the UK Robert Report emphasised the importance of worker involvement in lifting workplace safety,

The UK *Health and Safety at Work Act 1974* provides for the participation of employees in OHS through the institutions of health and safety representatives and health and safety committees. Regulations made under the Act give health and safety representatives the right to investigate dangerous hazards and occurrences, to investigate worker complaints, to make representations to employers, to represent employers in consultations with inspectors, to receive information from inspectors, to attend meetings of safety committees, and to receive paid time off for training and to perform other functions. Employers are required to establish a health and safety committee within three months of being requested to do so.

The Australian provisions for workplace participation are based on the UK provisions, but in some of the states, the powers given to health and safety representatives are much stronger than those vested in the UK, and resemble the powers given to Swedish safety delegates (see below). In all jurisdictions but the Northern Territory, the OHS statutes make provision for worker elected health and safety representatives. In Victoria, South Australia, the Commonwealth and the Australian Capital Territory, the powers given to representatives are quite broad, and include rights to training inspection, consultation information and similar issues. They include the power to issue a provisional improvement notice (a default notice in South Australia), and the right to direct that direct work cease (though the provisions vary between the jurisdictions). Western Australia, Queensland and Tasmania give much weaker consultative powers to representatives. The Tasmanian and Northern Territory statutes codify the common law right of a worker to refuse to perform dangerous work. Each of the statutes provides for health and safety committees, comprised of employer and employee representatives.

The Scandinavian countries have gone further in involving workers directly in decision-making processes. The 1977 *Swedish Work Environment Act* provides that worker control is a critical aspect of a healthy working environment. Employee

safety delegates are elected for a period of three years by local unions (and in non-union workplaces, by employees) at workplaces with five or more employees. Larger workplaces have a number of safety delegates, one of whom is elected as a chief safety delegate. Unlike UK safety representatives, Swedish safety delegates have the right to stop dangerous work pending an investigation by an inspector. They also have the right to participate in the planning of new premises, devices, work processes, work methods and the use of substances liable to cause ill health or injuries. Employers must inform delegates of any changes which will have a significant impact on conditions to the areas they represent. Employers must respond to representations by delegates without delay, and if matters are not resolved satisfactorily, they can be referred to an inspector or joint employer-employee health and safety committee. The local trade union may appoint a regional safety representative (RSR) in firms with less than 50 workers where there is at least one trade union member. The RSRs have rights of access to such workplaces and similar rights to investigation and inspection to those held by ordinary safety delegates in Sweden. The mandated RSRs tasks include acting as itinerant representatives who inspect and investigate OHS conditions in small enterprises, and request changes they consider necessary to achieve improvements in the working environment; promoting employee participation in OHS, including the recruitment, training and support of in-house HSRs; and activating local OHS work within the overall framework for systematic management of the working environment in small enterprises. The situation in Denmark is substantially similar to the Swedish position (see Cunningham and Johnstone, 1999: 255–8).

In the US there is little scope under the occupational safety and health legislation for workers to be involved at workplace level, although there is nothing to prevent workers raising OHS issues in the broader context of collective bargaining.

Ensuring that workers are afforded the protection offered by the statutes described above, as well as the opportunity to participate in decisions that affect their health and safety at work, requires inspection and enforcement. The varying approaches taken to workplace inspections and enforcement of OHS statutes are examined in the following section.

OHS inspection and enforcement

In most countries, the OHS statute establishes an OHS inspectorate, and vests that inspectorate with broad powers to enter workplaces and to inspect workplaces, plant, equipment and substances. Historically, inspection has focused mainly on the examination of plant and other physical artefacts in the workplace. In recent years, however, with OHS standards increasingly requiring duty holders to take a systematic approach to OHS management, inspectors in some jurisdictions have attempted to examine how employers manage OHS instead of, or in addition to, the inspection of the physical workplace. As Von Richthofen (2002, 208) notes, the 'traditional approach whereby inspectors aimed simply to identify legal irregularities and then give advice or impose sanctions, depending on the seriousness of the offence, is increasingly discredited'. The challenge for contemporary OHS inspectorates is to change their inspection and enforcement approaches to inspect systematic OHS management. In this approach, the traditional focus on hazardous conditions and work practices is not abandoned but provides signals of weaknesses in OHS management to be uncovered, and is part of the 'evidence' of the effectiveness of OHS management. Further, the inspectorates not only have to inspect workplaces but also to develop strategies to motivate duty holders to develop their approaches to systematic OHSM, using not only threats of sanctions, but also the commercial self-interest of management, and by demonstrating the efficiency and effectiveness of the OHSM approach (Von Richthofen, 2002: 208).

This has raised at least two issues for OHS inspectorates. How should an OHS

10