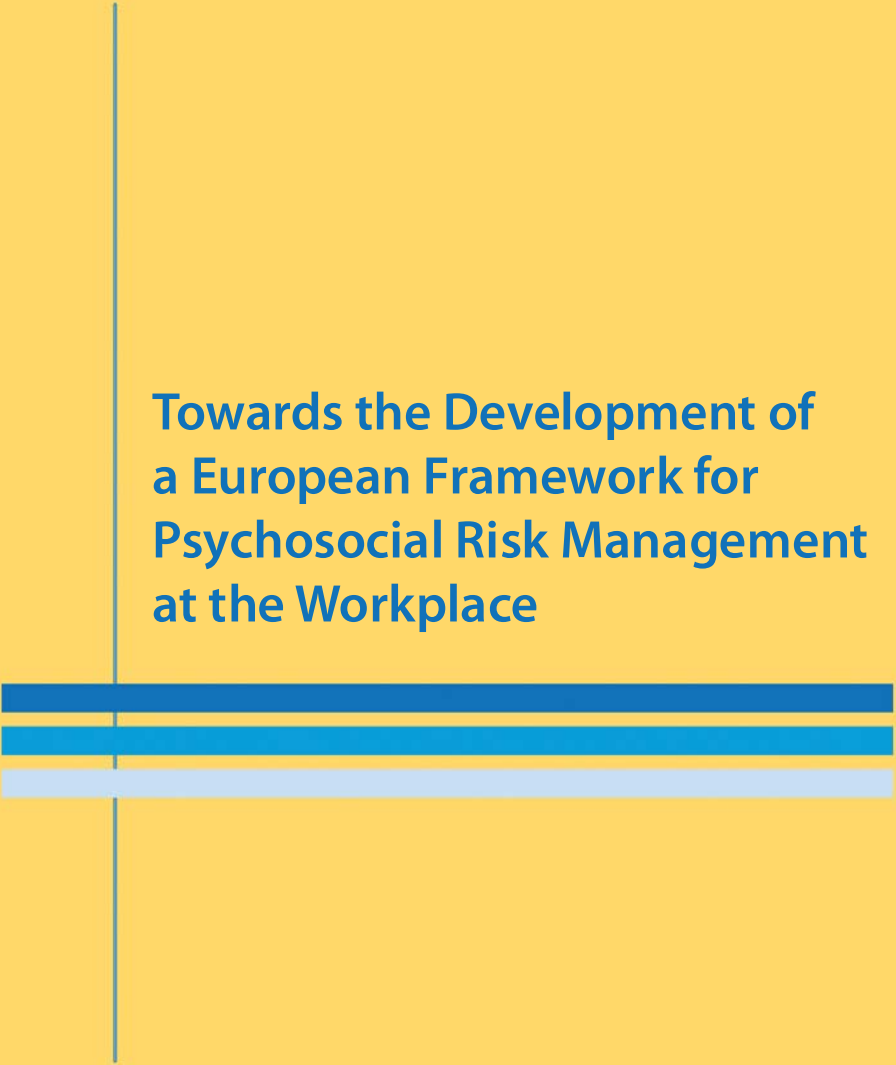




Towards the Development of a European Framework for Psychosocial Risk Management at the Workplace

SALTSA

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Institute of
Work, Health &
Organisations

Towards the Development of a European Framework for Psychosocial Risk Management at the Workplace



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Preface

We live in a period of change not least in terms of the nature of the work that we do, the organisations that we work for and the pattern of our working lives. The changes that are occurring in the world of work are many, significant and seemingly unending. Interestingly, it has been observed for many centuries that with such changes come new challenges to the health and safety of working people demanding new concepts and frameworks, new approaches and new tools for managing those challenges.

The current report considers the new work-related challenges to the health of working people in Europe that are associated with the changing landscape of work. It describes what many agree are the appropriate concepts and framework, approaches and tools for dealing with those challenges through the extension of the generic risk management paradigm to focus on work-related psychosocial hazards and work-related stress.

The report begins by considering the available European data on the health of working people drawn from both national and transnational European surveys and health surveillance systems. On the basis of this evidence, it suggests that throughout Europe, the two main challenges are now musculoskeletal disorders and work-related stress and notes that this situation is unlikely to change significantly in the medium term. Together these occupational health problems have serious economic impact and both directly and indirectly challenge the demands on and affordability of social

security, welfare and pensions provision throughout Europe. The report briefly discusses the nature of musculoskeletal disorders and work-related stress noting that psychological and social factors play a significant role in the aetiology of the former, including the experience of work-related stress, while the latter, as a health outcome, is often associated with minor psychiatric morbidity and not unrelated to the experience of anxiety and depression. It is also noted that work-related stress plays an aetiological role in more physical conditions other than musculoskeletal disorders. One of the most established examples is cardiovascular disease.

Studies on both musculoskeletal disorders and work-related stress make clear that their antecedents lay in an interaction of environmental and individual factors and that the design and management of work and work organisations are major issues for both. Several authoritative reviews and taxonomies of such factors are available and are likely to be updated regularly as a key activity of occupational health and related disciplines in Europe. At the same time, there is both a policy (legislative) imperative based on widespread agreement in applied science and in health and safety practice that all work hazards can and should be addressed through evidence-based and systematic problem solving in the form of the risk management paradigm. Such a risk-based approach has near universal application in health and safety management and is 'recommended' in European health and safety law.

The report explores the nature of the generic risk management paradigm as the recommended approach to dealing with work-related psychosocial hazards. It treats the development of this approach as an extension of existing good practice in occupational risk management but points up those aspects of this extension which should be considered further. In particular, it discusses the extension of this approach to consider positive work factors and to move thinking beyond the avoidance or reduction of risk, as required by European law, to consider the promotion of good practice in work and organisation design and management. The early evidence is that the extension of the risk management framework in this respect increases its acceptability and usefulness to organisations and helps build the business case for its implementation.

The report describes the business case for organisations adopting the extended risk management approach in the context of a less regulated health and safety situation in Europe and the drivers of free market competition. It also explores the positioning of a commitment to risk management in relation to the concept and practice of corporate social responsibility. It argues that the management of the health of working people by dealing with issues of work design and management is the 'other side of the same coin' as good practice in environmental and community based action.

In discussing the nature of the generic risk management approach, the report identifies its key features. It then illustrates the generic approach by presenting a small number of particular European methodologies for protecting and promoting the health of working people by tackling work design and management and work-related stress. It summarises each illustration, describing its defining features and noting which of the key characteristics of the generic risk management approach it incorporates.

Finally, the report describes how a common European framework might be developed for managing work-related psychosocial hazards and associated challenges to the health of working people through the risk management approach. It recommends that the concept of evidence-based systematic problem solving be adopted as the framework for risk management and that the key characteristics of such a process be agreed in relation to work-related psychosocial hazards. It then suggests that the types of measurement required to support those processes be agreed but some flexibility be left in the exact nature of the measuring instruments used to provide those measurements. This allows for differences in current practice, language and cultures to be accommodated without unnecessary and destructive dispute although it creates the need to be able to translate data between different measuring instruments.

Together the concept of evidence-based and systematic problem solving, the key characteristics of risk management and agreement on the types of measures required and the translation of data between existing measures will form the necessary framework for use in Europe: a European framework for psychosocial risk management

(PRIMA-EF). It is noted that this report is only the beginning of a more exhaustive process of research and development required to bring PRIMA-EF to fruition. More information on PRIMA-EF may be found at www.prima-ef.org.

This report was funded by SALTSA and researched and written by a European consortium of designated Collaborating Centres in Occupational Health of the World Health Organization. The SALTSA (Samarbetsprogram mellan Arbetslivsinstitutet, LO, TCO och SACO) programme was established by the Swedish National Institute for Working Life (NIWL) in 1997 as a research programme on working life issues in a European perspective, in cooperation between the Institute and the three trade union confederations LO, TCO and SACO. From 1997 to 2007, the programme produced more than 90 reports from 70 projects conducted in cooperation between European universities, colleges, institutes, trade unions and other stakeholders. When the NIWL was closed in 2007 due to a political decision the research programme SALTSA was transferred to Uppsala University. It is now hosted by the Department of Economic History since July 2007, as an integrated part of a centre for working life research at Uppsala University. SALTSA's research is based on real working life issues. Contemporary problems and new trends are identified by a network of stake-holders and studied by leading European researchers. The aim of SALTSA is to contribute to scientific research of the dynamics and complexity of the European working life arena by studies on labour market, employment and work organisation issues. The objectives of SALTSA are:

- to stimulate multidisciplinary and transnational research on relevant European working life issues
- to conduct research characterized by national comparative perspectives as well as supranational analysis
- to elaborate research projects in close contact with social partners and other relevant actors on both national and European level.

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Chapter 1

Changing world of work: challenges to health and safety management

In recent decades significant changes have taken place in the world of work (EU-OSHA, 2007) which have resulted in emerging risks and new challenges in the field of occupational health and safety. Global socio-political developments of increasing globalisation and the establishment of a free market, the development of information and communication technology, and significant demographic changes and their impact on the modern workforce characterise the development of the modern workplace (Kompier, 2006; EU-OSHA, 2007). Currently, major issues of relevance to the changing world of work can be summarised as: contractual arrangements, working hours, use of new technology, telework, and flexible work arrangements, and changes in the workforce (EU-OSHA, 2002a). The significant changes observed in the organisation and management of work have resulted in emerging occupational safety and health (OSH) risks (EU-OSHA, 2007): namely, risks identified as new and observed to be increasing (EU-OSHA, 2007).

Across the European Union (EU) psychosocial risks, defined as ‘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, 1995), have been identified as an emerging risk and as a top priority and, in turn, key challenge in modern occupational safety and

health management (EU-OSHA 2007). Linked to psychosocial risks, issues such as work-related stress and workplace violence have been highlighted to be of particular importance and a key priority (EU-OSHA, 2007). At the EU-level two policy instruments, the framework agreements in 2004 and 2007 to address the prevention of work-related stress and harassment and violence at work, have been developed and supported by the EU social partners to foster national-level commitment to the identification, prevention and management of these two particular public health issues (McDaid, 2008).

The following chapter will examine in detail the relevant and noteworthy changes in the world of work, particularly in relation to three key areas: (1) changes in the in the nature of work and work organisation, (2) impact of new forms of organisation and employment on occupational health and safety, and (3) changes in the work population. The review of these key changes will be framed within their relevant impact on the emergence of psychosocial risks, and their respective impact on effective occupational health and safety management.

1.1. Changes in the nature of work and work organisation

The nature of work and work organisation has changed significantly over the past decades. The evolution of new working practices may be intended to help companies to implement mechanisms and strategies in order to challenge the growing competitive nature of the global marketplace (McDaid, 2008). Some of these strategies include increasing flexibility, outsourcing areas which are not core to the system, downsizing and using more temporary and other non-traditional employment practices. Many organisations focus on core areas and the tendency is to outsource the rest, buying products and services from other companies or persons (Goudswaard, 2002; OSHA, 2002b; Sauter et al., 2002; Sundin & Wikman, 2004).

Changes in the nature of work have also been impacted by the emergence of new information and communication technologies such as the internet, computer networks and electronic data

interchange (OSHA, 2002b). The pace of technological advancements and the opening of markets and boundaries have impacted on the distribution of work. In conjunction with the focus on outsourcing, this has meant that manufacturing of produce has mainly moved to developing countries, so the structure of the job market in Europe is moving towards a primacy of the tertiary sector. New technologies have also allowed the creation of teleworking (i.e. employment outside company premises which is aided by such technologies).

In a growing competitive global market many companies, to compete more effectively, have restructured and downsized their workforce, relocated production to lower-cost sites, increased the use of non-traditional methods of employment practices (such as outsourcing, temporary work, part-time work, or flexible work) and implemented new forms of work methods such as lean production and just-in-time production (EU-OSHA, 2007; Kompier, 2006). New organisational practices, although different in their content and structure, have two aspects: namely greater emphasis on high performance (e.g., productivity, profit) and on flexibility (Kompier, 2006). Increasing flexibility in organisational and employment practices is thought to enhance ability of companies to adjust freely to ever-changing market conditions and thus to increase survival and profitability in the global marketplace (Kompier, 2006). Individuals have more opportunities for work and access to more flexible environments that can provide them with a greater breadth of skills and the opportunity to balance work and family demands (Hutchinson & Brewster, 1994).

1.2. Impact of new forms of organisation and employment on occupational health and safety

There is a rising concern of the effects the new forms of work organisation and practices, in particular in relation to temporary employment, home working, teleworking, part-time work and precarious employment, may have on the health of workers (OSHA, 2002b; Sauter et al., 2002; WHO, 2005), organisations and communities (Cooper, 1999). A long list of changing forms of work organisation and practices can be identified in the preceding

decades, and a discussion of their respective impact on workers' occupational health can be offered. Two specific changes in the organisation of work and employment patterns will be reviewed in this chapter and their respective impact on occupational health will be discussed: namely, teleworking and temporary/ precarious work contracts.

1.2.1. Teleworking

In Europe an estimated 4.6-7.1% of the working population spend over 50% of their working hours at home (Felstead & Jewson, 2000). Teleworking refers to 'work carried out in a location where, remote from central offices or production facilities, the worker has no personal contact with co-workers but is able to communicate with them using new technology' (Ki, Martino & Wirth, 1990 pg. 50; as cited in Mann & Holdsworth, 2003). Several key benefits of teleworking have been previously cited: namely, enhanced work-life balance, increased flexibility, reduction in commuting, reduced overheads for employer, increased skill base for employer, and increased productivity. However in contrast, several negative consequential impacts of teleworking and flexible working arrangements on workers' health have in addition been documented such as social isolation, presenteeism, lack of support, career progression, and blurring/undefined boundaries between work and home domains (as reviewed in Mann & Holdsworth, 2003; and OSHA, 2002b).

Specifically, a growing body of research has begun to examine the possible 'spill-over' effect resulting from increasing ill-defined boundaries between work and home domains for employees and how, in turn, this may impact on workers' health and well-being.

Mann and Holdsworth (2003) examined the impact of teleworking on workers' psychological health and found several positive outcomes: namely, reduction in commuting stress or irritation due to interruptions in the workplace. However in addition, respondents also reported increased: loneliness and isolation, frustration due lack of technical support, guilt resulting in calling in sick, and resentment regarding the impact of working remotely has on elements of

respondents' private life. A more recent study (Mann & Holdsworth, 2003) comparatively evaluated the psychological impact of teleworking to office-based work. The study found that in comparison to office-based workers, teleworkers experienced significantly more mental health symptoms of stress and slightly more physical health symptoms.

Ertel, Pech and Ullsperger (2001) surveyed freelancing teleworkers and found, like in previous research, respondents identifying both negative and positive elements to the structure and nature of their working conditions. On the one hand, the majority of teleworkers reported a high level of control over their work process (e.g., 91% task variety, 81% challenging job, 78% learning opportunities); however, conversely, a high degree of job ambiguity, fluctuations in the amount of work, and demands for high performance coupled with tight deadlines were also frequently reported. On average 63% of teleworkers surveyed worked over 45 hours per week; and of those 25% worked over 60 hours. High levels of work interference with private life (> 40 hours = 66%, > 60 hours = 78%) and disturbed ability of relaxation (> 40 hours = 37%, > 60 hours = 54%) were reported; in comparison to those freelancers working less than 40 hours per week (41%, 20% respectively).

Montreuil and Lippel (2003) found that workers that had received training related to the individual management of telework found it to be a relevant and useful exercise; in contrast those workers that did not receive the training reported a difficult adaptation period of variable duration (in terms of stress, isolation, extended working hours in the initial months). This preliminary evidence demonstrates the importance of both the consideration of the occupational health impact of teleworking, and more generally various forms of atypical work organisation on the effective management of occupational health and safety.

1.2.2. Temporary and Precarious Employment

Temporary employment has increased in developed countries in the past years (Virtanen, Kivimäki, Joensuu, Virtanen, Elovainio & Vaherta, 2005). Between 2004-2005 the proportion of part-time and

temporary employment in Europe rose (Romans & Hardarson, 2006); albeit this observed percentage varied remarkably across countries. For example, in 2005 the percentage of temporary contracts ranged from 2.7% in Estonia to 34.4% in Spain (European average is 14.9%). In terms of part-time work, the European average of 18% ranges between 2.6% in Slovakia and 46% in the Netherlands (Romans & Hardarson, 2006). Temporary, part-time and precarious employment have been linked to increased job demands, lower job security and reduced control over working conditions (Benach, Amable, Muntaner & Benavides, 2002; Benavides, Benach, Diez-Roux & Roman, 2000; Quinlan, 2004; Quinlan, Mayhew & Bohle, 2001a). In general, there is growing evidence to indicate that job insecurity and short-term contractual relationships have a negative effect over workers' health (Virtanen et al., 2005). Quinlan and his colleagues (2001a) conducted a review and found that 87.8% of the reviewed studies on downsizing, organisational restructuring and job insecurity were related to ill health indicators; whilst 7.3% of the remaining studies did not identify a significant association, and 4.9% of the remaining studies results were inconclusive due to significant methodological flaws. Similar results were observed in relation to temporary work, where 58.3% of the studies demonstrated a negative association with ill-health indicators; of the remaining studies, 8.3% did not demonstrate a significant relationship and an overwhelming 33.4% demonstrated inconclusive results.

Virtanen and colleagues (2005) examined the relationship between temporary work contracts and a variety of health outcomes in a systematic review. The results of the review demonstrated evidence of an association between temporary employment and psychological morbidity, as compared to permanent workers. Additionally, temporary workers were also found to have a significantly higher risk of occupational injuries, but their sickness absence was found to be lower relative to permanent employees. Virtanen, Kivimaki, Elovainio, Vahtera, and Ferrie (2003) examined the long term impact of contingent work on workers' health and sickness absence. Data was collected from a prospective cohort study with a four year follow up. In total 4851 hospital employees, having either a fixed-term contract or a permanent contract, were surveyed at baseline and follow-up. The results of the study demonstrated that in comparison to

permanent employees, fixed term employees reported lower workload, job satisfaction and job security. Continuous fixed employment was not found to favourably change any of the aforementioned outcome measures. However, for those employees that changed from fixed term to permanent employment increased job security was observed and enduring job satisfaction. In general, a relationship between job insecurity and ill health has been consistently observed (Sverke, Hellgren & Naeswall, 2002).

1.3. Changes in the working population

In recent decades an increasing diversification of the workforce can be observed, due significant changes in employment patterns (Kompier, 2006; Zahm, 2000) and increased worker mobility (EU-OSHA, 2007). Three primary changes that can be observed in the working population, each yielding new challenges to the diversification of the workforce in recent years are: (a) the ageing workforce; (b) the feminisation of the workforce; and (c) increased immigration of new groups to European economies. These three changes in employment patterns and overall composition of the European workforce have significant implications for occupational safety and health and its management. These three areas will be examined in greater depth in the following sections.

1.3.1. Gender

A dramatic change in employment patterns can be observed over recent decades (Zahm, 2000); namely, with the increase of active participation of women in the paid workforce (commonly referred to as the *feminisation* of the workforce). In the 1950's, women accounted for approximately 34% of the workforce. Currently it is estimated this number has increased to 42% respectively in the enlarged EU (EU-OSHA, 2002c). Increased growth of female employment in the last decade is observed as compared to men: 19.3% compared to 7% respectively (Eurostat, 2006).

Significant gender segregation within the labour market and workplace can also be observed (EU-OSHA, 2002c; Vogel, 2003). In

short, men and women tend to work in very different occupational sectors and types of professions/jobs. The majority of employed women in the EU25 member states were found to be highly concentrated in six occupational sectors (60%); namely, health care and social services (17%), retailing (12.5%), education (11.5%), public administration (7%), business activities (7%), and hotels and restaurants (5%). In comparison, the degree of concentration in certain occupational sectors is less pronounced in men, with 42% of men in the EU25 working in six sectors of employment: namely, construction (13%), public administration (7% - much the same as women), retailing (6%), business activities (6%), agriculture (5%), and land transportation (4%). These six main occupational sectors primarily occupied by men account for only 33% of female employment (Eurostat, 2007). The evidence thus indicates that jobs occupied by women are spread less evenly across occupational sectors, as compared to men, and that the sectors in which women predominantly work are categorically different from those in which men are concentrated in (Eurostat, 2007). Even where women and men work in the same occupational sectors such as public administration (women = 7% and men = 7%) and where men and women perform the same job, they tend to conduct very different tasks within that job (Messing, 1998; Vogel, 2003). Gender segregation is so pervasive that, in order to rectify this imbalance across the labour market, it is estimated that 75% of women would have to change jobs or professions (Messing, 1998).

The pervasiveness of gender segregation within the labour has resulted in significant differences in both job content and working conditions amongst women and men (Messing, 1998; EU-OSHA, 2002c; Östlin et al. 2007); thereby resulting in differential exposure rates and taxonomy of workplace hazards (for example, exposure to toxic chemicals, ergonomic demands, risk of accidents, and psychosocial risks; Messing, 1998). For example, a European Foundation survey found that men tend to be more exposed to physical and chemical hazards (Kauppien & Kandolin, 1998) than women; whilst women are more frequently exposed to emotionally demanding work, and to work in low-status occupations with often restricted autonomy, as compared to men (EU-OSHA, 2002c). Consequently, this differential exposure to workplace hazards can

result in both direct and indirect differential impacts on occupational illness and disease for men and women (EU-OSHA, 2002c). For example, evidence indicates that men are three times more likely than women to have serious accidents at work (EUROSTAT, 1998); whilst women are more likely to report work-related upper limb disorders, work-related stress, infectious diseases and skin problems (for a comprehensive review of gender differences see EU-OSHA, 2002c).

Differential working conditions amongst men and women have been demonstrated to have differential negative consequences in regards to their health and safety (EU-OSHA, 2002c). A cross-sectional survey of 2176 bank employees in the UK revealed statistically different gender differences amongst full-time employees in malaise symptoms; even after controlling for other factors (including marital status, age, and occupational grade; Emslie, Hunt & McIntyre, 1999). A cross-sectional study of 7484 workers in Canada found that albeit women reported more frequently high-strain jobs, negative psychosocial work characteristics demonstrated a stronger association to psychological distress among men (Vermeulen & Mustard, 2000). These preliminary studies highlight the importance of examining gender differences in work experiences, and, moreover, their possible differential impact on men and women's occupational health and well-being. The European Agency for Safety and Health at Work (2002c) highlights the need, and moreover the importance, of using gender-sensitive risk assessment procedures; thereby promoting the direct assessment and evaluation of possible gender-relevant issues in the workplace and how those identified issues can be directly addressed in order to maximize the effectiveness of occupational health prevention and management initiatives to be equally effective for both men and women.

1.3.2. Immigration

A second observable and noteworthy trend in the changing demographic nature of the current workforce composition is the increased immigration of new groups to European economies. The increasing number of immigrants, in particular between EU countries, has been speculated to be the result of increased advances in

information technology, travel and mobility (OSHA, 2002b). The working conditions of immigrants have been found to vary both between countries and in relation to the characteristics of the immigrant population. In general it can be observed that legal workers, as compared to illegal workers (including both legal and illegal immigrants and visitors working contrary to their visas), have both better working conditions and access to compensation claims (Guthrie & Quinlan, 2005).

Evidence indicates that ethnic minority migrants have different conditions, as compared to white migrants, and there is evidence that they can be less successful in the labour market and report significantly lower levels of psychosocial well-being than the majority population (Shields & Price, 2003). There are also differences in terms of gender of the migrant population, with men more likely to be economically active than women, although this can be associated to cultural differences and not necessarily to discrimination.

In relation to health and safety provision, illegal workers can have lower protection and no access to health and safety provision or workers' compensation. In the cases where it has been deemed that contracts of employment are invalid, these meant that workers would not receive compensation for health and safety breaches (Guthrie & Quinlan, 2005). It is possible that some employers take advantage of this situation and use illegal workers for more perilous activities. Reduced surveillance hazards for these groups can also have implications for their health and safety, as in the widely publicised case of 21 Chinese cockle pickers who drowned when overcome by tides due to inadequate supervision and no regard for safety. The case gave rise to a review of the operations of 'gangmasters' (i.e. suppliers of casual or seasonal labour to the agriculture and horticulture industry) in Britain (Great Britain, Parliament, House of Commons, Environment, 2003) which showed that although many gangmasters work in accordance with current regulations, there are some well-reported examples of extremely degraded working conditions such as, sub-standard accommodation (often deducted from pay), payments under the minimum wage, intimidation and fear that they will lose both their jobs and their accommodation if they complain.

The increasing number of immigrants, both legal and illegal, can also challenge health and safety in a more indirect manner. Immigrants' cultural background, anthropometrics and training may differ from those of the average national of the host country, this may in turn impact their use of technology developed for these specifications (Gurr, Straker & Moore, 1998; Kogi, 1997; O'Neill, 2000). An additional challenge for migrant workers is that the understanding of safety signals and signs may differ in different cultures, so common symbols used in safety might not be understood in the same manner by some immigrants.

1.3.3. Ageing

Within many, if not all, industrialised nations a significant demographic change, known as population ageing, can be observed. The demographic shift is the result of a combination of interacting factors: namely, in general, a lengthening life expectancy and declining birth rate (Wegman & McGee, 2004). Within the EU15 it is estimated that by the year 2025, the proportion of 50 to 64-year-olds will double in size as compared to workers under the age of 25 years (35% to 17% respectively); in some EU countries it is predicated that this trend will be observed as soon as 2010 (Ilmarinen, 1999; 2006). Although the evidence points to an ageing population, this is not reflected in the characteristics of those in employment. Evidence suggests that both participation and employment rates of older workers (over 55) have markedly decreased in Europe (Auer & Fortuny, 2000; Griffiths, 1997).

The primary concern is not increased life expectancy, but rather the implications of early retirement and its respective impact on the labour market and, moreover, the society-at-large. In short, for this cohort of workers more healthy years will be spent in retirement than working (Ilmarinen, 2006). As the proportion of pensioners to working age individuals increases, this may result to a financial strain on the state due to growing health care and retirement costs (Auer & Fortuny, 2000; Griffiths, 1997; Ilmarinen, 2006). This falling dependency ratio has resulted in increased concerns within society of a possible pension crisis (Roberts, 2006).

One possible solution to address this growing concern has been the suggestion of increasing the minimum age of retirement from 65 to 70 years of age (Miles, 1997); however little knowledge and strong empirical evidence is available on the long-term effects of a prolonged work life. Several European countries, for example Finland, have adapted this strategy and have increased the minimum age of retirement to 70.

The needs of older workers have been demonstrated to differ from those of younger workers; namely, increased exposure to certain psychosocial risks at work; less training over a similar period of time; decreased opportunities to gain further knowledge, expertise and develop new skills; less opportunities for task rotation, less support from supervisors, less access to professional development and discrimination in terms of selection, career development, learning opportunities and redundancy (Chui, Chan, Snape & Redman, 2001; Griffiths, 1997; Maurer, 2001; Molinie, 2003). These differential work environments and conditions can result in differential impacts on occupational health and safety.

The observed incidence of work-related health problems of older workers is generally comparable to that of younger workers (i.e. those between 25 and 44 years old). However, as workers get older, an increase in prevalence of musculoskeletal disorders can be observed, and they are more likely to report work-related stress (however, this has been shown to decrease following retirement; Griffiths, 2007). Additionally, for the cohort of workers aged 65 and up, the prevalence of total complaints drops on all categories; a similar trend can be observed in relation to those problems which cause long term absence (except for the case of musculoskeletal disorders; Eurostat, 1999). It can be speculated that this observed trend can be explained by the fact that only healthier workers will be likely to continue working following retirement age. This evidence reaffirms the fact that in a society that wishes to promote, or may require workers to work beyond the age of early retirement; occupational health strategies to prevent ill health, or help manage health problems at work will need to examine age as a variable in its own right in order to enhance the global health of the workforce,

rather than confounding factor – as it has been traditionally conceptualized (Griffiths, 2007).

An ageing population, and its respective implications in the composition of the European workforce, has significant implications for the effective management of occupational health and safety; due to the observed differential working conditions and taxonomy of risks experienced by older workers, and the interaction of these risks in relation to the progress of ageing (Griffiths, 1997; 2007); as evidence outlined previously indicates, older workers' characteristics vary from those of younger workers and they are more likely to suffer from chronic illness or disability (Griffiths, 1997).

1.4. Conclusion: increased exposure to psychosocial hazards

The changes in the nature of working life are varied. They include changes in the working population, changes in the nature of work and work organisation, and changes in the nature of working life. These present a significant challenge for occupational health and safety, due to their direct and indirect impact but also because of the challenge they present for traditional surveillance systems. Traditional surveillance systems might not be capturing these changes in the organisation of work, and the duty of care over employees is defused as employment moves away from company owned premises. In cases where employees work from home the possibility for inspectors to access is reduced, unless specific arrangements have been agreed upon.

The most salient issue in relation to the consequences of the changing world of work relates to the increased exposure to recognised psychosocial hazards and the emergence of new hazards which need to be identified in order to reduce the associated risks to health and safety (EU-OSHA, 2007). Psychosocial hazards are defined by the International Labour Organization (ILO, 1986) in terms of the interactions among job content, work organisation and management, and other environmental and organisational conditions, on the one hand, and the employees' competencies and

needs on the other. As such, they refer to those interactions that prove to have a hazardous influence over employees' health through their perceptions and experience (ILO, 1986). A simpler definition of psychosocial hazards might be those aspects of the design and management of work, and its social and organisational contexts, that have the potential for causing psychological or physical harm (Cox & Griffiths, 2005).

Common psychosocial hazards include unpleasant or monotonous tasks, time pressure, lack of participation and control, lack of career development opportunities, poor communication, and work-family conflict, among others (see Table 1). The changes in the world of work can exacerbate these problems through various pathways such as reduced social support and participation at work due to externalisations or work at home, increased tension between family and work demands as more women join the workforce and family matters require attention from both women and men, increase in unpredictable or unsociable schedules for those working in temporary agencies or the quasi self-employed, decrease in training as organisations assume this to be a responsibility of the individual and turnover increases, etc.

Table 1.1.: Psychosocial hazards (adapted from Leka, Griffiths & Cox, 2003)

PSYCHOSOCIAL HAZARDS	
Job content	Lack of variety or short work cycles, fragmented or meaningless work, under use of skills, high uncertainty, continuous exposure to people through work
Workload & work pace	Work overload or under load, machine pacing, high levels of time pressure, continually subject to deadlines
Work schedule	Shift working, night shifts, inflexible work schedules, unpredictable hours, long or unsociable hours
Control	Low participation in decision making, lack of control over workload, pacing, shift working, etc.
Environment & equipment	Inadequate equipment availability, suitability or maintenance; poor environmental conditions such as lack of space, poor lighting, excessive noise
Organisational culture & function	Poor communication, low levels of support for problem solving and personal development, lack of definition of, or agreement on, organisational objectives
Interpersonal relationships at work	Social or physical isolation, poor relationships with superiors, interpersonal conflict, lack of social support
Role in organisation	Role ambiguity, role conflict, and responsibility for people
Career development	Career stagnation and uncertainty, under promotion or over promotion, poor pay, job insecurity, low social value to work
Home-work interface	Conflicting demands of work and home, low support at home, dual career problems

Psychosocial hazards are always specific and unique to each particular organisation and job; thus, because of this, any taxonomy – as the one presented – should be used as a guide and not as a prescriptive and thorough checklist. The changing world of work also presents the challenges of recognising new hazards as they emerge in order to prevent associated risks. There is a need to consider how the changes outlined in this chapter can generate new risks. The awareness of current trends and expected outcomes in relation to the working population, work organisation and the nature of working life can provide a tool that enables the early identification of hazards and risk prevention.

It should also be considered that the same hazards might affect workers in a differential manner so the associated risks for a certain group can be hidden if only the more traditional hazards are explored. For example, older workers might be able to cope with certain hazards such as home-work interface better than middle aged workers, but have more difficulty in adjusting to shiftwork or unsocial working hours.

In conclusion, the changing world of work poses certain challenges to health and safety which should be considered. This is of utter importance due to the speed at which these changes are occurring (EU-OSHA, 2002a). Challenges include the emergence of new risks to physical and mental health, and in particular an increased exposure to psychosocial hazards and the emergence of new hazards which require constant monitoring. The following chapter will examine the association between exposure to psychosocial risks and work-related stress to health outcomes in relation to the individual and the organisation.

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Chapter 2

The impact of psychosocial risks and work-related stress on workers and organisations

As outlined previously, the world of work has changed remarkably in preceding decades resulting in the emergence of new types of occupational risks, termed psychosocial. A growing body of evidence demonstrates that a poor psychosocial working environment and work-related stress can have both a direct and indirect impact on workers' physical health and mental well-being. The Fourth European Working Conditions survey (EuroFound, 2007) found that one out of five workers from the EU15 and almost one in three from the 10 new member states believed their health was at risk due to work-related stress (WRS). Reports indicate that WRS alone affects more than 40 million individuals across the European Union, costing an estimated €20 billion a year in lost time and health bills; it is among the most commonly reported causes of occupational illness by workers (EuroFound, 2007).

In order to enhance the effective management and prevention strategies for psychosocial risks in the workplace, it is imperative to examine in greater detail the complex and multifaceted nature of the impact of psychosocial risks on workers' and organisational health.

2.1. Work-related health problems: workers' health

A growing body of evidence demonstrates the association between work-related stress and psychosocial risks in the workplace and antecedents of poor worker physical and mental well-being. The following section will summarise the possible health and health-related effects of stress and psychosocial risks to the individual: in terms of physical, psychological and social effects.

2.1.1. Physical health effects

A growing body of robust evidence, deriving from many rigorous cross-sectional and longitudinal studies, indicates a link between the psychosocial working environment and impacts on workers' physical health. Increasing evidence indicates that many of the most commonly experienced physical effects due to work-related stress and psychosocial risks relate to four physiological systems: namely, hypertension, heart disease, wound-healing, musculoskeletal disorders, gastro-intestinal disorders, and impaired immune-competence (Cox, Griffiths & Rial-Gonzalez, 2000). Several studies have examined the link between two psychosocial constructs (namely effort-reward imbalance and job demands and control) and their associated impact on a variety of physical outcomes.

Niedhammer, Tek, Starke and Siegrist (2004) examined longitudinal data collected through the GAZEL cohort; both cross-sectional and prospective analyses were conducted to examine the current status of workers' health and their health trends overtime. The GAZEL cohort was established in 1989 to collect data regarding workers' health and working conditions, and originally included 20264 workers for a French electricity and gas company. In 1995 the yearly collected data began to include questions on psychosocial aspects of the working environment. The current study examined data collected data in 1998 (n= 10 175; 71 % men) and a comparison between the data collected in 1998 to 1999 (n= 6286, 71% men). The cross-sectional analysis revealed both effort-reward imbalance and over-commitment were significantly associated with self-reported health for both men and women. When effort and reward were examined as independent variables, reward was found to be a significant risk

factor for both men and women, whilst effort was found to be a significant risk factor only for men. The prospective analysis demonstrated that effort reward imbalance was found to be a significant predictor of poor self-rated health for both genders; however, effort was found not to predict poor-self rated health, whilst reward did. For men only over-commitment was found to be a predictor of poor self-rated health.

A prospective study examining a British sample of civil servants (n= 10308) found a similar link between psychosocial risks and detrimental impacts on worker's self-rated health. Specifically, a strong association was observed between high job demands and increased risk of poor physical functioning. Specifically, high job demands were found to be related to 30% increased risk in men and 50% increased risk in women for poor physical functioning in relation to low job demands (Stansfeld, Head & Marmot, 2000). An earlier study conducted by Stansfeld and colleagues (1998), examining the same aforementioned sample of British civil servants, found negative aspects of work (namely high demands and effort-reward imbalance) and low social support were strong independent predictors of poor health functioning. The strength of the longitudinal nature of these studies has direct implications in inferring causal relationships between the variables. However, as these studies look at one particular occupational sector and national context the generalisability of these findings is limited in their scope.

It should be noted that, as the previous discussed studies highlight, many psychosocial factors may have differential impacts on both men and women. Niedhammer and colleagues (2004) highlight the importance of future research conducting separate analysis for men and women in the field of psychosocial factors at work. In so doing this evidence will contribute to a more comprehensive and holistic understanding of psychosocial risks and their impact for the worker and for women and men independently. This knowledge is imperative when both designing and tailoring effective evidence-based interventions that protect workers' health and enhance well-being.

2.1.1.1. Musculoskeletal disorders

Musculoskeletal disorders (MSDs) are the most commonly reported cause of occupational illness by European workers (Kumar 2001; EuroFound, 2007; EU-OSHA, 2004b). MSDs make up nearly half of all new cases of work-related disease in the UK (Cherry, Meyer, Holt et al., 2000). The aetiology of musculoskeletal pain is underpinned by two mechanisms (Bonger et al., 1993; Cox & Griffiths 1996; MacDonald et al., 2001; Randall et al., 2002): (a) biomechanical (physical) risk factors; and (b) psychosocial risk factors (De Beeck & Hermans, 2000; Randall, Griffiths, Cox & Welsh, 2002; Warren, 2001). The biomechanical pathway operates through an intimate association between certain physical characteristics of work and mechanical load; whilst psychosocial factors are related to elements of work design and management (Randall et al., 2002).

The biomechanical factors contributing to the development and maintenance of MSDs have, over recent years, been extensively investigated (Buckle, 1997); and their role in the development and maintenance of musculoskeletal pain has been widely established (Warren, 2001). Evidence indicates that interventions that exclusively target the physical aspects of work design have not been demonstrated to be completely successful in reducing workers' report of musculoskeletal pain (Bigos et al., 1991; Kourinka & Forcier, 1995). In contrast, research examining aetiological psychosocial factors in the development and maintenance of musculoskeletal pain has, until recently, received less scientific investigation (Buckle, 1997; Bongers, Ijmker, van den Heuvel & Blatter, 2006). Current research has demonstrated that psychosocial and biomechanical risk factors have independent or interactive effects on MSDs development (Warren, 2001; see Figure 2.1).

Increasing attention is being placed on the interactive effects of physical and psychosocial hazards in the aetiology of work-related MSDs. The European Agency for Safety and Health at Work has identified this as a priority for research (EU-OSHA, 2004b). A review of the literature in relation to lower back pain highlighted the interactive role of psychosocial factors (specifically the role of low social support, low job satisfaction, poor work organisation and low

job content) and factors related to the physical aspects of work in the development of MS pain (De Beeck & Hermans, 2000). The impact of exposure to both physical and psychosocial hazards for MSDs has been found to have a stronger effect than exposure to physical or psychosocial factors separately (Devereux, Rydstedt, Kelly, Weston & Buckle, 2004), as shown in figure 2.1.

Devereux, Buckle and Vlachonikolis (1999) conducted a cross-sectional case study survey examining the possible association between self-reported symptoms of back disorders and the interactive effect of physical and psychosocial risks in manual workers, delivery drivers, technicians, customer services computer operators, and general office workers (n= 638). Based on participants' self-reported assessment of their working conditions, employees were categorised into one of four groups: (a) high physical and psychosocial risks; (b) low physical and psychosocial risks; (c) low physical and high psychosocial risks; or (d) high physical and low psychosocial risks. The highest increase in risk was observed for the high physical and high psychosocial exposure group for the symptoms of back disorders; followed by high physical and low psychosocial exposure group. Despite the study's respectable sample size and scientific methodological rigour, response rates across occupational groups varied substantially (ranging from 82% to 42%, respectively); with possible implications on the validity and reliability of this study's findings. In addition the cross-sectional nature of the study limits speculation on the causal relationship between these variables.

Sim, Lacey and Lewis (2006) examined the prevalence and population impact of work-related upper limb and neck pain. This cross-sectional survey was conducted in North Staffordshire, UK, where there is a common local manual industry (n=5133; response rate 53.5%). Like in previous studies, both physical and psychosocial work characteristics were associated with upper limb and neck pain: namely, repeated lifting of heavy objects, prolonged bending of the neck, working with arms at/above shoulder height, little job control, and little supervisor support. In total, 24% of the variance of MS pain was accounted for by physical work characteristics, whilst 12%, respectively, was observed to account for psychosocial factors.

Several limitations to the current study should be highlighted: namely, the low response rate (53.5%) may have implications of the reliability and validity of the study's findings. Additionally, as only one area of the UK was examined in this study within the manufacturing sector, a replication of this study in other regions/countries and occupational sectors would have to be conducted to examine the generalisability of these findings.

Andersen, Haahr and Frost (2007) examined risk factors for severe regional musculoskeletal symptoms by conducting a prospective cohort study of 5604 workers from industrial and service companies. Self-report data on musculoskeletal symptoms and pain, physical and psychosocial work exposures, and individual and health related factors were collected at baseline (n = 4006) and 24 months later (n= 3276). Results indicate that of the data collected at baseline; only 7.7% of respondents were free of regional pain, indicating an overwhelming prevalence of MS pain in the general working population. Additionally, the transition from no or minor pain to more severe pain over the 2 year period was found to have a multifactorial aetiology influenced by physical and psychosocial factors, and factors related to health and beliefs about health in the individual. Physical factors were found to predict increasing pain in specific bodily regions, as compared to diffuse and non-specific regional pain. Specifically, arm pain was predicated by highly repetitive work, low back pain predicated by heavy lifting, and lower limb pain by pulling heavy weights. Psychosocial factors, in contrast to physical work characteristics, were found to be associated with nonspecific effects on regional MS pain. For example, low job satisfaction was associated with all outcomes, whereas job control was associated with low back pain and low social support from colleagues was associated with lower limb pain.

Similar results were observed by Randall and colleagues (2002). This cross-sectional survey found workers' subjective rating of the adequacy of the design and management of their physical and psychosocial working environment to be related to their report of musculoskeletal pain; particularly in relation to five key factors: management practice; status, support and participation; physical work environment; work equipment; and job demands. However, the

results of the study indicate that these mechanisms appear to be activated only under certain conditions; specifically, musculoskeletal pain reported in the upper body was found to be associated to both biomechanical and stress-related pathways, whilst pain reported in the lower body was found to be only biomechanically-related. Several limitations of the current study should be highlighted: firstly, aetiological causality cannot be assumed due to the cross-sectional nature of the study; and, secondly, the majority of participants were men (97%) thus limiting the generalisability of the study's findings. However, the study does further contribute to the growing body of evidence that highlights the importance of considering psychosocial factors and, moreover, understanding further their independent and interactive effect with physical hazards on the development and maintenance of MSDs.

A prospective cohort study aiming to examine the impact of exposure to mechanical risks and psychosocial factors on workers' self-reported neck and shoulder pain was conducted in 2005 by Östergren and colleagues. Randomly selected participants, residing in a large metropolitan Swedish city aged 45-65 (n=4919), were recruited to participate. Self-reported data was collected at baseline and at a one year follow up period. Results of the current study observed that high mechanical exposure was associated with increased risk of shoulder and neck pain for both women and men during follow up; whilst an interactive effect of mechanical load and psychosocial factors were observed exclusively in women. Andersen, Kaergaard, Poul, Thomsen, Bonde, Fallentin, Borg and Mikkelsen (2002) found that being female increased the risk of neck/shoulder injury by 1.8 times (1.2-2.8). Gender differences in self-reported MS pain and disorders have been highlighted in various documents and studies (for review see Hoofman, van Poppel, van der beek, Bongers & van Mechelen, 2004). Östergren and colleagues suggest that gender should be considered a key factor in examining MS disorders and developing interventions.

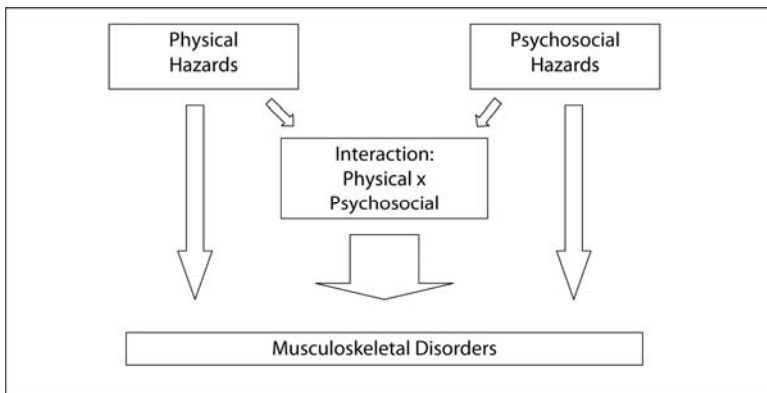


Figure 2.1: Causal paths for work-related MSDs

Understanding the multifaceted nature of the aetiological development of MSDs, considering both physical and psychosocial factors is important when developing strategies to effectively prevent and manage work-related MSDs (De Beeck and Hermans, 2000; Östergren et al., 2005). Psychosocial risk management, as described in chapter 3, can play a vital role in the reduction of the burden of MSDs in the working population. Moreover, there is evidence to suggest that interventions with a concentrated focus on work organisation issues have the potential to reduce work-related stress and, in turn, possibly neck and upper limb symptoms (see review Bongers et al., 2006).

2.1.1.2. Cardiovascular disease

Cardiovascular disease is the leading cause of death and disability in most countries (Everson-Rose & Lewis, 2005). The rates of coronary heart disease have been observed to vary markedly across occupations, more than can be accounted for by conventional risk factors, suggesting that elements of work or working conditions might be of aetiological importance (Hemingway & Marmot, 1999).

A growing body of evidence from a diversity of disciplines supports the hypothesis that psychosocial factors are related to both morbidity and mortality due to cardiovascular diseases (Landsbergis,

Schnall, Belkic, Baker, Schwartz & Pickering, 2001; Rose & Lewis, 2004). Several reviews have been conducted examining the association between psychosocial factors at work and cardiovascular disease; most demonstrating a positive association (Belkic, Landsbergis, Schnall et al., 2000; Schnall, Landsbergis & Baker, 1994; Kristensen, Kronitzer & Alfredsson, 1998; as cited in Landsbergis et al., 2001). A systematic review of exclusively examining prospective cohort studies in relation to psychosocial factors in the aetiology and prognosis of CHD found a significant relationship between job strain and CHD (Heming & Marmot, 1999).

Chandola and colleagues (2008) examined longitudinal data collected through the Whitehall study. The primary aim of this study was to examine the biological and behavioural mechanisms linking coronary heart disease with work-related stress. The results of the study demonstrated that chronic work stress was strongly associated with CHD and this relationship was demonstrated to be strong among participants under the age of 50. The observed relationship between stress and CHD was found to be mediated through indirect effects of health behaviours (low physical activity and poor diet in particular) and the direct effects of neuroendocrine stress pathways. These two mediating factors were found to account for an overwhelming 32% of variance of the relationship between cumulative stress and CHD.

Kuper and Marmot (2003) conducted a prospective cohort study (Whitehall II study) examining the association between job strain and components of job strain and the risk of CHD. The first phase of the study collected self-report data during 1985-1988 of British civil servants; these participants were continuously followed over time with several periods of data collection. The fifth phase of data collection was completed during 1997-2000 resulting in a mean follow up period of 11 years. A total of 6895 males and 3413 female civil servants aged 35-55 participated in the current study. The results of the study demonstrated that individuals with concurrent low decision latitude and high demands (job strain) were at the highest risk for CHD. When these variables were examined independently, high demands strongly predicated CHD incidence; this relationship was also observed for decision latitude, albeit less consistently.

Similar results were observed by Kivimaki and colleagues (2002) in Finland. A longitudinal study examined the relationship between work-related stress and cardiovascular mortality of workers in a metal industry. A total of 812 workers (545 men and 267 women) free from cardiovascular diseases at baseline were followed over approximately 25.6 years. Results of the study indicated that workers reporting job strain were 2.2 times more likely to experience cardiovascular mortality, as compared to their colleagues that did not report job strain. Additionally, workers reporting a reward-effort imbalance (characterised by low salary, lack of social approval, and few career opportunities; Seigrist, 1990) were 2.4 times at risk of cardiovascular mortality, as compared to the colleagues that did not report this imbalance.

As part of the Belgian Job Stress project (1994-1999), the independent role of perceived job stress on short-term incidence of clinical manifest coronary events in a large occupational group (n= 14337) comprising exclusively of middle-aged men was examined. This study did not find a statistically strong association between job strain and job demands in the development of coronary heart disease; however, a coronary heart disease incidence was substantially associated with social support (Bacquer, Pelfrene, Clays, Mak, Moreau, de Smet, Kornitzer & de Backer, 2005). The use of exclusively a male population limits the generalisability of these findings to women. However, a prospective study conducted with 49259 middle-aged Swedish women (Kuper, Adami, Theorell, Weiderpass, 2006) examined psychosocial determinants of CHD. Job strain and social support were weakly associated to CHD, in contrast to previous findings conducted in predominantly male samples. This preliminary study highlights the need to further explore possible gender differences in aetiological social variables in the development of CHD, and how this, in turn, may affect intervention initiatives.

As aforementioned there is a growing body of evidence that identifies the role of psychosocial factors in cardiovascular disease mortality and morbidity. Much of the current research evidence has examined limited psychosocial hazards; namely, job strain (control and demands), and increasingly effort-reward imbalance. Although there is strong evidence to indicate their role in the development of

cardiovascular disease by these two theoretical constructs, there remains a lack of knowledge and, moreover, research examining the possible aetiological role of other psychosocial factors found in the workplace and CHD. This gap limits the knowledge base in the development of effective interventions to prevent CHD.

2.1.2. Psychological and social health

Research indicates that psychosocial working conditions may have a detrimental impact on both affective and cognitive outcomes such as anxiety, depression, distress, burnout, decision-making, and attention (Cox, Griffiths & Rial-Gonzalez, 2000). Stansfeld and Candy (2006) examined the link between psychosocial work factors and mental disorders by conducting a meta-analysis of published longitudinal studies. In total 11 papers met the strict inclusion criteria and were included in the review. Job strain, low decision latitude, low social support, high psychological demands, effort-reward imbalance and high job insecurity were identified as strong predictors of mental ill-health. The strongest effects were observed for two specific workplace stressors: namely, job strain and effort-reward imbalance. The following section will explore the impact on workers' mental health and cognitive functioning.

2.1.2.1. Mental health

In the UK approximately 15-30% of workers will experience some form of mental health issues during their working lives (D'Souza, Stradzdins, Lim, Broom, & Rodgers, 2003); resulting in an estimated 80 million working days lost every year, costing employers £1-2 billion per annum (Stansfeld, Fuhrer, Shipley, & Marmot, 1999). Work-related stress, depression and anxiety can be directly associated to the exposure to psychosocial hazards at work (Cox, Griffiths & Leka, 2005; Cox, Griffiths & Rial-Gonzalez, 2000; Cox & Rial-Gonzalez, 2000; Devereux et al., 2004; Middelcorp, Cath & Boomsma, 2006). Across research findings, work characteristics such as lack of job control, low decision latitude, low skill discretion and job strain have been found to be associated with the risk of depression, anxiety, distress, fatigue, job dissatisfaction, burnout and sickness absence (de Jonge, Bosma, Peter, & Siegrist, 2000; de Lange, Taris, Kompier, Houtmad, & Bongers,

2003; D'Souza et al., 2003; Maudsner-Dorsch & Eaton, 2000; Stansfeld et al., 1999; Wieclaw, Agerbo, Mortensen, Burr, Tuchsén, & Bonde, 2008).

A recent study, conducted in Denmark, aimed to investigate the risk of depressive and anxiety disorders in relation to psychosocial working conditions (Wieclaw, Agerbo, Mortensen, Burr, Tuchsén & Bonde, 2008). A population-nested case control methodology was utilized; whereby cases were selected among all patients recorded in the Danish Psychiatric Central Research Register (aged 18-65), who received their first-ever diagnosis of a depressive or anxiety disorder during 1995-1998. The selected cases were matched to five never-admitted referents of the same gender and age from a large national level database (cases = 14 166, controls = 58060). The results of the current study demonstrated that psychosocial risks, such as job control, emotional demands and working with people, were significantly associated with increased risk in psychiatrically diagnosed depression or anxiety disorders. Interestingly, this pattern was found to differ across the sexes. Specifically in men, a strong association between low job control and increased risk of anxiety disorders, and a weak association between job strain and the risk of anxiety disorders was found. In contrast, an elevated risk of depression was associated to high emotional demands and working with people for women. In both men and women high demands were associated with decreased risk of anxiety disorders. Albeit the current study's scientific rigour in its methodological design and its respective impact on the validity of its findings, the generalisability of the findings to common mental health disorders is limited as only severe clinically diagnosed disorders were examined. Additionally, due to the cross-sectional nature of the study causality cannot be assumed.

A longitudinal study, conducted in the UK (Stansfeld, Fuhrer, Shipley & Marmot, 1999) may provide insight into the causal relationship between work characteristics and the aetiology of psychiatric disorders. In the Whitehall II study, a longitudinal prospective cohort study, 10308 British civil servants (33% female) were followed over an extensive period of time: approximately 9 years. Within this cohort of middle-aged civil servants, demands at work were found to increase

the risk of psychiatric disorders, whilst social support and high decision authority decreased the relative risk. Additionally, high efforts and low rewards were associated with increased risk of psychiatric morbidity. As the research sample was predominantly male, this limits the generalisability of the findings to the population at large; particularly as there is a growing body of literature highlighting clear gender differences in this domain.

Similar results were observed by Stansfeld and Candy (2006) in their meta-analysis of longitudinal studies examining work-related psychosocial risks and common mental health disorders. High demands paired with low decision authority and low rewards paired with high effort were found to be prospective risk factors for common mental health disorders. As observed in previous studies, the impact of these psychosocial risks on mental health was found to differ among men and women.

2.1.2.2. Cognitive impairments

A growing body of evidence indicates that, outside detrimental impacts on psychological health, psychosocial hazards play a significant role in impairment in cognitive tasks, such as decision-making, attention and rates of error (Cox, Griffiths & Rial-Gonzalez, 2000). A cross-sectional survey was distributed to 4407 nurses across 8 general hospitals located in Metropolitan Tokyo and other cities in Japan. Those nurses classified as being in 'mentally poor health' reported significantly higher rates of medical errors as compared to those nurses classified as 'mentally in good health' in relation to: drug-administration errors, incorrect operation of medical equipment, errors in patient identification, and needlestick injuries (Suzuki et al., 2004).

2.1.2.3. Social and behavioural health

Exposure to psychosocial risks has been linked to an wide array of unhealthy behaviours (e.g. Kouvonen, Kivimäki, Cox, Cox & Vahtera, 2005; Kouvonen, Kivimäki, Elovainio et al., 2005; Kouvonen, Kivimäki, Virtanen, Pentti & Vahtera, 2005) such as physical inactivity, excessive drinking and smoking, poor diet and sleep (Cox, Griffiths & Rial-

Gonzalez, 2000). A longitudinal study (Head, Stansfeld & Siegrist, 2004) found that an effort-reward imbalance at work was associated with alcohol dependence in men; after adjusting for occupational grade and other baseline factors for alcohol dependence. A cross-sectional study randomly selected 3843 employees from 32 worksites in the U.S.A. The study aim was to examine the association of three independent variables (job strain, high demands and low control) to several health behaviour outcome measures: body mass index (BMI), smoking, exercise and dietary fat intake. A positive correlation was observed between job demands and smoking, smoking intensity and high fat intake in men and with BMI and smoking intensity in women. Similar, albeit weaker, relationships were observed for job strain and low control. In 2003, a cross-sectional survey of 12110 individuals from 26 worksites examined the relationship between perceived stress (quantified by the measurement of individual perceived degree of control) and health behaviours. The results demonstrated that self-reported high levels of stress were associated with, across both sexes, higher fat diet, less frequent exercise, cigarette smoking, recent smoking increases, less self-efficacy to quit smoking, and less self-efficacy to not smoke when stressed (Ng & Jeffery, 2003). Examined collectively there is considerable evidence that poor psychosocial working conditions are related to an increase in detrimental health behaviours; with a possible direct or indirect impact on the development or exacerbation of physical health conditions (e.g., coronary heart disease) and psychological health (e.g., depression).

2.1.3. Conclusion: impact on workers' health

In sum, there is substantial scientific evidence to indicate that there is a clear relationship between psychosocial risks and consequences to individuals' physical, mental and social health; highlighting them as a key public health concern and with clear implication for society-at-large (Blackwell, 2008). However, the health impact of psychosocial risks and work-related stress extends beyond individual health, and can also affect the productivity and resiliency of the organisation (a concept termed 'organisational healthiness'; Cox, Griffiths & Rial-Gonzalez, 2000).

2.2. Work-related health problems: organisational health

In the literature there are several outcomes related to stress and a poor psychosocial working environment that affect the productivity and, moreover, health of the organisation, namely, job satisfaction, morale, performance, turnover, absence, presenteeism and organisational commitment (Cox, Griffiths & Rial-Gonzalez, 2002). The primary focus of this section will be to examine the evidence base of the relation between psychosocial risks and sickness absence and presenteeism, and job satisfaction and intention to leave the organisation.

2.2.1. Sickness absence and presenteeism

Most absence is an indicator of genuine illness or low employee well-being (Marmot et al. 1995) with clear implications for organisations in terms of loss of production, missed deadlines, client/customer dissatisfaction, strain on colleagues providing cover, recruiting and training temporary cover staff and management time for solving problems. Sickness absence is estimated to cost British employers £476 per employee per year and results in 176 million working days lost (CBI, 2002). Worker ill health has been demonstrated to result in increased levels of absenteeism (e.g. Bakker, Demerouti, de Boer & Schaufeli, 2003; Hardy, Woods & Wall, 2003). Longitudinal data collected through the Whitehall II study (Head et al., 2007) revealed evidence that increased risk of long spells of sickness absence was associated to: effort-reward imbalance for both men and women, and low relational justice (defined as the extent to which supervisors consider employees' viewpoints, are able to suppress personal biases and deal with subordinates in a equitable and fair manner) for women. A review conducted by Smulders and Nijhuis (1999) examined the evidence of 'stressful' working conditions and their association to sickness absence. The common factors found across cross-sectional studies were role-ambiguity, under-stimulation, overload, non-participation, and high 'life stress'; and the common factors found across longitudinal studies were role ambiguity, job control, downsizing, and job insecurity.

Sickness '*presenteeism*' refers to physically being present at work but mentally/ cognitively absent (Cooper et al., 1996; as cited in Cox et al., 2000). Presenteeism, in contrast to absenteeism, has been investigated considerably less in the scientific community. A Swedish study of 3801 workers found that presenteeism was associated with musculo-skeletal pain, fatigue and slight depression. In addition, those occupational groups that experience a high level of sickness presenteeism also reported a higher level of sickness absenteeism. The highest rates of sickness presenteeism were found in three occupational sectors: namely, education, care and welfare. Sickness presenteeism was also high in groups where there was a difficulty in finding a suitable replacement (Aronsson, Gustafsson & Dallner, 2000).

2.2.2. Job satisfaction and intention to quit

Indices of poor organisational health must also examine issues surrounding job satisfaction, or moreover job dissatisfaction, and intention to quit. Indeed, Roznowski and Hulin (1992, p. 26; as cited in Lambert et al., 2001) suggest that job satisfaction measures are "the most informative data a manager or researcher can have for predicting employee behaviour". It has been previously theorised that high levels of job dissatisfaction lead to employee withdrawal, and in turn, voluntary worker turnover. Research has demonstrated a relationship between these two variables; albeit the explained variance is typically small (Locke, 1979; as cited Lambert et al., 2001), thus suggesting a more complex and multifaceted relationship between these two variables.

Lambert, Hogan and Barton (2001) found job satisfaction to be a highly salient antecedent of turnover intent; however, it was moreover found to mediate the relationship between the work environment and turnover intent. Additionally this study found that job satisfaction was significantly influenced and shaped by elements of the work environment (namely, role conflict, task variety, financial rewards, relations with co-workers, and autonomy/participation); as compared to demographic characteristics (e.g., age, gender, educational level, and occupational tenure). Lum and colleagues (1998) explored the relationship between job satisfaction and

turnover intent in a sample of nurses. The results of the study suggested that job satisfaction had only an indirect effect on turnover intent, whereas organisational commitment was shown to have the strongest and most direct impact. Additionally, both a direct and indirect effect on intention to quit was demonstrated in relation to pay satisfaction. The available evidence suggests that job satisfaction and intention to quit are inter-related constructs underpinned and influenced by psychosocial factors in the working environment.

2.3. Conclusion

There is strong evidence to indicate an association between work-related health complaints and exposure to psychosocial hazards, or to an interaction between physical and psychosocial hazards, to an array of health outcomes at the individual level and at the organisational level (Cox, Griffiths & Rial-González, 2002). Specifically, psychosocial risks in the workplace have been demonstrated to have a possible detrimental impact on workers' physical, mental and social health; in addition, a growing body of evidence indicates both a direct and indirect role of the psychosocial working environment on organisational health indices (such as absenteeism, productivity, job satisfaction and intention to quit).

The consideration of the hazards associated to the most common health complaints of working people enables the understanding of patterns of exposure which provide the means for preventing these problems. It is clear that the causal paths for these ailments are complex and multi-factorial. Factors to consider include environmental exposures and organisational exposures (see figure 2.2).

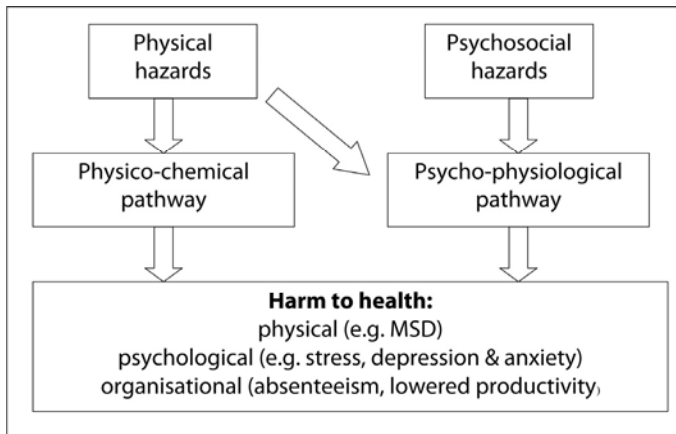


Figure 2.2: The aetiology of work-related health problems (Adapted from Cox et al, 2000)

There has been, in recent years, a growing movement at a European, national and organisational level to develop measures and programmes to effectively manage and prevent these psychosocial risks (ILO, 2004; WHO, 2003; European Foundation, 1996). Commonly three levels of interventions have been used to address health problems in the workplace: primary, secondary and tertiary level interventions. Primary-level interventions, also commonly referred to as 'organisational-level' interventions (Burke, 1993; as cited in Sutherland & Cooper, 2000) are concerned with taking action to modify or eliminate sources of stress (i.e., psychosocial risks) inherent in the workplace and work environment, thus reducing their negative impact on the individual (Cooper & Cartwright, 1997). Secondary-level interventions refer to initiatives aimed at modifying an individual's response to psychosocial risks; specifically concerned with the prompt detection and management of minor illness or psychological distress (Sutherland & Cartwright, 2000). Finally, tertiary level interventions are concerned with minimizing the effects of stress-related problems once they have occurred through the management and treatment of symptoms of occupational disease or illness (Hurrell & Murphy, 1996; Cooper & Cartwright, 1997; LaMontagne et al., 2007). One of the leading approaches in primary prevention in occupational health and safety is risk management.

This model has been in recent years increasingly used to address psychosocial hazards and their associated impacts on workers' health. The following chapter will examine this paradigm in greater detail and how this strategy can be used to address poor psychosocial working conditions and prevent and manage work-related ill health.

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Chapter 3

Meeting the challenge: the risk management paradigm

Over the past decades a number of approaches incorporating the risk management paradigm to prevent and manage psychosocial risks have been developed and implemented (key examples of such approaches are presented in chapter 5). This chapter outlines the key elements and describes the development of a risk management approach to dealing with psychosocial risks and work-related stress, elucidating its key stages. It concludes by comparing such an approach with traditional approaches to risk management.

3.1. Risk management in health and safety

The use of risk management in occupational safety and health (OSH) has a substantive history, and there are many texts that present and discuss its general principles and variants (e.g., Cox & Tait, 1998; Hurst, 1998; Stanks, 1996) and its scientific and socio-political contexts (e.g., Bate, 1997). The risk management approach to dealing with health and safety problems is clearly advocated by the European Legislation and is described in some detail in supporting guidance. It is, for example referred to in the European Council's Framework Directive 89/391/EEC (EC, 1989), and in the national legislation of member states such as in the UK's Management of Health and Safety at Work Regulations 1999 and its accompanying Approved code of Practice. It is also implicit in official European, national and

international guidance on health and safety management (Leka, Griffiths & Cox, 2003; Cox et al., 2000).

Risk management in OSH is a systematic, evidence-based, problem solving strategy. It starts with the identification of problems and an assessment of the risk that they pose; it then uses that information to suggest ways of reducing that risk at source. Once completed, the risk management actions are evaluated. Evaluation informs the whole process and should lead to a re-assessment of the original problem and to broader organisational learning (Cox, Griffiths & Leka, 2005).

Risk management represents logical problem-solving and is often based on two distinct but intimately related cycles of activity: risk assessment and risk reduction. This is made clear in the EC Guidance on Risk Assessment at Work (EC, 1996). Risk management is essentially organisational problem solving applied to the reduction or containment of risk, with the emphasis on risk reduction. Various models of risk assessment exist in the OSH literature; most are structured and operate through a prescribed and rational sequence of actions.

Decision making is a critical feature of organisational problem solving in general and of risk assessment in particular. Einhorn and Hogarth (1981) have argued that such decision making can be broadly considered in terms of four interacting sub-processes: information acquisition, evaluation, action and feedback. The presence of feedback in the models of problem solving and risk management implies that these processes are cyclical in nature and should be treated as activities that are ongoing. It is in this sense, that risk management is sometimes described as a vehicle for continuous improvement in OSH.

A typical model of risk management as problem solving typically includes seven steps (Cox et al., 2000):

1. Identification of hazards
2. Assessment of associated risk

3. Design of reasonably practicable control strategies (interventions)
4. Implementation of control strategies
5. Monitoring and evaluation of effectiveness of control strategies
6. Feedback and re-assessment of risk
7. Review of information needs, and training needs of employees.

Various staged models of risk management exist in the OSH literature; for example, Cox and Tait (1998), and van der Heijden and Stern (1992). These models vary in the emphasis that they place on the type of problem that they address (e.g. mechanical hazard or microbiological hazard), on the focus of the likely control intervention (e.g. the person working with the hazard, their work system or the culture of their organisation) or on the control strategy to be used (prevention at the organisational level, enhanced training or improved occupational health support). Of course, in any real situation, these three factors are likely to be inter-related. Often a mixture of foci and strategies must be used to deal effectively with a hazardous situation in which there are many challenges to health and safety.

Most models incorporate five important elements or principles: (i) a declared focus on a defined work population, workplace, set of operations or particular type of equipment, (ii) an assessment of risks, (iii) the design and implementation of actions designed to remove or reduce those risks, (iv) the evaluation of those actions, and (v) the active and careful management of the process (Leka et al., 2003). This control cycle is then iterated to allow a continuous control of risks.



Figure 3.1: Main elements of the ILO-OSH management system (adapted from ILO, 2001)

According to EU legislation and the International Labour Office, occupational safety and health, including compliance with the OSH requirements pursuant to national laws and regulations, are the responsibility and duty of the employer. The employer should show strong leadership and commitment to OSH activities in the organisation, and make appropriate arrangements for the establishment of an OSH management system (ILO, 2001). The system should contain the main elements of policy, organising, planning and implementation, evaluation and action for improvement, as shown in figure 3.1.

Risk assessment is a central element of the risk management process. It has been defined by the European Commission in its Guidance on Risk Assessment at Work as “a systematic examination of the work undertaken to consider what could cause injury or harm, whether the hazards could be eliminated, and if not what preventive or protective measures are, or should be, in place to control the risks” (EC, 1996). In

this context, it is important to understand the concepts of hazard, risk and harm. Hazard refers to the capability of a certain element at work (materials, work environment, work organisation and practices, etc.) to cause damage or harm. In some contexts, particularly outside health and safety research, they are also called risk factors. Harm refers to the damage, injury or disease caused to a person through work. It includes both physical and psychological outcomes. Risk refers to the association between hazards and harm, in other words, to the likelihood that a certain hazard can cause harm.

Once hazards and their associated risks have been identified, the control cycle for risk management would continue with the design and implementation of interventions. These interventions are evaluated through a second risk assessment process and thus the cycle continues. The basic health and safety equation of hazard-risk-harm has been offered as a conceptual framework (see figure 3.2 for understanding the nature and management of psychosocial risks and work-related stress (Cox, 1993).

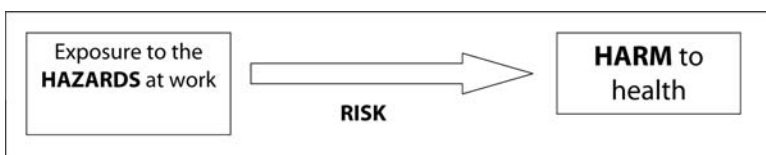


Figure 3.2: Hazard, risk and harm

As discussed in the previous chapter, the scientific evidence suggests that the experience of work-related stress provides an important link between employees' exposure to psychosocial hazards at work and any subsequent and related ill effects to their health (harm) (Cox, 1993; Cox, Griffiths & Rial-Gonzalez, 2000). As such it can be dealt with either at the organisational level at source, by reducing exposure to hazards that are experienced as stressful, or at the individual level, by treating the experience of stress itself as its health effects. The risk management approach primarily focuses on the former strategy although most attempts to reduce the risk to health associated with exposure to psychosocial hazards necessarily involve

both organisational and individually focused interventions (Cox et al., 2000).

3.2. Developing a risk management model for psychosocial hazards

The first model using the risk management paradigm to prevent and manage psychosocial risks and work-related stress was proposed in the UK in the early 1990s (Cox, 1993), and was based on a general summary of systematic problem-solving processes as used both in applied psychology and in management science. The premise was that the risk management paradigm was already understood by managers, and one that had been widely in operation in many countries for some years with respect to the management of chemicals and other substances known to be hazardous to health (Cox, Griffiths & Randall, 2003).

The starting point for the development of the risk management approach for psychosocial risks was based on the changing nature of work and of work problems and work-related ill health (Cox, 1993). Examples of these changes were taken from aspects of the UK Labour Force Surveys. The interpretative framework implicit in the analysis of this data, relevant to the question of work stress, was clearly that of the traditional health and safety equation of *HAZARD—HARM—RISK*, however there was the additional suggestion that work stress might be a mediating factor in the relationship between hazard exposure and subsequent harm (Cox & Rial-Gonzalez, 2000).

However, Cox and Rial-Gonzalez (2000), suggested prudence when establishing expectations of what was achievable when adapting a general model of psychosocial risk management. They highlighted two issues as important: first, there cannot be an exact point-by-point translation of models developed for more tangible and physical risks to situations involving psychosocial hazards and work stress. There is need to think logically and creatively when adapting such models. The issues that arise should be decided in the light of (local) legal requirements and practical constraints, informed by our knowledge of applied science and should be part of an overall process. This is

neither a matter of real debate nor is it a problem as there is already a wide variety of effective risk management models in existence both across and within different areas of health and safety. The lack of any felt need to agree on one single model has not hampered progress in health and safety management – quite the reverse. Furthermore, the adaptation of the traditional risk management paradigm to deal with psychosocial hazards does not have to aim at an exhaustive, precisely measured account of all possible hazards for all individuals and all health outcomes. The over-riding objective is to produce a reasoned account of the most important work organisation factors associated ill-health (broadly defined) for a specific working group and one grounded in evidence (Leka, Griffiths & Cox, 2005).

Second, a psychosocial risk management approach must not be 'complicated or technical' in terms of its specifications, as the goal is not absolute accuracy and specificity of its measures or the mechanisms underpinning its decision making, instead it simply needs to be 'good enough' to enable employers and employees to move forward in solving the associated problems and comply with their legal duty of care (Griffiths, 1999). In finding a practical way for managers, the objective is not to seek an exhaustive, precisely measured account of all possible stressors for all individuals; instead it is to produce a reasonable account, with sound scientific basis, of the major likely stressors for any given working group. In other words, it is not an activity carried out for the benefit of researchers, but one pursued with the aim of making a difference to employees' working conditions within organisations (Cox, Griffiths & Randall, 2003).

3.3. Risk management for psychosocial hazards

The model underpinning risk management for psychosocial hazards is relatively simple. Before a problem can be addressed, it must be analysed and understood, and an assessment made of the risk that it presents. Much harm can be done, and resources squandered, if precipitous action is taken on the assumption that the problem is obvious and well enough understood. Most problems, even those that present simply, are complex and not always what they seem.

Some form of analysis and risk assessment is required. Figure 3.3 illustrates a general model of risk management for psychosocial hazards.

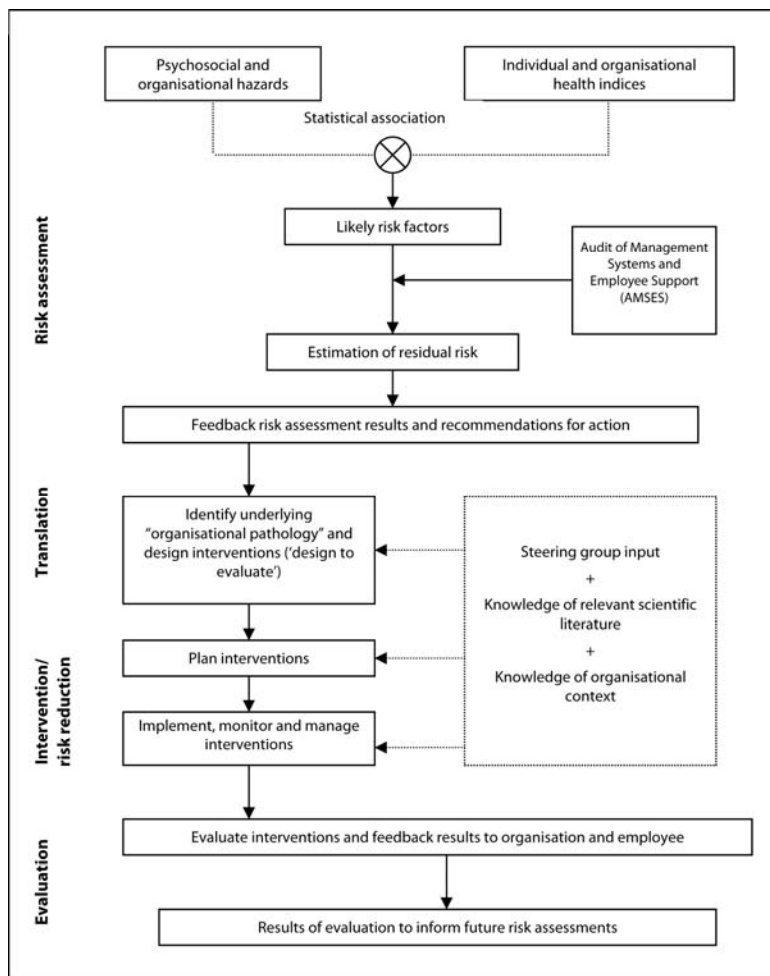


Figure 3.3: Model of risk management for psychosocial hazards (adapted from Cox, Griffiths & Randall, 2003)

The *risk assessment* provides information on the nature of the problem, the psychosocial hazards and the way they might affect the health of those exposed to them and the healthiness of their organisation. Adequately completed, the risk assessment allows the key features of the problem to be identified - these have been called likely risk factors - and some priority given to them in terms of the nature and size of their possible effects or the number of people exposed. These data can be used to inform the development of an action plan to address the problems at source whenever it is reasonably practicable to do so (Cox, Griffiths & Randall, 2003).

The information from the risk assessment is discussed, explored and used to develop an action plan: the *translation* of the risk assessment information into a reasonable and practical plan to reduce risk. Usually, the discussion and exploration of the problems and likely risk facilitates the discovery of any underlying organisational pathology - major problems that may be hidden but give rise to the problems and likely risk factors. This often makes *intervention* easier as the underlying organisational pathology can be targeted instead of, or as well as, its symptoms (the problems and likely risk factors) (Cox, Griffiths & Leka, 2005).

The development of the action plan, based on the evidence from the risk assessment, involves deciding on: what is being targeted, how and by whom, who else needs to be involved, what the time schedule will be, what resources will be required and how the action plan will be evaluated. If properly handled, planning to reduce risk in relation to psychosocial hazards is no different from any other management activity. The action plan is then implemented as planned and its progress monitored and reviewed, and the processes involved and their outcomes eventually evaluated.

The *evaluation* of action plans is an important step, but one that is often overlooked or avoided. Not only does it tell the organisation how well something has worked in reducing psychosocial hazards and the associated harm but it allows the re-assessment of the whole situation, providing a basis for organisational learning. Essentially it establishes a continuous process for improvement. Managing psychosocial hazards is not a one-off activity but part of the on-going

cycle of good management of work and the effective management of health and safety. In many ways, good management is psychosocial risk management.

3.4. Stages in the risk management paradigm for psychosocial hazards

3.4.1. Risk assessment

Analysing possibly hazardous situations and assessing the risk that they might pose to the health of individuals or the healthiness of their organisations is not rocket-science (Cox, 1993). Such an assessment only has to be good enough to provide sufficient appropriate evidence to initiate discussions of psychosocial hazards at work and provide an informed basis for managing those problems through a risk reduction action plan.

The notion of 'good enough' is used in its scientific sense and is contrasted with that which is 'ideal' or 'perfect'. 'Good enough' is used here to mean fit (and sufficient) for purpose. The purpose of the risk assessment is to inform, guide and support subsequent risk reduction (Cox et al., 2005).

As discussed previously, risk assessment can be operationalised through a six-step process (Cox and Rial-Gonzalez, 2000):

- a. Hazard identification
- b. Assessment of harm
- c. Identification of likely risk factors
- d. Description of underlying mechanisms
- e. Audit of existing management systems and employee support
- f. Draw conclusions about residual risk and priorities

The risk assessment brings together two elements to allow the identification of likely risk factors. First, it requires the identification of psychosocial hazards. Psychosocial hazards are usually situation specific; what is present in one type of work or affects a particular

type of worker may not be present in another job or affect a different type of worker. The risk assessment has to consider particular defined work situations (e.g. by examining the workplace, type of worker, work process, etc.). It is not an organisation-wide approach.

The identification of psychosocial hazards relies on the expert judgement of groups of relevant working people about the adequacy of the design and management of their work. The knowledge and expertise of working people in relation to their jobs is recognised and treated as valuable evidence. This information is treated at the group level and consensus is measured in those expert judgements on working conditions. The method does not seek to catalogue individual views about work.

Second, information about the possible harm associated with psychosocial hazards is collected both from the risk assessment and from otherwise available organisational records, such as absence data and occupational health referrals. This information is used to determine which of the psychosocial hazards actually affects the health of those exposed to them or the healthiness of their organisation. This exercise, relating psychosocial hazards to their possible effects on health, can be an exercise of logic or can be more formally investigated using simple statistical techniques. Most organisations will use the former approach.

The exercise of logic is straightforward and involves comparing groups or areas that differ in terms of their exposure to, or report of, the psychosocial hazards in terms of the data on possible health outcomes. What is required here is that the exercise of logic is described and that decisions based on it are justified in terms of the available evidence so that they can be audited at a later stage if necessary.

Bringing together the information on psychosocial hazards and their possible health effects allows the identification of likely risk factors. These risk factors can be prioritised in terms of the nature of the hazard or the harm it causes, the strength of the relationship between hazard and harm, or the size of the group affected. Similar

decisions on priorities are made every day in other areas of risk assessment.

However, before action can be sensibly planned, it is necessary to analyse what is already in place to deal with psychosocial hazards and its effects on the individual or their organisation. This analysis requires an audit of existing management practices and employee support. This is an examination of initiatives for handling psychosocial hazards, work-related stress and other associated health outcomes. The support available to employees to help them cope or look after them if they are affected is also examined (Leka, Griffiths & Cox, 2005).

This information from the audit together with the risk assessment information allows a notion of the residual risk to be formulated (i.e. the risk associated to psychosocial hazards that is not currently being managed by the organisation). All this information feeds forward to the process of translation: discussing and exploring the risk assessment data to allow the development of an action plan for risk reduction.

3.4.2. Translation

One of the necessary developments from the traditional risk management model is the 'translation' phase, where identified risk factors are discussed, prioritised and targeted by means of specifically designed actions (Cox, Griffiths & Randall, 2003). The risk assessment information is used as evidence on which to base the planning of the risk reduction activities. In practice, those involved in action planning discuss and explore the results of the risk assessment (the likely risk factors and the problems identified by the majority of staff), developing their understanding of the problems identified. This often leads to the discovery of any underlying problems and this can add to the power of the translation exercise. It helps the planning of risk reduction to know if there are deep problems that are driving the likely risk factors.

Translation involves agreeing what needs to be done, how it will be achieved, by whom and when, whether others need to be involved,

what resources are required, and, importantly, how it will be evaluated. Putting the interventions into practice is facilitated by a clear action plan.

3.4.3. Intervention and risk reduction

Interventions can help prevent health complaints through the design of work and the reduction of hazards; they can provide tools to manage hazards so that risks are reduced; or they can provide treatment and rehabilitation for those who have already been harmed by the exposure to hazards. The emphasis here, and in European legislation on health and safety, is on primary risk reduction targeted on the organisation as the generator of the risk. However, in practice, it is often also necessary to consider how support and rehabilitation for those already affected can be improved or provided. Commonly three levels of interventions have been used to address psychosocial risks in the workplace: primary, secondary and tertiary level interventions.

Primary risk reduction interventions modify the psychosocial risk factors at source focusing on the organisation or groups within it (Cooper & Cartwright, 1997; Cox et al., 2000; Cox et al., 2002). Changing the organisation and work environment is one of the main strategies of managing psychosocial risks, as it can be accomplished before the problem actually arises. A good employer designs and manages work in a way that avoids common psychosocial hazards and prevents as much as possible foreseeable problems. A well-designed work should include clear organisational structure and practices, appropriate selection, training and staff development, clear job descriptions, and a supportive social environment (Leka, Griffiths & Cox, 2003).

Interventions on coping with hazards focused on the individual have been proven to have a positive outcome in 'temporarily reducing experienced stress' (Cooper & Cartwright, 1997). Secondary interventions involve taking steps to improve the perception and management of the psychosocial risks and are provided for groups at risk of exposure to psychosocial risks. It is assumed that more training and knowledge would provide employees with the tools to cope

with the difficulties they encounter at work, either taking independent action to manage the risks or using techniques to buffer their effects. Issues that can be covered through training include interpersonal relationships (between colleagues and with supervisors), time management, relaxation techniques and communication, among others.

In the cases where individuals have already been harmed by exposure to hazards, tertiary prevention actions can be taken once a problem has become evident to limit its effects. The action here is on the consequences of exposure to psychosocial hazards, which can be either psychological or physical. In this sense, people who are suffering from psychosocial complaints, which include burnout, depression or strain, can be provided with counselling at the workplace and those suffering from physical symptoms can benefit from occupational health provision.

The management of psychosocial risks should prioritise interventions that reduce risks at source. There are a number of arguments for giving them precedence (Cox, 1993). European law prioritises such measures within organisations and the need to target problems at source. They also can be significantly cost-effective as the focus of interventions is put on the causes and areas within the organisation where change is required. Moreover, they promote organisational healthiness as they address issues relating to organisational culture and development. In line with the risk management paradigm, actions can be tailored to different contexts and are systemic in nature. The risk reduction interventions need not be disruptive, nor need they be 'different', or even revolutionary, when compared with everyday management practices (Cox, Griffiths & Randall, 2003).

However, the implementation of the action plan for risk reduction needs to be carefully and thoughtfully managed. It is effectively a change process, and, like all change processes has to be planned and managed to be effective. The progress of the action plan must be systematically monitored and discussed, as well as provision made for its evaluation.

3.4.4. Evaluation

Evaluation is a thread that runs through the entire risk management process (Cox, Griffiths & Randall, 2003). It is essential for any action plan to be evaluated to determine how well and in what respects it has worked. The process of implementation as well as the outcomes of the action plan must be evaluated. Evaluation must consider a wide variety of different types of information and draw it from a number of different but relevant perspectives (e.g. staff, management, stakeholders etc.).

The results of the evaluation should allow the strengths and weaknesses of both the action plan and the implementation process to be assessed. This information must not be treated as an issue of success or failure, praise or blame, but treated more dispassionately. It should inform a re-assessment of the original problem and of the overall risk management process, as well as providing feedback on the outcomes.

The organisation should use the evaluation to establish a vehicle for continuous improvement and also as the basis for drawing out learning points that may be of use in future risk management projects. However, the evaluation of organisational interventions is not always straightforward. Qualitative approaches such as stakeholder interviews are often found to be a cost-effective and satisfactory technique. In addition, because organisational interventions are not an 'all-or-nothing' event, it is useful to explore how far any planned action was actually implemented, and whether or not it reached its intended audience. Exploring subtle variations in implementation (evaluating process as well as outcome) can provide a useful technique for evaluation (Randall, et al., 2002).

The evaluation of interventions is an important step, but one that is often overlooked or avoided. Not only does evaluation tell the organisation how well actions have worked in reducing psychosocial risks but it allows the reassessment of the situation, providing a basis for organisational learning. Essentially it establishes a process for continuous improvement. Managing psychosocial risks is not a one-

off activity but part of an ongoing cycle of good management at work and the effective management of health and safety.

3.5. Conclusion: compatibility of psychosocial and traditional risk management

The previous sections in this chapter have introduced the general principles of the risk management paradigm and the specific steps involved in managing psychosocial risks. With the assumption that many of those who will be responsible for psychosocial risk management are probably more aware of the issues related to traditional health and safety risk management, this section explores the compatibility of these two approaches looking at the similarities and differences between them.

From the description of the psychosocial risk management process in the previous sections, it can be observed that this process is quite similar to that of traditional health and safety risk management. In principle, they are both based in the concept of a control cycle: identification of hazards, assessment of risks, design and implementation of interventions, and evaluation. It can also easily be noted that the focus in both cases is the elimination of risks at source, and that only when this is not possible behavioural changes or treatment are sought as a way of preventing further harm.

Further similarities can be observed when considering the context in which these processes occur. They are both addressed by the European Framework Directive on the introduction of measures to encourage improvements in the safety and health of workers at work (EC, 1989). This Framework Directive establishes the need for continuous assessment of risks and their reduction. It also defines a participative approach as the way in which this assessment and reduction of risks should be conducted. In this sense, both the psychosocial and traditional risk management approaches are a shared responsibility of the employer and the employees.

The similarities, in relation to shared principles, do not end with their mention in European legislation. There is strong research and

practice based evidence of their effectiveness on the reduction of undesired costs for workers, organisations and society. They can both have an effect over a broad range of aspects, including sickness absence and social security, among others. Due to their impact, they should be understood as basic social responsibilities and regarded as aspects of good management.

In more practical terms, psychosocial and traditional risk management are associated in terms of the interactions which can be observed between psychosocial and more traditional risks (such as physical exposures). For example, psychosocial hazards may increase the risk of exposure to hazardous chemicals through the generation of more human error, so more intoxications might occur within the same levels of exposure when psychosocial conditions are less favourable. On the other hand, the exposure to physical or chemical hazards might in itself constitute a psychosocial risk as employees worry about the possible implications of such exposures.

Once hazards and their associated risk have been identified, the next step in risk management is to take measures, to reduce the risks that result from the hazards. It is more or less generally accepted that there are hierarchies of preferred measures. Starting with measures at source, then measures to block transfer of the hazards to groups of people, and only thereafter to block transfer to individuals. Finally measures to mitigate the effects in case of serious exposure to the hazards might be necessary. For psychosocial risk management such generally accepted hierarchies of measures are proposed as the preferred strategy, but many companies are still focusing on the treatment and rehabilitation of individuals, or the provision of training that would block the effects of exposure to hazards.

Even considering the many similarities between the models, psychosocial risk management often seems somewhat different in terms of the techniques used and the characteristics of the hazards involved. It is still perceived by many, that the two risk management approaches are not easily compatible. An understanding of the factors underlying the differences between the two can facilitate the implementation of psychosocial risk management strategies by those more used to the traditional approach.

A first area of concern relates to the characteristics of the hazards being tackled. The traditional health and safety risk management paradigm is mainly concerned with occupational safety and occupational hygiene risks. In these cases, risks are always directly linked with 'hard and tangible' hazards, such as potentials for sudden and accidental release of energy or toxic properties of chemical substances. Moreover safety 'events' (near misers, accidents) are usually quite concrete in time. In contrast, most psychosocial hazards are intangible and far from concrete (see chapter 1). It may seem that psychosocial hazards are not only less well defined, but are regularly ambiguous and cannot objectively be measured. Finally, factors that are regarded as psychosocial hazards may also be (in other degrees or other circumstances) positive factors that contribute to a challenging job (here a comparison with so called 'system-bound' toxic substances can be made: those substances have a positive health impact at low levels while being toxic at higher levels – e.g. Vitamin D; whether the effect is positive or negative depends on the dose or exposure level).

Moreover, psychosocial risk management is often directly related to changes in work (e.g. changing deadlines, reorganisations, conflicts at work) that are always dynamic. Contrastingly the traditional OSH risk management paradigm is based on a generally static world view. If the risks are assessed, and adequate measures are taken, then the situation is managed (until some future change requires renewed risk control); the focus is therefore on the control of internal processes and routines. However, managing psychosocial risks calls for a dynamic world view, where changes are taking place frequently or even all the time, and deals with situations where routine activities are intermingled with decisions about new work activities.

Differences can also be observed in relation to the level on which interventions to manage risks need to be introduced. In traditional risk management, the usual step after the identification of hazards is to assess the risks associated with those hazards in the specific situation, often at workplace level. Many psychosocial hazards are not specific at workplace level as they might stem from the organisation of work, i.e. the hazards are not identifiable on the operational (workplace) level, but rather on the system or

organisational level or at the level of job content. The identification of psychosocial hazards and the assessment of the resulting risks may therefore require a different focus.

Because of the need to understand the specific context in order to assess psychosocial hazards and the risk they may pose, they are generally identified via surveys. In such cases, the identification of hazards and assessment of risks starts with identifying and scrutinising the group at risk. For a safety engineer this would be the world upside down as this (1) implies that the hazards and risks are implicitly accepted as part of the status quo, and (2) such an approach would only lead to the identification of occupational incidents and accidents that occur quite frequently, so such an approach would never lead to acceptable levels of safety. In the case of psychosocial hazards, this may be the only appropriate approach as the use of inflexible taxonomies can hide problems specific to a certain organisation or group.

Considering both the differences and similarities between psychosocial and traditional risk management can help understand their compatibilities. The challenge of increasing the compatibility of the two, aiming at integrated or aligned risk management in the knowledge society where changes are normal, is actually twofold: it is a challenge both to experts in psychosocial issues, and for all experts in OSH management.

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Chapter 4

Positioning the psychosocial risk management approach

Readiness for change is an important prerequisite for the successful process of a psychosocial risk prevention programme. Readiness of organisations or employees means the extent to which they are prepared to implement psychosocial risk management programmes. In the workplace this also means mobilisation; engaging all sectors/parties to the prevention effort (Oetting et al., 1995). Readiness for change in turn is linked to drivers of change.

Health has a potential value that needs to be pointed out to stakeholders. It can be a strategic interest which helps organisations create the environment which allows for a healthy workforce (Zwetsloot & Pot, 2004). Thus, psychosocial risk management is of value for organisations and governments, and not only an area of academic interest. The positive impact of introducing occupational safety and health management systems at the organisational level, both on the reduction of hazards and risks and on productivity, is now recognised by governments, employers and workers (ILO, 2001).

There are various strategies which can be used to position psychosocial risk management and various drivers for change which can have an impact on its application. These are discussed in this chapter. Drivers of change are considered in the first place and an argument is made that a combination of strategies is expected to have the highest impact over stakeholders. Some of the strategies

that can be used to position psychosocial risk management are then described, including the financial costs of ill health, social responsibility and legislative requirements. It is concluded that an understanding of the value of psychosocial risk management for society, organisations and workers can facilitate the positioning of the approach. Suggestions are also made to extend the risk management paradigm to include a focus on the positive aspects of work, quality of working life and competitiveness.

4.1. Drivers of change

Any action to manage psychosocial hazards is in itself a source of change. Thus, it is advisable to consider the general principles of change and how these apply to all parties. There are several ways to trigger and manage change processes (Zwetsloot & van Scheppingen, 2007). These can be classified according to the focus of the change process, which can either be based on logical reasoning, values and norms, interest, power or individual drives (see Table 4.1). It is important to use the change strategy that best fits with the characteristics of the organisation and the decision makers in it, or use a mixture of strategies to attain this objective.

Table 4.1: Triggers to change processes (*adapted from Zwetsloot & van Scheppingen, 2007*)

FOCUS OF CHANGE PROCESS	STRATEGY	WHY CHANGE?
Logical reasoning	Emphasise the rationality and usefulness for the organisation	Because it is rational
Values and norms	Influence the individual and group values	Because people feel it is good
Interest	Understand and use individual and/or group interests	Because it is good for me/us
Power	Use penalties and rewards	Because it has to
Drives	Consider the inner drives or intrinsic motivation	Because it inspires and builds on the drives of key individuals

The most adequate trigger strategy should consider both short-term effectiveness and its potential for continuity in the longer run. Such a strategy should be developed considering important issues relating to labour market conditions (such as issues relating to ageing, gender, immigration) and nature of the work (issues relating to contingent work, part-time work etc. – see chapter 1 for more details) as comprehensive prevention and management of psychosocial risks needs to consider the broader context and issues within which interventions need to operate.

In this way there is enough scope to carefully plan, implement and evaluate actions. Support for the different strategies can be taken from various sources. For example, scientific evidence and a clear cost analysis would help develop a case based upon logical reasoning or interest; corporate social responsibility (CSR) and international agreements can be used as a basis to support strategies

based upon values and norms; or power issues are the main concern in the cases where law enforcement is utilised. These drivers are examined below.

4.2. Financial impact of ill health

Ill health in the workplace has high associated costs (Zwetsloot & Pot, 2004). If the financial impact of ill health is to act as an effective incentive for the improvement of safety and health conditions at the organisational level, the costs of illness must be economic (i.e. prices can be given to their impact), internal (i.e. they generate costs which are paid by the company), variable (i.e. they vary in response to the incidence and severity of illnesses) and routinely visible (i.e. measured and allocated in routine accountancy methods). Further, a cost analysis of these effects should consider direct costs of illness management, the opportunity costs (i.e. the value of the opportunities lost in relation to interruptions due to ill health) and intangible costs (such as the loss of goodwill from customers if a case of work-related ill health is widely publicised) (Dorman, 2000).

The most important area of cost analysis for the impact of ill health in the workplace relates to the translation of opportunity costs into their economic equivalent. Potential areas of losses due to ill health include lost productivity and replacement costs due to absenteeism, presenteeism, low worker morale due to perceived risks; higher turnover; increased recruitment and training costs for replacement personnel and reduced quality of the recruitment pool; damage to equipments and materials; and reduction on quality of production or costumer service, amongst others (Dorman, 2000; MSAH, 1999; Zwetsloot & Pot, 2004).

For example, 9% of EU15 workers reported absence due to work-related health problems in 2000, of which a 5% where over 10 days (Paoli & Merllie, 2001). According to the 1994 EuroFound estimates, costs for employers in the UK were of over €13.2 billion in lost productivity at a cost of €630 per employee; German employers paid €30.5 billion towards social security insurance; in Belgium they paid €2.4 billion for benefits on work accidents and diseases (1,000 per

employee), and in the Netherlands the benefit costs for sickness absence was €4.1 billion (EuroFound, 1997).

In 2004, the Trade Union Confederation of Workers' Commissions in Spain published a study examining the economic costs of industrial accidents and occupational illnesses, which estimated the annual total cost of workplace accidents and occupational illnesses at almost EUR 12 billion, which was equivalent to 1.72% of Spanish GDP in 2002 (Espluga, 2004). In a recent review, the total cost of ill-health to the British economy was estimated to be in the region of €113.3 billion (Black, 2008).

In the Netherlands, Koningsveld et al. (2003) calculated that costs of absenteeism and disability amounted to €12 billion. The largest costs related to work-related sick leave and disability, mainly caused by psychological and musculoskeletal disorders, each accounting for about 22% (€3 billion) of the total costs. Evidently, absenteeism and disability, due to psychological and musculoskeletal disorders, are a major problem in Dutch society costing the Dutch 3% their total GNP.

As discussed before, psychosocial risks, work-related stress and workplace violence are now also widely recognised as major challenges to occupational health and safety (EU-OSHA, 2002). A survey in the EU Member States found that 90% of the respondents thought that in their countries stress was a major cause of ill health (Iavicoli et. al., 2004). Even though the figures speak for themselves, many organisations do not realise the extent to which stress can affect their business performance.

In Austria, 1.2 million workers reported suffering from work-related stress associated with time pressure. In Denmark, 8% of employees reported being 'often' emotionally exhausted. In Germany, 98% of works councils claimed that stress and pressure of work had increased in recent years and 85% cited longer working hours. In Spain, 32% of workers described their work as stressful. In Sweden, 9 out of 10 white-collar workers reported working against the clock in their daily tasks, and 40% skip lunch breaks (Koukoulaki, 2004).

In Germany, a considerable increase has been observed in absenteeism due to psychological disorders. Since 1994, absenteeism in this regard increased by 74.4%, while the number of days lost rose by 36.7%. Depression was one of the major causes, accounting for 37% of all psychological disorders. The economic cost of psychological disorders has been estimated to be €3 billion in 2001 (Eurofound, 2005).

Stress can affect organisations by causing high rates of absenteeism and staff turnover, disciplinary problems and unsafe working practices, as well as low commitment to work, poor performance, tension and conflicts between colleagues. In addition, stress damages the image of the organisation, both among its workers and externally, and increases the liability to legal claims and actions by stressed workers (Leka et. al., 2003). It is estimated that stress-related diseases are responsible for the loss of 6.5 million working days each year in the UK, costing employers around €571 million and society as much as €5.7 billion. In Sweden in 1999, 14% of the 15000 workers on long-term sick leave said the reason was stress and mental strain. The total cost of sick leave to the state in 1999 was €2.7 billion. In the Netherlands in 1998, mental disorders were the main cause of incapacity (32%) and the cost of work-related psychological illness is estimated to be €2.26 million a year (Koukoulaki, 2004).

Despite the potentially high costs of inaction at the organisational level, organisations often assume or claim that costs of implementing interventions is higher than the costs of dealing with hazards directly thereby belittling these issue. Therefore, it is necessary to consider the costs of investments for prevention actions, besides the associated costs of work-related illness (Dorman, 2000). Psychosocial risk management approaches which can provide the evidence that the costs of implementation are lower than the costs related to ill health will have more chances for success and get 'buy-in' from organisations. Developing a business case for psychosocial risk management is therefore essential. In the cases where the cost-analysis of such interventions shows a balance between the costs of the implementation and those already being incurred by the company, other change strategies can be utilised, with the advantage that the costs of an intervention cannot be used as a

barrier to change. In essence, psychosocial risk management is synonymous to best economic development, especially with a view on the emerging knowledge society (Zwetsloot & van Scheppingen, 2007).

4.3. Legislation

A number of significant developments towards the management of psychosocial risks have been achieved at the policy level in the EU since the introduction of the 1989 EC Council Framework Directive 89/391/EEC on Safety and Health of Workers at Work on which a new EU risk prevention culture has since been established. EU Member States have since transposed the Directive into their national legal structures as a result of which employers' in these countries have an obligation to assess all health and safety risks for employees, including psychosocial risks. In this context they have the obligation to assess risk and adapt the work to the individual in terms of work design, choice of equipment and choice of production methods. This covers the steady evolution of occupational risks, the continuous changes in the world of work, and the need for scientific research and innovation.

Employers also need to be informed of the latest advances in technology and scientific findings in relation to the design of work. Certain regulations on workers' health and safety also establish that the person responsible for prevention in the workplace must have the skills and qualifications proportionate to the type of work conducted in the company and the risks involved. It is expected that people in this position attend training courses in risk prevention and protection – including psychosocial risk factors related to the organisation and administration of work – where their skills are verified.

EU legislation needs to be transposed to national level legislation. Although none of the EU countries has specific regulations on work-related stress, some areas of the assessment of psychosocial factors are included. Besides, guidance is starting to be provided to employers in order to facilitate the assessment of psychosocial

factors and the reduction of stress and absenteeism at work. Belgium, Denmark, Finland, Germany, the Netherlands, Sweden and, more recently, Italy have specific legislation on the employers' obligation to address psychosocial risk factors. These are either general regulations regarding all psychosocial issues at work or specific issues, such as bullying and harassment, working time, workload and work pace (EU-OSHA, 2002).

However, it has been widely acknowledged that these developments have not had the impact anticipated both by experts and policy makers and the main reason cited for this has been the gap that exists between policy and practice (Levi, 2005). Among the reasons for this gap is the lack of awareness across the enlarged EU that is often associated with lack of expertise, research and appropriate infrastructure. At the same time, the responsibility for understanding and managing the interface between work, employment and mental health varies greatly across countries (Cox, Leka, Ivanov & Kortum 2004). Challenges for governments and regulatory systems are also connected with current trends towards outsourcing as described in chapter 1. In light of these difficulties, other 'softer' forms of regulation have been developed to promote action.

4.4. Social dialogue and collective agreements

Actions taken by social partners within the European Social Dialogue, that is a core element of the European social model (Weiler, 2004), have over the past years played a significant role in recognising the relevance of psychosocial issues and work-related stress.

In line with European and global developments (in particular changes in the division of labour and increased competition over the last years), a shift of emphasis in policies has been observed from improving the quality of work to increasing productivity and economic performance. In this context and referring to the policy-making process in the EU, 'softer' forms of regulation in occupational safety and health have been advocated to facilitate convergence in health and safety standards between new and old member states.

Autonomous framework agreements are an example of softer forms of regulation.

An autonomous and/or 'voluntary' agreement signed by the European social partners creates a contractual obligation for the affiliated organisations of the signatory parties to implement the agreement at each appropriate level of the national system of industrial relations instead of being incorporated into a directive (Eurofound, 2007). Implementation of the agreements does not constitute valid grounds to reduce the general level of protection afforded to workers in the field agreement. The agreements do not prejudice the right of social partners to conclude, at the appropriate level, including European level, agreements adapting and/or complementing such agreements in a manner which will take note of the specific needs of the social partners concerned (CEC, 2002).

Dialogue between the European social partners takes place at both cross-sectoral and sectoral level. Participants in cross-sectoral dialogue – ETUC (trade unions), BUSINESSEUROPE (private sector employers), UEAPME (small businesses), and CEEP (public employers) - have concluded a number of agreements that have been ratified by the Council of Ministers and are now part of European legislation such as parental leave (1996), part-time work (1997) and fixed-term contracts (1999). The social partners have also concluded 'voluntary' agreements on telework (2002), work-related stress (2004), and on harassment and violence at work (2007).

The European Commission has laid emphasis on the economic and social cost of stress based on studies carried out by the European Agency for Safety & Health at Work which came to the conclusion that every year stress at work costs the industry billions of euros (CEC, 2004). Having identified the need for specific joint action on the issue of work-related stress and anticipating a Commission consultation on stress, the European social partners included this issue in the work programme of social dialogue 2003-2005 (European Social Partners, 2004). This consultation led to the signing of a non-binding agreement on work-related stress reached at European level by employer and employee organisations as part of the social dialogue process, the 'Framework Agreement on Work-related Stress'

(European Social Partners, 2004a). The objective is to provide employers and employees with a framework of measures which will identify and prevent problems of work-related stress and help to manage them when they do arise. Under the agreement, the responsibility for determining the appropriate measures rests with the employer. These measures are carried out with the participation and collaboration of workers and/or their representatives. These measures can be collective, individual or both. They can be introduced in the form of specific measures targeted at identified stress factors or as part of an integrated stress policy encompassing both preventive and responsive measures (European Social Partners, 2004a).

More recently, the European social partners included the issue of harassment and violence in the work programme of social dialogue 2006-2008 (European Social Partners, 2006). This consultation led to the signing of the non-binding 'Framework Agreement on Harassment and Violence at Work' (European Social Partners, 2007). It is important to note that the agreement relates both to bullying and third party violence. The aims of the agreement are to increase awareness and understanding of employees, workers and their representatives of workplace harassment and violence, and to provide employers, workers and their representatives at all levels with an action-oriented framework to identify, manage and prevent problems of harassment and violence at work. According to the agreement, enterprises need to have a clear statement outlining that harassment and violence will not be tolerated. The procedures to be followed where cases arise should be included. The agreement will be implemented and monitored for three years at the national level.

These developments are considered very important, as it has been argued that the perception these different groups have of the role of work-related stress and psychosocial risks as a problem is varied (Iavicoli, 2004). It has been emphasised that an integral element to the comprehensive and successful management and prevention of psychosocial risks is the continuous involvement of social partners (namely employees and employers) during the intervention process (Kompier et al., 1998).

4.5. International agreements and guidance

In the last decades, international organisations, as well as EU and international bodies have published reports on ways to deal with psychosocial risk factors (ILO, 1986; WHO, 2003; EU-OSHA, 2002). Both general guidelines and basic steps in a risk control cycle have been provided as well as more detailed accounts of various measures. The European week for safety and health at work gathered examples of best practice both on stress and violence and bullying at work (EU-OSHA, 2002). EU-OSHA's report on the priorities for occupational safety and health research in the extended Europe (2004) established the psychosocial work environment as one of the priority areas for research during 2002-2006.

At the international level, significant developments have been the declaration of the Global Plan of Action for Workers' Health at the recent WHO World Health Assembly (WHO, 2007), WHO guidance on psychosocial risks, work-related stress and psychological harassment (e.g. WHO, 2003a; 2003b; 2007), ILO initiatives to promote social dialogue on health and safety issues and various ILO conventions on workers' health.

4.6. Corporate social responsibility

Today, with increasing globalisation, greater environmental and social awareness, the concept of organisations' responsibilities beyond the purely legal or profit-related aspects has gained new impetus. In order to succeed, business now has to be seen to be acting responsibly towards people, planet and profit (the so-called '3Ps') (European Commission, 2001). As a result corporate social responsibility (CSR) is becoming an increasingly significant priority for companies of all sizes and types. CSR concerns the integration of social and environmental concerns by companies in their business operations, and in their interaction with stakeholders, on a voluntary basis (Zwetsloot & Starren, 2004). To be socially responsible requires organisations to move beyond legal compliance, towards greater investment in human capital, the environment, and their involvement with stakeholders.

The European Commission (2001) defines CSR as “a concept whereby companies integrate social and environmental concerns in their business operations and their interactions with their stakeholders on a voluntary basis”. The European Multi-stakeholder Forum on CSR (2004) further extended the understanding of CSR by concluding that CSR is the voluntary integration of environmental and social considerations into business operations, over and above legal requirements and contractual obligations, that commitment of management and dialogue with stakeholders is essential and when operating in developing countries and/or situations of weak governance, companies need to take into account the different contexts and challenges, including poverty, conflicts, environment and health issues.

CSR has three constituting dimensions (EC, 2001; Zwetsloot & Starren, 2004):

- *Internal*: related to human resource management, health and safety at work, adapting to change, the management of environmental impacts and natural resources, and ethics;
- *External-local*: which concerns with the role of the organisation on local communities in terms of providing jobs, taking care of the physical environment or contributing to the work of local organisations;
- *External-worldwide*: which has to do with what the organisation does in the global arena, including close work with business partners, suppliers and consumers, and a concern for human rights and the global environment.

The internal dimension of CSR policies covers socially responsible practices concerning employees, relating to their safety and health, investing in human capital, managing change and financial control. Health and safety at work is an essential component of CSR and companies are increasingly recognising that they cannot be good externally, while having poor social performance internally (Zwetsloot & Starren, 2004). CSR is also identified as a critical component for engaging SMEs to move the area of health and safety forward (HSE, 2005).

The commitment to CSR in companies can thus provide an important access point for the management of psychosocial issues at work. This is of particular interest when the characteristics of a changing world of work are taken into account. In relation to the business case, and although CSR is viewed as a constituent value of an organisation, there is evidence that going beyond legal compliance can contribute to the competitiveness of a company (EC, 2001). Implementing CSR initiatives demonstrates an interest in social issues and helps organisations comply with the social pressure for better working conditions in developing countries and CSR initiatives in client organisations.

On the other hand, CSR acts as a strong argument when using values and norms as the lever for change. It is not only good for the company to implement actions to manage psychosocial risks, but it is actually good in itself. This approach is of particular interest when organisations are already implementing some kind of CSR initiative or where a strong leader has values which relate to this approach. The use of voluntary performance standards for psychosocial risks can provide a method in which companies can identify and monitor these risks and, in turn, modify business operations or practices to effectively address these issues. Thus, psychosocial risk management, within the larger context of occupational safety and health, can be viewed as an essential component of responsible business practices and, thus, CSR may act as a useful conceptual framework in guiding initiatives to manage and prevent psychosocial risks, work-related stress, workplace violence and bullying.

4.7. Conclusion – the need to extend the risk management paradigm

It can be concluded that an understanding of the value of psychosocial risk management for society, organisations and workers can facilitate the positioning of the approach. A number of key drivers for promoting psychosocial risk management have been reviewed in this chapter; these have included the financial costs of ill health and the potential costs of inaction, legislative requirements,

social dialogue, social responsibility and international organisation action. However, many of these drivers will not be relevant in countries and organisations where adequate capacities and structures do not exist. For example, the legislative structures relating to OSH are weak in many developing countries, corporate social responsibility is practiced more as corporate philanthropy, social dialogue is non-existent and worker participation is minimal. Therefore a minimal basis to implement a psychosocial risk management programme is essential.

In Europe, this minimal basis was achieved with the introduction of the 1989 EC Council Framework Directive 89/391/EEC on Safety and Health of Workers at Work. A number of approaches based on the risk management paradigm have since been developed and implemented which draw on some of the drivers presented above; these approaches are reviewed in the next chapter.

Policies for psychosocial risk management require capacities, respectively at the macro level (international/national/regional) and at company level. The capacities required comprise adequate knowledge of the key agents (management and workers, policy makers), relevant and reliable information to support decision-making, availability of effective and user friendly methods and tools, and availability of competent supportive structures (experts, consultants, services and institutions, research and development). Although within the EU there are great differences in existing capacities, a more unified European framework for psychosocial risk management can promote knowledge through such transfer and lead to the development of appropriate methods and tools, thereby building capacities where required.

Psychosocial risk management is relevant not only to occupational health and safety policy and practice but also to broader agendas that aim to promote workers' health, quality of working life and innovation and competitiveness across the EU. In addition, psychosocial risk management is relevant to the Lisbon agenda that aims to promote quality of work and innovation and enhance economic performance and competitiveness of EU enterprises. It can contribute to the creation of positive work environments where

commitment, motivation, learning and development play an important role and sustain organisational development. Finally, a broader unified approach to psychosocial risk management which includes such positive work aspects will help promote and facilitate psychosocial risk management at the workplace.

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Chapter 5

European approaches to psychosocial risk management

Psychosocial risk management approaches differ from each other in many ways: in theoretical foundation, aim and type of problem addressed, data collection, indicators and analytical techniques, reliance on expert and employee participation, involvement of social partners, involvement of external stakeholders, adaptability to special problems and emergent risks, groups and organisation characteristics, and length of the evaluation period.

Although there is considerable amount of activity in the field of psychosocial risk management, it is disproportionately concentrated on reducing the effects of such risks, rather than reducing the presence of these risks at work (Kompier and Cooper, 1999). The risk management approach, adapted to the management of psychosocial risks, as proposed in previous chapters, is an ideal method to prevent harm generated from these risks. It is rooted in EU legislation and incorporates two essential steps: risk assessment and risk reduction. A number of approaches based on the risk management paradigm have been developed and implemented.

This chapter focuses on a review of current 'best practice approaches' in Europe, and identifying their key features, how they map onto the risk management cycle and prevention strategies they employ. These models have been developed and implemented in different

countries and in different sectors or organisations (in terms of nature and size).

5.1. Health circles – Federal Association of Company Health Insurance Funds (BKK) – Germany

5.1.1. Overview

Health circles were designed in Germany to facilitate health promotion in the workplace with an emphasis on organisational and psychosocial factors. Although they were not specifically developed to tackle work-related psychosocial factors, their nature makes them an appropriate tool for this objective.

Health circles are participative actions where employees identify the major health-related problems in the workplace and implement appropriate solutions. The areas which are assessed include lifestyle changes and changes to the work environment and organisation. It is a flexible approach where the general method can be tailored to various situations and companies.

Assessed outcomes vary according to the requirements of the organisation. Typical outcomes include reducing absenteeism, increasing job satisfaction, reducing turnover rates, reducing early retirement, and higher motivation.

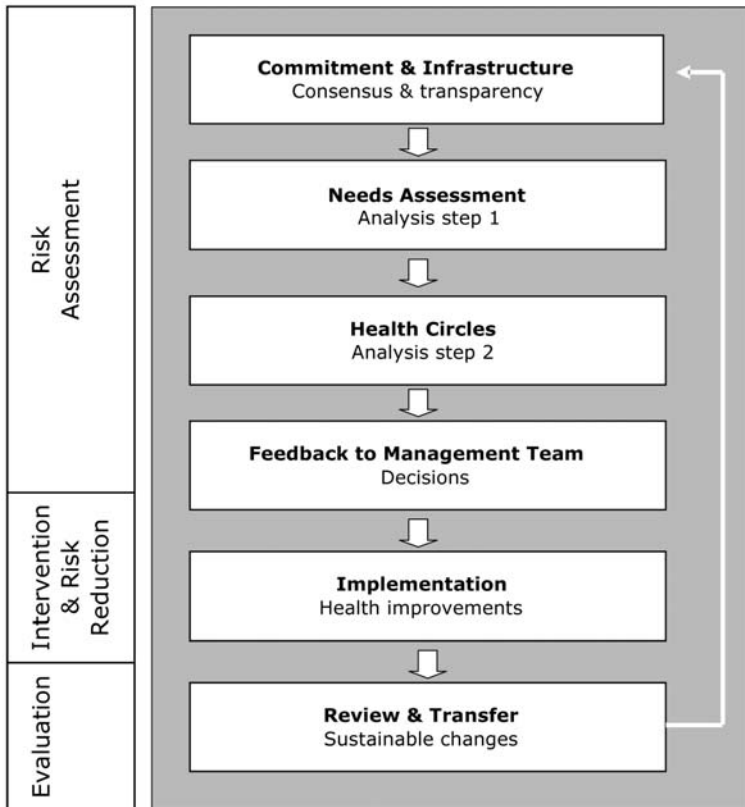


Figure 5.1: Health circles

5.1.2. Development process

Health circles were developed in Germany in the 1980s. They responded to changes in legislation, which required companies to place more emphasis in prevention activities. They were designed following other participative problem-solving approaches, such as quality circles. Because of this, they are based on the assumption that employees are experts on their work and the management of the work environment.

5.1.3. Implementation

Health circles are generally implemented in departments which have specific problems related to absenteeism or dissatisfaction. They are formed by a group of employees, who evaluate psychosocial risk factors and define solutions to tackle the identified problems, and a trained professional who acts as a moderator. Meetings are generally held in work hours and last for about one hour and a half. In most cases, the process includes between 6 and 10 meetings.

The process has 6 steps:

1. **Commitment & Infrastructure:** A contract is signed between employees and management. This guarantees commitment of all parties with the project goals. It also allows a focus on consensus and transparency.
2. **Needs assessment:** A health surveillance report is produced from company or insurance data. The report focuses on overall absenteeism rates, absenteeism length and diseases reported as the causes for absenteeism. It can be used to identify departments where absenteeism is particularly problematic and allows the identification of possible psychosocial hazards. This report is often followed by an employee survey, where both hazards (physical and psychosocial) and employee health and well-being are assessed (see figure 5.2).



Figure 5.2: Focus of health circles

1. Health circles: A steering committee is formed by those responsible for safety and health, who oversee the process. About 10 to 15 participants are invited to each health circle. These include representatives from employees, the company and unions, and a moderator. The health circle develops health improvement suggestions. Participants are asked to propose solutions to the problems identified through the surveillance report and employee survey. In this way, the meetings focus on those problems which are perceived by a larger number of employees. During this process, meetings are recorded and their results are reported to all employees in the affected department.
2. Feedback to management team: The management team is informed of the progress and suggestions produced by the health circle. They make decisions regarding which suggestions to implement and the order in which these are implemented.
3. Implementation of solutions: Proposed solutions are implemented throughout the process. These provide the basis for health improvements.
4. Review and transfer: In the last health circle meeting, all participants are asked to evaluate what has been achieved. It is

also common that a follow up meeting is conducted with the participants in the health circle to complete the evaluation of the process. In some cases, the employee survey is repeated in the department where changes were implemented. This allows the assessment of changes in outcomes.

The completion of the process, including the 6 steps outlined above, takes around 15 months.

5.1.4. Practical applications and evaluation

Health circles have been applied in hundreds of companies over the years. Overall, participants report high satisfaction with the approach. Besides, most suggested solutions are implemented.

Aust and Ducki (2004) reviewed 11 studies, which included 81 health circles. They concluded that health circles are an effective tool for the improvement of physical and psychosocial working conditions. Health circles also have a positive effect on outcomes, including enhanced employee health and well-being and reduced sickness absence.

Overall, health circle participants report high satisfaction with the composition of the group, number of meetings and the process of identifying problems and developing suggestions. In most cases, companies implement a good percentage of the solutions proposed by the health circle (between 45% and 86%). These changes improve working conditions and the health status of workers, and reduce absenteeism.

An evaluation of the satisfaction with the process (using surveys) and an evaluation meeting to look at results are included in the process. Outcome evaluations are mentioned in the approach, so tangible changes in the work environment are not necessarily assessed. Health circles can be particularly useful in a culture used to participative strategies.

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5.2. Istas21 (CoPsoQ) Method - Trade Unions' Institute of Work, Environment and Health (ISTAS) - Spain

5.2.1. Overview

Istas21 is a psychosocial risk management method, adapted from the Copenhagen Psychosocial Questionnaire (CoPsoQ). Although the main focus of this method is the evaluation of risks, a thorough manual is included with descriptions of the risk management process.

Its aim is to provide a method for the assessment of psychosocial risk factors which is valid for the Spanish population. It also aims to be used as a basis for the development of prevention actions using the risk management paradigm. The method is provided free of charge, with the conditions that: it is used as a tool for prevention strategies

though the risk management approach, employees take active part in the process, results are confidential and questionnaires anonymous, and that the instrument is not modified.

The focus of the assessment is on the association between psychosocial risks and a series of outcomes, which include: job satisfaction, general health, mental health, vitality, behavioural stress symptoms, physical stress symptoms and cognitive stress symptoms. The interventions which can be developed through the use of the approach are tailored to the needs of each company.

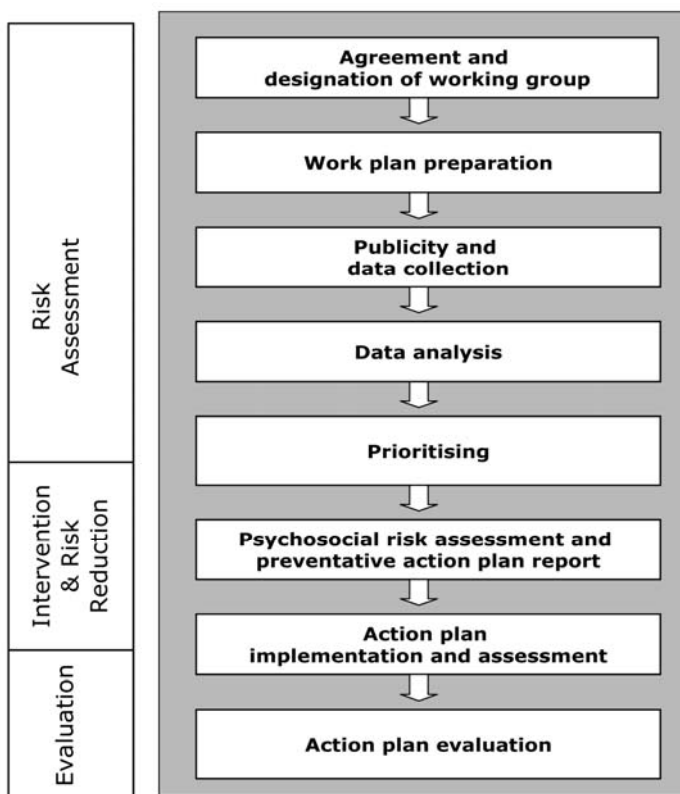


Figure 5.3: Istas 21 (CoPsoQ) Method

5.2.2. Development process

The Istas21 method is an adaptation of the CoPsoQ for the Spanish population. It was adapted in 2002 by Moncada, Llorens & Kristensen for the Spanish Trade Unions' Institute of Work, Environment and Health (ISTAS).

The development process is clearly based on stress theories, particularly on Karasek's job demands – job control model; because of which the evaluation of risks in this approach includes only those psychosocial factors for which there is strong evidence of risk to health: psychological demands, active work and skills development, social support and quality of leadership, and compensation (insecurity and esteem).

The adaptation was conducted by a team of Danish and Spanish researchers. It started with a workshop where the Danish questionnaire was described and the main differences between the working conditions in Denmark and Spain were identified. The questionnaire was then translated to Spanish and back to Danish. Items which showed differences in the two Danish versions were discussed in a second workshop. Two scales which were not included in the CoPsoQ were added at this stage. A pilot study was then conducted with 85 workers in Navarra and Cataluña.

The questionnaire has been validated both in its original version in Denmark and in its Spanish adaptation. The Spanish adaptation was validated with a sample of 859 participants from the province of Navarra. The questionnaire is available in three versions, a long version for research, a medium length version for companies with more than 30 employees, and a short version for small enterprises and self-assessment. There is not much scope for tailoring, although some questions can be adapted to suit specific situations, and clear guidance is provided in this respect.

The terms of the licence agreement which appear in the Istas21 method are not part of the CoPsoQ. These provide the means to place the emphasis in the risk management approach and not only the assessment of risks. This is a clear advantage as it makes the basic

assumptions of the risk assessment process clear and known to any users.

5.2.3. Implementation

The method consists of a validated questionnaire and its associated manual. The licence for the use of the instrument is dependant on agreement of the conditions of use, which include its use for prevention purposes, participation, anonymity and confidentiality, and no tailoring over what is stated in the manual. The action process includes the following activities:

1. Agreement and designation of a working group: The method is presented to the management team and employee representatives. Agreement is sought and a document signed, which includes the consent to take part of the process and agreement with the licence conditions outlined above. Once an agreement is signed, a work group is designated. This group must include representatives of management, health and safety (prevention) and employees. It is also recommended to include company directors not directly associated with health and safety management. This work group is responsible for the completion of the action process.
2. Work plan preparation: The reach of the programme and units of analysis (such as departments, roles, etc.) are defined, the questionnaire is generated, including the adaptation of some clearly defined items, and a plan is developed for the provision of information to stakeholders. This information-sensitisation plan may include formal documents, meetings with workers and/or supervisors, and other techniques which are deemed appropriate.
3. Publicity and data collection: At this stage, information is provided to employees, the questionnaires are distributed and data is gathered.
4. Data analysis: Data is analysed to produce six kinds of results: standardised coefficients for all psychosocial risk factors; proportion of employees in each level of exposure; proportion of

employees in each level of exposure for each risk factor; satisfaction and stress symptoms results; general health, mental health and vitality; and frequencies of all answers to the questionnaire. Results are interpreted and a report produced. Feedback is provided to management, employee representatives, employees and supervisors.

5. Prioritising: The relative importance of exposures is defined by the work group. They then propose and prioritise prevention interventions, although this can also be done by prevention circles formed by affected employees and experts (health and safety and production). Information on these proposals is then provided to management, employee representatives, employees and supervisors.
6. Psychosocial risk assessment and preventative action plan report: This report summarises the work done. It should be treated as 'work in progress' and amended if new prevention strategies are deemed adequate.
7. Action plan implementation and assessment.
8. Action plan evaluation.

Activities 1 to 6 are detailed in the manual, the other two are just mentioned.

5.2.4. Practical applications and evaluation

There is no evidence provided for the application of the full method. The questionnaire has been validated in Spain. It requires experts in the area for some of the processes. Its emphasis on validity at the expense of tailoring can be very positive for research outcomes, but might make it difficult to translate to actions at the company level.

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5.3. SME-vital – Health Promotion Switzerland – Switzerland

5.3.1. Overview

SME-vital was developed between 2001 and 2004 by the Institute of Social and Preventive Medicine, University of Zurich, and Institute of Occupational Medicine, Baden. The project was funded by the public foundation “Health Promotion Switzerland”. It consists of a web-based workplace health promotion (WHP) toolbox for small and medium sized enterprises (SMEs). The toolbox has been available on the internet in German and French since July 2004.

Although the focus of this tool is on health promotion, the approach is broad and includes the management of psychosocial risk factors. Primary outcomes are defined by the dimensions of the employee questionnaire: job task, work organisation, participation, leadership, working climate, commitment, physical and psychological well-being etc. Additional outcomes vary by interest of the organisation, e.g. absenteeism, company image, organisational processes, customer satisfaction.

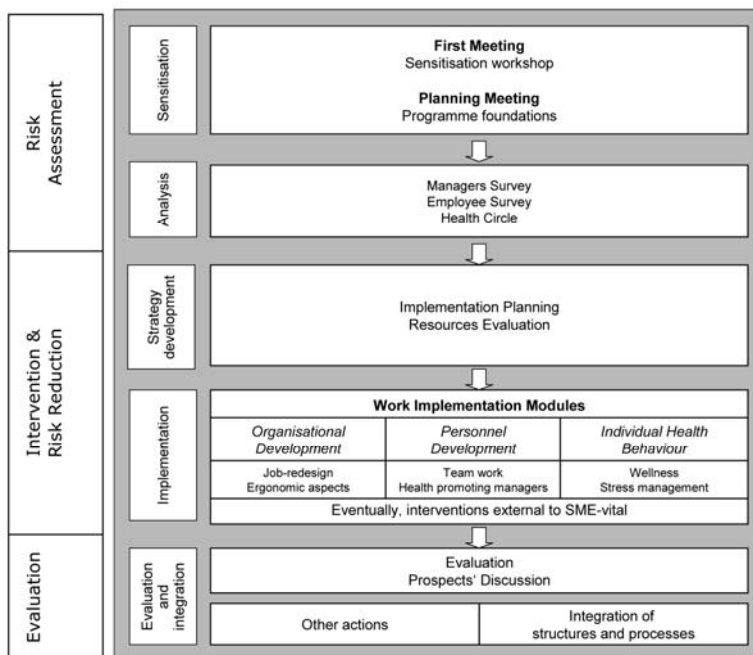


Figure 5.4: SME-vital

The toolbox contains 10 modules which follow the risk management paradigm (see figure 5.4). After a starter-workshop with the top management, three modules help to analyse the situation in the company (two surveys and a health-circle) and six modules enable dealing with the problems identified by the analysis. An overall WHP project management guide shows how to structure the overall WHP process.

Although the tool was originally developed for SMEs, in practice it has also been used by large organisations as well. The quantitative analysis tools provided are only suitable for companies with at least 30 employees.

5.3.2. Development process

To increase dissemination of WHP in SMEs, Health Promotion Switzerland initiated and funded a three year programme (2001-2004) to develop a web-based toolbox for comprehensive WHP in SME. This programme had three objectives:

- Developing practical modules for implementing comprehensive WHP in SMEs,
- Building a network of SMEs with exemplary experience with these modules Acting as models of good WHP practice,
- Assuring ongoing dissemination of WHP in SMEs.

The WHP toolbox had to meet the following criteria which initially had been jointly defined by various stakeholders (public and private WHP providers, SME representatives, ministry of finance):

- Building on the comprehensive WHP model of the European Network of WHP as a theoretical basis of the toolbox
- Particular emphasis on psychosocial factors in the working environment
- Targeted at SMEs with 30 to 250 employees which have limited resources for developing own WHP instruments but have sufficient resources for implementing comprehensive WHP
- Generalisable to all economic sectors
- Practical and easy to use by companies by providing concrete guidelines and working materials
- Composed of standardized modules which are flexible enough to be combined and adapted according to specific company needs
- Easily accessible via a free internet site.

The comprehensive WHP model of the European Network of Workplace Health Promotion constitutes the theoretical basis of the toolbox. This model covers the following four principles (Luxembourg Declaration 1997): participation of all staff, integration into all areas of the organisation, project management following a problem-solving cycle, comprehensiveness with equal consideration

of individual- and environment-directed measures. Because work-related physical determinants of health are relatively well covered by legally required health and safety systems, the WHP toolbox particularly emphasises psychosocial determinants of health in the working environment.

For developing the toolbox, a working group consisting of six private and public WHP providers including two research institutes as well as an SME representative was constituted. This working group considered the following forms of evidence:

- Generalisable, published evidence including work-related psychosocial determinants of health to be addressed by WHP, proven WHP instruments, WHP case-studies and evaluation-studies;
- practical experience of participating WHP providers regarding what works best in the SME context and what is most needed;
- perceived WHP needs and readiness for WHP actions of the target group of SMEs.

To test the practicality and generalisability of the toolbox, 10 SMEs from various economic sectors in the German and French speaking part of Switzerland were recruited as pilot companies. The WHP providers in the working group developed a draft version of a comprehensive WHP toolbox and tested it in the 10 pilot companies. Based on a thorough formative evaluation of this pilot test the modules of the toolbox were systematically improved.

5.3.3. Implementation

The implementation of SME-vital in companies follows the following process:

1. Initiate WHP: Information brochure and “starter workshop” with top-management for initial motivation for WHP, for organisational analysis of the potential and general aims of WHP in the specific company and for setting up an implementation plan for the following modules.

2. WHP analysis: Employee and management surveys for detailed bottom up and top down analysis of health promoting working conditions. The management survey analyses current work organisation, personnel management practices and employee benefits from the managers' perspective. The employee survey analyses strengths and weaknesses regarding job task, work organisation, participation, leadership, working climate, and commitment from an employee perspective. The survey instrument can be filled out online and aggregated results are automatically generated for the participating companies.
3. Develop WHP strategy: Module 'health circle' is a joint employee-management approach for analysing the above survey results, conducting a problem analysis, setting company specific targets for the WHP process and developing a joint action plan.
4. Implement the plan: Depending on the company-specific needs, companies can choose from the following six readily available implementation modules grouped into three levels of intervention:
 - Organisational development: how to guide for improving workplace ergonomics, practical guideline on how to go through a participatory job re-design process.
 - Personnel development: training for team development (communication, collaboration, external partners), management training for health promoting leadership style.
 - Individual health behaviour: how-to guide for wellness-related activities in a company (physical activity – relaxation – nutrition); stress management training.
5. Evaluate the results: monitoring changes based on a repeated application of employee and management surveys; controlling of achievement of company-specific targets.
6. Consolidate and institutionalise WHP: establish "health circles" as sustainable structure (joint employee-management committee) for WHP.

The general approach and generic instruments can be adapted to specific company context and needs. It has been implemented in various organisations and industrial sectors.

5.3.4. Practical applications and evaluation

SME-vital was implemented in 10 pilot-companies. This process showed that the modules support a WHP process corresponding to the underlying comprehensive WHP model of the European network for WHP. The toolbox was well received by the pilot SMEs. All ten companies actively participated during the entire programme and most continue WHP activities. The modules proved flexible enough to fit the context and interests of very diverse SMEs.

During a final assessment conducted by an external, independent evaluator, participating companies reported the following main benefits of the programme:

- Better communication between employees and management; improved working climate
- Increased motivation and performance of employees
- Increased competency in coping with demands and ongoing organisational change
- For broader dissemination, linkage of the WHP toolbox to established management systems such as total quality management needs to be improved.

The programme's implementation and impact were assessed using a one-group pre-post test design. Baseline assessment was conducted at the beginning of the programme and a follow-up survey was carried out 18 months later. The pilot SMEs were heterogeneous in size, economical sector and organisational structure. Seven SMEs, consisting of 50 to 350 employees, took part in both the baseline and follow-up survey (67% average response rate, n=572 and 56% average response rate, n=479, respectively). The questionnaire covered 8 dimensions of the working environment and contained items addressing the health status of the employees. In the follow-up survey, a set of items was added to assess awareness of the programme, participation, accessibility, personal competency

building and profit from the programme and its impact on the working environment and health from an employee perspective.

Overall, monitoring of the working environment and health status in the SMEs revealed only minimal differences between the two measurement points. Yet, employees were affirmative of the programme's impact, especially concerning working issues that are more accessible to change, e.g. employee participation and teamwork. Awareness of and participation in the programme varied considerably, depending among other factors on employee turnover. In general, the programme was rated as satisfactory and continuation of it was desired. Employees participating closely in the programme thought they had accessibility, had built their personal competency and profited from the programme more than workers who did not take part.

All users of SME-vital have to register. Registration data include company characteristics, state of WHP, attitudes towards WHP and modules downloaded. All employee survey data across companies are aggregated and available as a benchmark.

The usability should be high: the toolbox provides concrete instruments for easy implementation. Currently, over 500 companies have registered and downloaded material. Over 120 companies have conducted the employee survey online.

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5.4. Work Positive pack with HSE's Management Standards – Health and Safety Authority, Health and Safety Executive and National Health Service – Ireland, Scotland, England and Wales

5.4.1. Overview

The 'Work Positive pack with HSE's Management Standards' is an update of the 'Work Positive' stress management approach for SMEs. It incorporates the new HSE Management Standards for stress at work as well as the findings of the evaluation of Work Positive. It was commissioned by the Health and Safety Authority in Ireland (HSA), the Health and Safety Executive in the UK (HSE), and Health Scotland (HEBS).

Work Positive consists of a resource pack that assists organisations through a comprehensive process of identifying and reducing the potential causes of stress in organisations. The resource is primarily targeted at small to medium-sized enterprises but is appropriate for larger corporations that are geographically spread or split into divisions.

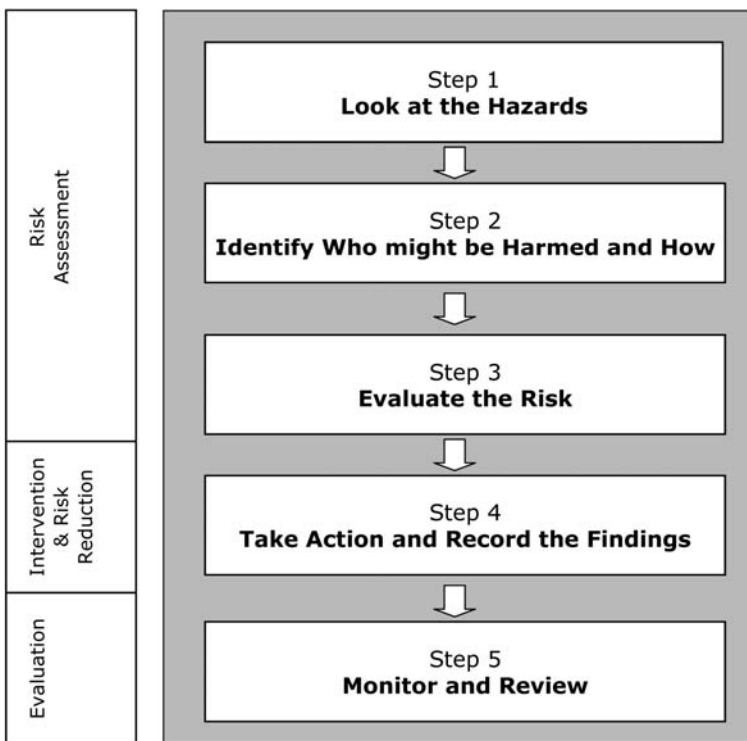


Figure 5.5: Work Positive

5.4.2. Development process

In 1996, Health Scotland commissioned the Institute of Occupational Medicine (IOM) to develop a risk management approach for workplace stress. This approach was called the organisational stress health audit or OSHA. It involved the use of external consultants who conducted interviews with a sample of employees and provided control measures and recommendations on how stress might be reduced.

The five step Work Positive approach was developed as an effort to build on the strengths of OSHA while at the same time addressing its weaknesses. Work Positive was developed in two phases. In the first

stage a questionnaire and benchmarking tool were designed. The questionnaire was based on the structure of the OSHA interviews (and known causes of work-related stress). The benchmarking tool was developed following the business excellence model. The second stage involved the piloting of these tools in fourteen organisations.

The Work Positive pack was then sent to ten organisations throughout a range of different sectors. The experience within these companies was analysed and is provided as case study materials. In this way, industry specific examples for the use of a generic approach are provided.

Work Positive, in its original form, was operational widely throughout Scotland, England, Wales and Ireland. A further redevelopment was completed in line with the introduction of the new HSE management standards. In 2004-2005 the HAS, HSE and HEBS commissioned work to revise the existing Work Positive – Prioritising Organisational Stress Resource to incorporate the new HSE Management Standards for stress at work as well as the findings of the past evaluation of Work Positive. The new Work Positive incorporates the 6 Management Standards developed by the HSE and includes normative data from the UK.

5.4.3. Implementation

Work Positive is a step by step process that assists in the identification and management of potential causes of stress. It has been adapted to include the six Management Standard headings (Demands, Control, Support, Relationships, Role, and Change). The complete process includes 5 steps:

- Step 1- Look at the hazards: This step includes planning and assessment of risks. Important elements for planning include the provision of information to senior management, setting up a steering group with representatives across the organisation, the identification of a co-ordinator, the provision of information to participants and ensuring that employees are aware of available support if they are already suffering from stress or a stress-related illness. Once this is completed, the steering group uses the HSE

management standards to review the organisations' policies, systems and procedures using a benchmark exercise. They also gather organisational information regarding outcomes which have been associated to stress (e.g. absence, turnover, performance, etc.).

- Step 2- Identify who might be harmed and how: The steering group should identify who is to be included in the risk assessment. Issues which are considered at this stage include the definition of high risk groups, the maintenance of anonymity of results and how to establish an environment of openness, trust and honesty.
- Step 3- Evaluate the risk: At this stage, a risk assessment questionnaire is distributed among the staff and the data analysed. The survey based tool incorporates the HSE Management Standards. The questionnaire, an analysis tool, a tutorial and a manual are available free of charge.
- Step 4- Take action and record the findings: Focus groups are organised with representatives from the employees. The issues identified in the risk assessment are discussed here and solutions developed. Emphasis is placed on providing an environment where employees feel free to raise their concerns and give opinions regarding possible actions. An action plan is developed as a result of this stage, based on a template.
- Step 5- Monitor and review: The steering group meets regularly to review the action plan and ensure its completion. Progress is assessed in relation to the benchmarking exercise conducted in step 1. It is important at this stage that employees and management receive feedback on progress and can still contact the steering group with any concerns. It is recommended that the questionnaire is applied at regular intervals, both to check for progress and to assess any emerging risks.

Work Positive is available online. The user can host it and send it to participants through email. Alternatively, it can be done by pen and paper.

5.4.4. Practical applications and evaluation

To date, Work Positive has been used on approximately 25,000 employees. The original tool was piloted in 4 organisations. The questionnaire was completed by employees while a co-ordinator from the organisation completed the benchmarking exercise. Both the employees and the co-ordinator also completed an evaluation questionnaire. In addition, interviews were conducted with a random sample of employees. The general response to the questionnaire and benchmarking exercise was positive. Minor changes to the questionnaire were made taking into consideration the results of the pilot study.

Case studies for 11 companies are presented in the Work Positive website, which provide examples of how organisations have tackled the five steps outlined above.

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5.5. Risk management approach for work-related stress – Institute of Work, Health & Organisations, University of Nottingham - UK

5.5.1. Overview

In the UK, the Management of Health and Safety at Work Regulations 1992 and its revision in 1999 require employers to undertake assessments for all risks to health. Managers were advised by the

Health and Safety Executive (1995) to include work-related stress in their assessment of risks. This fulfils both UK and European legal obligations that ask employers to assess and manage any type of risk to workers' health, including psychosocial risks. The risk management process is driven by active participation of employees in a series of stages: familiarisation (including the formation of the steering group and workplace visits), risk assessment (using methods such as surveys, group discussions and individual interviews), audit of management systems and employee support, action innovation (defining risk reduction interventions on the basis of the risk assessment results) and evaluation. The process promotes a continuous improvement cycle. The tools and methods used to conduct an effective risk assessment are tailored to the size of the group and the nature of the work in the organisation.

5.5.2. Development process

The adaptation of the general risk-management framework to deal with work-related stress was pioneered by the Institute of Work, Health, and Organisations (University of Nottingham, United Kingdom). It was first described in 1993. Since then, its application in organisational settings has provided numerous opportunities to develop and evaluate the framework and to provide guidelines as to how to implement the process (Cox et al. 2002; Cox et al., 2000; Leka, Griffiths & Cox, 2003).

It proposes an approach similar to that applied for the management of physical risks, which is understood by employers and helps comply with legal requirements. The process involves assessing psychosocial risk factors and health of the employees to determine those which are likely to be associated with ill individual or organisational health. The results of the assessment are then used in a participative process to design actions, putting them into practice and assessing the results of the action plan.

In planning the risk management there are several guiding principles and practical issues of importance:

- Work with defined groups: each risk assessment is carried out within a specified and defined group (either a department, company or profession).
 - Focus on work not the individual: The aim of the risk assessment is to identify the aspects of work giving rise to stress, not the individuals experiencing stress.
 - Focus on 'big issues': the focus is on problems that staff agree on that staff agree on, rather than individual complaints.
 - Use of reliable measures: all methods of data collection are designed to be reliable and valid.
 - Confidentiality of information given by employees must be guaranteed: thus, data collected must be stored securely and not disclosed.
 - Risk reduction as a goal: risk assessment tools are designed to provide sufficient detail and context-specific information to allow for intervention design.
- *Participation and context dependency.* Throughout the risk management process, the process is driven by the active participation of the employees through all stages: design, implementation and evaluation. Transference of such skills to the organisation promotes in-house abilities; thus, promoting the initiation of a continuous improvement cycle.
 - *The size of the group.* The tools and methods used to conduct an effective risk assessment need to be tailored to the size of the group where for larger groups a more quantitative approach (such as a survey) may be utilized; whilst for a smaller group a more qualitative approach using interviews and focus groups may be used.
 - *Management issues.* At the beginning of the risk management process, a Steering Group should be established. This group's central responsibility is overseeing and facilitating each risk management project. Typically, this group is comprised of management, staff representatives (in some cases union representatives), occupational health, health and safety and human resources specialists.

- *Publicity and marketing.* Publicity of the risk management project is of central importance; this ensures transparency of the process and recruits the widespread involvement of the organisation.
- *Ethical Principles.* Finally, ethical conduct and principles, as detailed in the British Psychological Society guidelines for Ethical Conduct, should be upheld at all times; such as informed consent and client confidentiality that are an integral component of the risk assessment procedure.

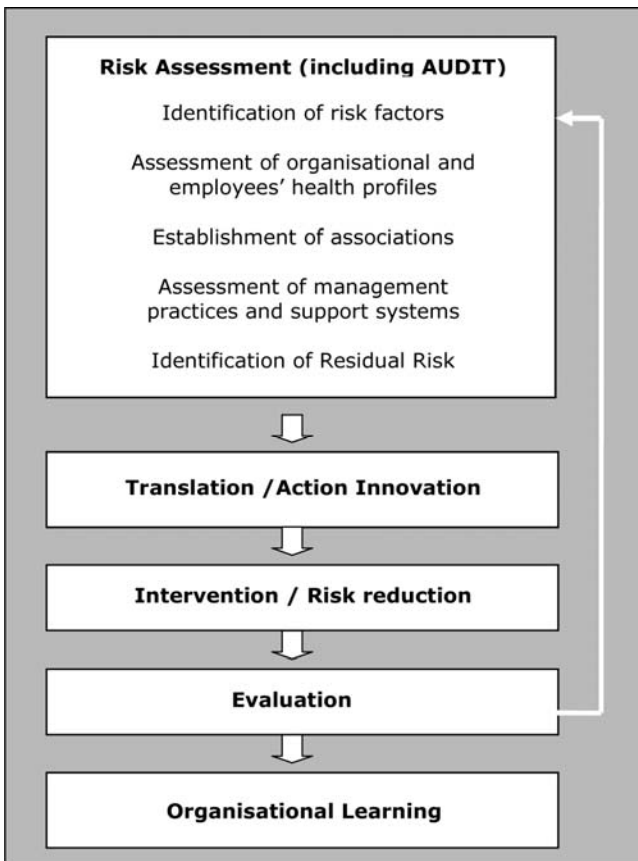


Figure 5.6: Risk Management approach for Work-related Stress

5.5.3. Implementation

At the beginning of the risk management process, a steering group should be established. The central responsibility of this group is overseeing and facilitating the risk management process. Typically, this group is comprised of management, staff representatives (in some cases union representatives), occupational health, health and safety and human resources specialists. Publicity of the risk management project is of central importance; this ensures transparency of the process and recruits the widespread involvement of the organisation. Prior to commencing risk management, considerable consultation between stakeholders and experts should be conducted; with a concentrated focus of setting appropriate expectations, schedules and identifying communication channels.

The risk management approach comprises nine steps:

1. Identification of likely risk factors, based upon the workers' knowledge of their work (qualitative techniques and risk assessment questionnaire)
2. Assessment of organisational and employees' health profiles (risk assessment questionnaire)
3. Establishment of associations between likely risk factors and health problems
4. Assessment of current management practices and employee support systems
5. Identification of residual risk, or the risk which has been identified and is not being managed with current practices
6. Development of an action plan for managing residual risks (participative approach)
7. Implementation of actions
8. Process and results evaluation
9. Re-assessment of risks.

Risk Assessment: The aim of the risk assessment stage is to identify, for a defined group, significant potential sources of stress (psychosocial hazards) relating to employees' work and working conditions; and examine their overall indices relating the health of the individual and the organisation. Subsequently, an audit of management systems

and employee support is conducted which identifies and assesses current management systems in relation to the control and management of the hazards and the experience of work-related stress, and in relation to the provision of support for employees experiencing problems.

Translation / Action Innovation: The results of the risk assessment are fed back to the organisation and the steering group, which form the basis of discussion among the stakeholders. This information, and the resulting discussion, is used to develop a plan of action (i.e., a package of interventions) that are reasonable and practicable; the aim of which is to reduce likely risk factors for stress in at work. These are also discussed with workers so as they are actively involved in the design of the interventions and have ownership of the actions to be taken.

Intervention/ Risk reduction: Developing an action plan involves deciding upon what is being targeted, the methods being used, those responsible, the proposed time schedule, the resources required and how the intervention will be evaluated. The primary aim of the action plan is in reducing likely risk factors that have the potential to cause stress. The change initiatives identified through this process, can be integrated into existing management plans for change; thus, minimising the degree of disruption within the organisation.

Evaluation: The next step in the risk management process is the evaluation of the action plan. The objectives of the evaluation stage are to determine: whether the intervention was implemented effectively, and whether the intervention had any impact on the problems identified during the risk assessment. This can be accomplished through several methods, which can be tailored/adapted to the size of the group being assessed. Several evaluation tools can be utilized: interviews with key stakeholders, interviews with staff, questionnaire measures (including measures of work and well-being used in the risk assessment), and organisational data. Within the context of smaller groups a more qualitative approach may be more appropriate to use: namely, interviews and focus groups. The evaluation tools contain three elements, each of

which yields important information: specifically they measure the level of awareness, participation and reaction to the intervention; measure the impact of the intervention of changes to working conditions; and assess whether the intervention has made an impact on the health and well-being of employees.

As aforementioned, the evaluative step in the risk management process begins to answer the question was the intervention effective in reducing stress and it allows for the reassessment of the situation and the identification of further problems needing to be addressed. This process of reassessment feeds into a cycle of continuous improvement within the company thereby yielding a basis for organisational learning.

5.5.4. Practical applications and evaluation

The risk management framework has been used effectively to identify and reduce work-related stress (and psychosocial risks) in a number of organisations. It is applicable in large enterprises as well as SMEs. The process is driven by active participation of employees through all stages, including intervention design. A number of methods are combined in the risk management process. The evaluative step in the risk management process addresses the question of whether the intervention was effective in reducing stress and it allows for the reassessment of the situation and the identification of further problems needing to be addressed.

A number of benefits have been demonstrated of the risk management intervention in research and implementation in organisations. The majority of groups involved in the risk management process improved their working conditions, and employees' reactions to the risk management interventions have been favourable and generally positive. There were observed positive trends towards improvement of employee wellbeing. Additional benefits were observed in regards to the risk management process. Firstly, it was seen as a useful tool for stimulating new ideas and ways of thinking about problems. Secondly, it quantified problems, which could be used to inform prioritisation of the identify issues and the required resources required. Thirdly, it focused efforts and actions to

promote a coherent and targeted approach to action. Finally, it yielded a framework for evaluating progress and monitoring change – a strategy that could be used to evaluate employees' planned and unplanned change.

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5.6. The Prevenlab-Psicosocial methodology – UIPOT, University of Valencia – Spain

5.6.1. Overview

Although the Spanish Law for the Prevention of Risks at Work (Ley de Prevención de Riesgos Laborales – Ley 31 de 8/11/1995) makes no explicit reference to workers' mental health, it does refer on various occasions to psychological and social aspects as relevant elements in the prevention of risks or as potential sources of risk. The Decree "Regulations of the Preventive Services" (Reglamento de los Servicios de Prevención – 17/1/1997) recognises the relevance of ergonomics and applied psycho-sociology as two of the specialities of occupational safety and health experts, and establishes the minimum training content for their work. The laws also establish the need to attend to psychosocial factors in all aspects related to the analysis and prevention of risks at work.

The "Prevenlab-Psicosocial" methodology is a system of analysis, assessment, management and intervention with regard to psychosocial factors relevant to the prevention of occupational risks. It is based on the theoretical conception of the AMIGO model, and aims to provide a system of professional practice that permits the analysis and assessment of risks for specialised intervention by professionals. The AMIGO model is useful for the identification and classification of possible preventive interventions to be carried out in an organisation and the facets on which they concentrate. It also facilitates intervention on providing a common scheme for diagnosis and interventions. Nevertheless, in using the model it should be borne in mind that the facets are independent, and that their most important feature is their relationship with one another. This point is especially relevant to the planning of the intervention.

5.6.2. Development process

In order to make an organisational diagnosis that facilitates the assessment of risks deriving from psychosocial factors in the workplace, an essential prerequisite is a theoretical model that enables a systematic and comprehensive consideration of

organisational phenomena at all levels, and that facilitates the identification of the most effective psychosocial interventions in each case. The AMIGO model (Análisis Multifacético para la Intervención y Gestión Organizacional – Multi-facet analysis for organisational intervention and management), serves as a foundation for the development of a methodology of risk assessment and helps to organise the different strategies and techniques of organisational intervention. It may also facilitate the selection of the most effective approaches in each case and the identification of areas in which the development of new techniques is required. The main characteristics of the AMIGO model are that it distinguishes “hard” and “soft” facets of the organisation, it employs a dynamic perspective of fit and of organisational coherence, it analyses the harmony between person (or group) and organisation not only in issues related to the work system but also in the organisation as a whole, through the consideration of the psychological contract concept. Finally, it offers a comprehensive view of the results that takes into account the demands of the supra-system, of the system itself and of the subsystems of which it is made up, leading to a multilevel approach.

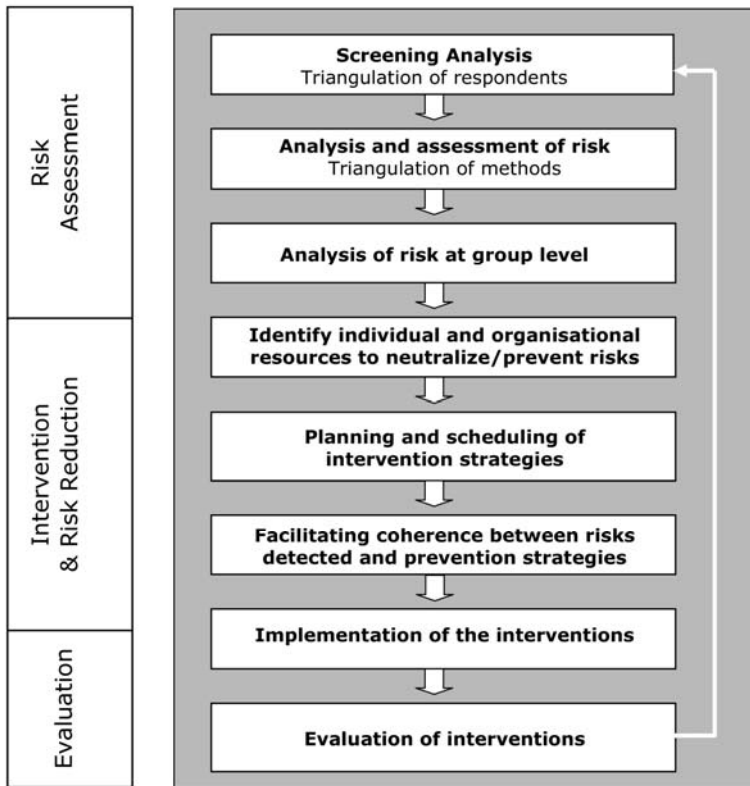


Figure 5.7: The Prevenlab-Psicosocial Methodology

5.6.3. Implementation

The method allows for the development of a professional intervention that is suitable, efficient (using minimum resources for achieving certain results), “user-friendly”, non-invasive for the organisation, and involves feedback processes that contribute to improving the methodology itself and its instruments. The method is applied in several stages.

1. In the first stage a screening analysis is carried out, the aim of which is to identify the main facets and components that

constitute sources of stress with harmful effects. This exploration can be carried out by means of the “triangulation of informants” method, which involves seeking spontaneous responses from the respondents and then conducting a systematic analysis of facets and components. Its complementary aims are to identify the facets that may represent resources in the intervention and the principal consequences of stress.

2. In the second phase a detailed analysis and assessment is conducted of those facets and components that have been identified as significant sources of risk. This assessment is also conducted by means of triangulation of informants and, where applicable, of methods. This stage also includes an analysis of possible sensitising factors that increase vulnerability to a given risk for certain people or groups.
3. In a third stage, an analysis is carried out of significant sources of risk at a collective level (by units or for the organisation as a whole). The appropriate development of this analysis requires prior planning, before the second stage, and needs to take into account the screening analysis. Sometimes, data obtained in the second phase may be relevant for this third phase. The statistical analysis –through aggregation– is carried out at group level.
4. The fourth stage involves a study of the facets and components of the organisation as a system in their function as resources that may contribute to neutralising or preventing the risks identified. The analysis starts out from the organisational or developmental level and is completed at the individual level, in those cases where this is necessary.

The method is flexible and can be implemented in any organisation in any sector with the assistance of experts. The application the methodology requires, as a necessary condition, the commitment of the management of the company and of those in charge of the hierarchical lines of all levels and departments. It is important to ensure and to define their collaboration in all of those aspects that will affect the correct and effective application of the methodology. Also important is the involvement and participation of the company's

health and safety representative(s); while the support of the company's Board of Directors is also an important factor. Finally, the employees in those departments or groups that are to participate in the study should be informed of the nature of the study and the implications of their participation.

The order of the stages outlined need not be strictly adhered to; nor is it necessary to carry out each one in its entirety. The stages described are for guidance, and their application must be flexible in order to respond to the needs that the expert considers priority in each case.

5.6.4. Practical applications and evaluation

The method is modular in structure, with each stage not necessarily being a precursor for the next; this allows a flexible design of each plan of analysis and assessment according to the needs, characteristics and restrictions of the client-system. Once the interventions developed using method are implemented in an organisation they are evaluated periodically in the stages outlined above and improvements are made based on their results. The model is useful as a guide for orienting the planning and scheduling of intervention strategies in risk prevention, facilitating coherence and articulation between risks detected and strategies for preventing them.

In a study carried out with a group of safety officers from twenty Colombian companies (medium and large, public and private), information was obtained with regard to interventions carried out in these companies for the prevention of risks, and to interventions that it would be advisable to carry out. This information was arranged according to the AMIGO model, with the aim of demonstrating its utility in the organisation of interventions on prevention. The data analysis demonstrated that the AMIGO model is useful for the identification and classification of possible preventive interventions to be carried out in an organisation and the facets on which they concentrate. It also facilitates intervention on providing a common scheme for diagnosis and interventions.

However, it must be noted that the method has been designed as a system of professional practice that permits the analysis and assessment of risks for specialised intervention by professionals. Initial investment is required to hire professional where they are not present in-house; post application, the interventions derived from the methodology are self-sustaining.

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5.7. Survey feedback as a method of stress management – Finnish Institute of Occupational Health – Finland

5.7.1. Overview

In Finland, since the implementation of the occupational health care legislation in 1978, which included several clauses referring to psychosocial factors, it became the employers' obligation to plan work and the work environment in a way that is not detrimental to the physical or mental health of the employees. In 2002, the new Finnish Occupational Health Service Act and Occupational Safety Act further stipulated that every workplace must assess the risks at work and in the work environment.

According to the regulations, the employers bear the responsibility to organise the assessment of risks or loading factors. This in practice generally leads to the assessments being carried out by a group which includes employer and employee representatives as well as OHS experts. A number of participatory organisational interventions

have been used to assess and manage psychosocial risks; one of the more effective interventions is the survey feedback method.

Many workplaces carry out annual work climate surveys that involve self-administered questionnaires. These questionnaires generally cover the main psychological, social and ergonomic aspects of work and also include measures of the well-being and subjective health of personnel. The results of the questionnaire survey can be used by the management and employees of work units for the survey feedback process that is often accompanied by practical organisational interventions and their evaluation. At the least, the evaluation is based on a comparison of survey results before and after the intervention. The survey feedback method follows the general steps of an organisational intervention process.

5.7.2. Development process

The role of occupational health (OH) personnel in stress management has been developing strongly in Finland, where traditional occupational health hazards are relatively well controlled. The change in the action models of OH personnel has been seen as unavoidable because of the growing need to control psychosocial factors at work. In addition, the lack of feasible methods and models has been cited as one reason for the difficulties in managing work stress. The challenge has been to develop methods which are simultaneously valid, concise and simple to use.

Following the implementation of the Occupational Health Care legislation of 1978, a checklist method for the monitoring of mental stress factors was developed. However, improving the work environment was difficult on the basis of the monitoring result. Although the monitoring was easy, the commitment of the organisation members to the changes was sometimes low. The Occupational Stress Questionnaire was developed to help the OH personnel survey the psychological work environment, its developmental needs and employee stress, and to involve the respondents in a *feedback discussion* in order to initiate improvements in stress-reduction.

The survey feedback method since has been a main approach in organisational development. It belongs to the socio-technological tradition of organisational psychology and follows the general steps of an organisational intervention process.

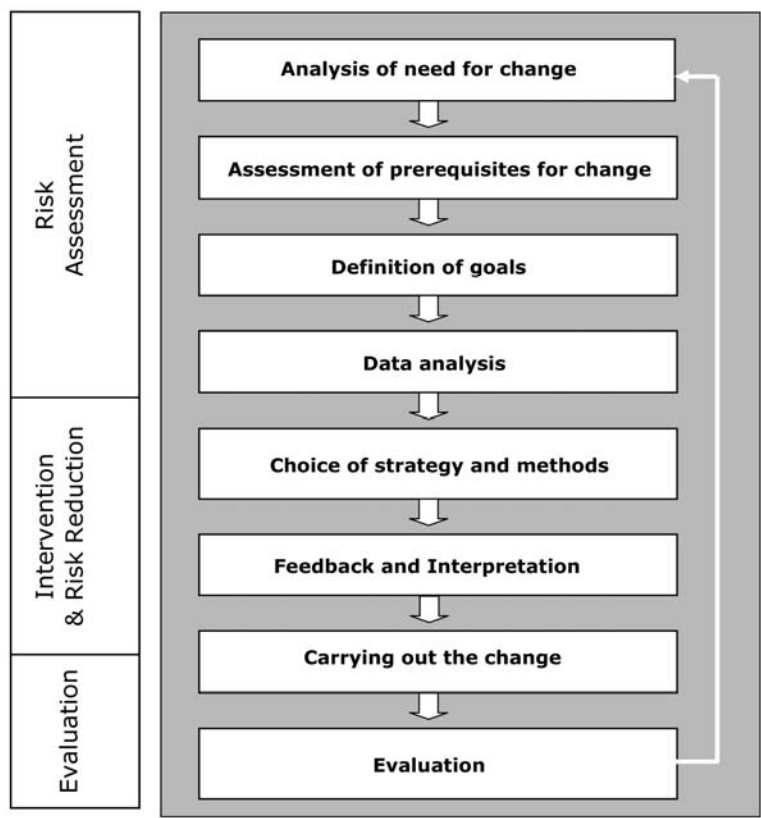


Figure 5.8: Phases in the planning of organisational and social change

5.7.3. Implementation

The implementation of the survey feedback method is underpinned by an action model rooted in the planning of organisational and social change which outlines seven implementation phases of the overall intervention (Figure 5.8). The seven phases are:

1. analysis of need for change
2. assessment of prerequisites for change
3. definition of goals
4. choice of strategy and methods
5. feedback and interpretation
6. carrying out the change
7. evaluation.

Diagnosing the situation of the work organisation and the relationship of the employee to his or her task and environment is the starting point for improvements. The survey feedback can be applied also in small work units, and can thus start development from local changes. This approach helps initiate improvements only if the organisational and social change process has been planned carefully and 'the interventionist' has consultative skills.

The survey is carried out using an occupational health questionnaire. This questionnaire is generally used to identify and assess problems in the workplace associated to stress; and thereby outline the development needs and necessary actions. A comprehensive version of this questionnaire covers five areas: socio-demographics, perceived work environment, factors modifying stress, response to stress, and the need for work development and individual support. The aim during the development of the questionnaire is to keep it concise and easily applicable as a routine tool, including understandable feedback of the results to the employees.

Following implementation, the feedback of the results is delivered to each work unit, organised to reach the natural work teams and also to allow shift workers to actively participate in the process. The employees, during these feedback sessions, participate in a discussion; with the overall aim of discussing the results of the survey

and, in turn, to set developmental aims. Concentrated emphasis is placed on the development of aims that could be achieved through the superiors' and employees' own efforts. The aims are defined separately for each department.

The critical phases of the survey feedback process are:

Negotiations and information: The process should be negotiated with and accepted by the expert group (representatives of management, occupational health personnel, safety personnel and union members), and emphasis must be placed on communicating with employees about the process. High participation, from all departments, and good motivation and confidence in the goals and procedures of the project are essential for the success of the process.

Feedback: At the beginning of the survey feedback sessions, an external researcher-consultant will generally present and interpret the results. Initially the discussion is limited to the interpretation of the results and the unit's goal setting. Only very general comparisons between departments are presented, because comparisons can divert the discussion from the goal setting. Following, the initial feedback, the in-house occupational health personnel take on the role of providing further more detailed feedback.

Initiating change: After the feedback, the OH personnel have to ensure the continuity of the process and participate in planning meetings in the departments; along with the employees they too should take responsibility for the improvements themselves. The assumption of a new role is necessary for the OH personnel as well as for the other members of the organisation.

As a method, survey feedback involves every respondent in the change process, in which both expectations and frustrations arise. This may also affect the traditional forms of participation in the organisation. Direct participation in the feedback discussions forms the basis for commitment and the assumption of responsibility for the improvement of the work and environment. The work units and the foremen carry the main responsibility for improving their own

situation, but the OH personnel could have an active role in supporting this work and the continuity of health promotion.

5.7.4. Practical applications and evaluation

The questionnaire used as the basis of the survey feedback method was consciously developed to be a user-friendly tool for organisations: to guide the identification of stressors in the workplace contributing to poor occupational health of employees, and provide evidence-based guidance on generating possible solutions. The implementation of the intervention is driven by the organisation, capitalising knowledge of the personnel within the company, and is guided by the employees; thus making this process easily applicable at a practical level. The method has been used effectively, particularly in large organisations.

For instance, the method was used in a large company to promote employee health and well-being by reducing stressors found in the workplace. The reduction of stressors, through a survey feedback method, was planned as a two phase process where: (a) the researcher- consultant supported the occupational health personnel in the organisation in developing a practical action model; and (b) the occupational health personnel supported the superiors and employees of the participating work units to reduce stressors. This invention consisted of a collaborative initiative between the research-consultant and the personnel in the occupational health department. The researcher-consultant's primary task was to structure the process, whereas the role of the occupational health personnel was implementing the devised process at the workshop level.

The evaluation of the intervention was based on both quantitative and qualitative data. Post measurements were carried out three years later in one of the departments where the intervention had been conducted. Additionally, qualitative interviews were conducted with the planning group members, participating occupational health personnel and the department's directors, charting their opinions on the new model of OHS in health promotion and the overall satisfaction with the survey feedback method. The employees'

opinions were surveyed during routine monitoring of the workplaces and during health examinations.

Using the evidence gathered from one department followed up as a case study, several benefits were demonstrated by this approach. The results of the evaluation demonstrated a change in work content, namely an observed increase in the variability of work, while the overall mental and physical strenuousness load decreased in this department. Further, based on the follow-up, it was observed that the occupational health personnel shifted their working model towards a more active co-operation with the work units. The authors noted that the organisation continued to use the survey feedback method as a routine method of the occupational health service of the company. After the project, the OH personnel felt that they were more aware of the conflicting expectations of different interest groups and were better able to recognize and cope with them. The readiness of the work units to participate in the search for new forms of co-operation and participation in the stressor reduction had improved.

The survey feedback method is easily applicable in various different companies and situations. However, the intervention requires specially trained researchers/ consultants and company occupational health personnel. Smaller organisations may not have in-house occupational health units and therefore may not always find this approach viable to implement.

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5.8. The SOBANE Strategy applied to the management of psychosocial risks

5.8.1. Overview

The Council Directive 89/391/EEC emphasises the implementation of general prevention principles at the workplace, however, the application of these principles raises many problems. One such problem is the coordination between occupational health practitioners and the industry, in particular SMEs. The SOBANE strategy (Screening, Observation, Analysis, Expertise) of risk management was developed to make it possible to avoid, solve or minimise problems and organise effectively and economically cooperation for greater efficiency of prevention, as depicted in figure 5.9.

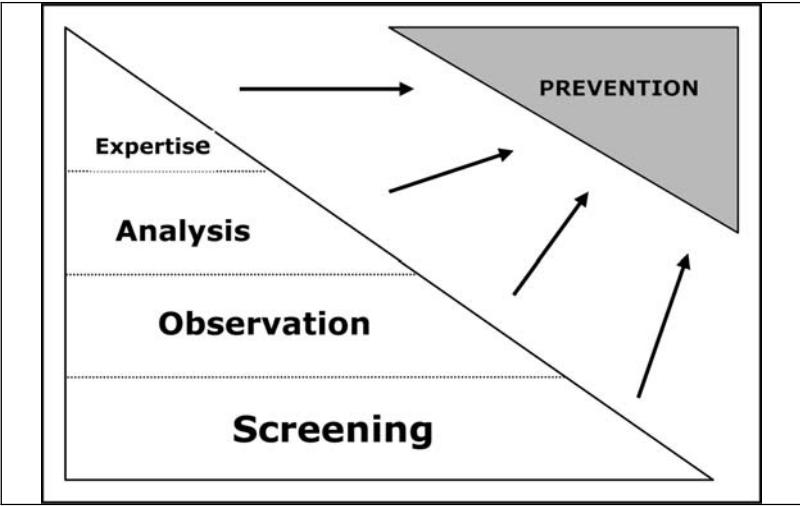


Figure 5.9: The SOBANE Strategy (adapted from Malchaire, et al. 2008)

The number of risk factors and the number of work situations are so large that it is impossible to study them all in detail. Since, in the majority of the cases, prevention measures can be taken right away on the basis of simple observation by the people directly concerned

and who know in detail the work situations day after day, the strategy utilises this method at the outset. A detailed analysis can then be conducted, if and when the work situation remains unacceptable after the obvious solutions have been implemented, and the participation of experts becomes essential only in some particularly complex cases.

The SOBANE strategy explicitly recognises the experience and knowledge of the workers and their management with regard to the work situation and shares the principle that measuring the exposure of the workers is not necessarily the first step in order to improve these situations. It attempts to optimize the recourse to the competences of the OHS professionals and the experts, in order to design and implement practical control measures more rapidly, effectively and economically.

5.8.2. Development process

The SOBANE strategy was proposed to better utilise the skills of the more widely available occupational health and safety (OHS) professionals and on the workers and their management to address generic/common issues while use the less available 'experts' to deal with the major problems that really need their 'expertise', leading to a more efficient use of resources. The following principles form the basis of the SOBANE strategy.

- No effective action can be taken without the participation of the workers who are the only ones to know exactly the exposure conditions.
- Workers and their direct management must be the actors and not only the objects of the prevention actions: OSH professionals should consider that they take part in the actions conducted by these people, instead of the opposite.
- The aim of OHS professionals is to act, not to simply record and assess.
- The aim is to ensure the best possible working conditions and not to 'comply' and simply get just below the limit values.

- Quantitative assessments do not lead necessarily to control measures and must be performed after and not before simple control measures are taken.
- The workers will not understand and cooperate with interventions limited to one aspect while other aspects that interfere as much, or more, with their living conditions are neglected.
- All occupational health problems are related and a comprehensive approach is needed in any case.

The SOBANE strategy has been applied and validated in fourteen fields and has been recently adapted so that it can be applied for the management of psychosocial risks.

5.8.3. Implementation

This procedure is adopted spontaneously and logically in most cases. Following a complaint, a visit (screening) of the work situation is made, and obvious problems are corrected. If this is not the case, a meeting (observation) is organised to discuss it more in detail and to identify solutions. If it cannot be solved directly, an OH practitioner is called in to help (analysis) and, in cases particularly difficult to solve, one has recourse to an expert (expertise).

An objective of the risk management strategy is to facilitate use of screening and observation tools for the people in the field at the workplace. This spontaneous procedure remains non-systematic and, therefore in the absence of such tools would not be very effective. The availability of easy to use tools to guide the screening and observation stages would allow accurate assessment of the risks by the people in the field (workers and their management), details of which can then be transferred to the OH practitioners and the experts allowing for suitable interventions to be developed and implemented (by the management and workers) with the specialists then taking full responsibility of the recommendations.

The SOBANE Strategy includes four levels of intervention for which methods were developed:

Level 1: 'Screening'

The objective at this level is only to identify the main problems and solve immediately the simple ones. This identification must be carried out internally, by people in the company who know the work situation well. These people are the workers themselves, their immediate technical management, the employers themselves in the small companies, or internal OH practitioners, if available, in medium-sized or large companies. The tools must be simple and quick to understand and use and must be adapted to their industrial sector.

The Déparis method (in French, *dépistage participatif des risques*) is suggested for use as the tool for participative screening of the risks. It consists of tables covering eighteen aspects of the work situation, one of which is the psychosocial work environment.

Each table includes a list of aspects to be discussed, with some indications of what the situation should ideally be. Next to this, the table includes a space where the coordinator (see below) notes what can be made in practical terms to improve the situation. Within a third frame at the bottom of each table the coordinator notes the aspects that require a more thorough study (at level 2, observation), to give shape to the solutions considered during the discussions. Lastly, an assessment (indicator) of the priority of this aspect is made, using an intuitive figurative system of colours and smiles.

The method at this level is used to identify problems in all work circumstances, and not at a given moment. The screening leads directly to simple, straightforward and economical solutions and significantly contributes to the education of the partners in adopting better work procedures.

Level 2: 'Observation'

A problem unsolved at level 1, screening, must be studied more in detail. The method must still be simple to understand and implement, and quick and inexpensive, so as to be used as systematically as possible by the workers and their technical staff, with the cooperation of an internal OH practitioner when available.

The objective is again to lead these people to discuss the problem in order to identify prevention solutions as soon as possible. As at level 1, the observation requires an intimate knowledge of the work situation in its various aspects, its options, and the normal and abnormal operations.

The Observation level, therefore, extends the general discussion started at the Screening level to go further towards the root of the specific problem. No reference is made to measurements and the best possible solutions are looked for the situation in general. At the end of the meeting, the group takes stock of the proposed control measures, assesses qualitatively the residual risk and decides whether or not to pursue the investigations at the subsequent Analysis level of the strategy.

The discussion takes into account the characteristics of the workers and, in particular, their gender, their age (in particular the young or older workers), their knowledge of the local language etc. Malchaire, et al. (2008) developed an Observation guide to be used when the strategy is applied to the management of psychosocial risks. It covers the following five aspects in detail:

- i. Autonomy and individual responsibilities
- ii. Work content
- iii. Time constraints
- iv. Relationships with the personnel and with the hierarchy
- v. Psychosocial environment

Malchaire, et al. (2008) acknowledge that not all of these aspects would be applicable to all work environments and therefore the 'coordinator' would choose those that relate to the specific work situation based on discussions in level 1.

Level 3: 'Analysis'

At this level, the assistance of an OHS professional (with a specialisation in psychosocial aspects of work) becomes indispensable and more specific and expensive analysis techniques are used to identify more specific and elaborate control measures.

Again the group, with the OHS professional, is invited to look for more elaborate measures, to assess the effectiveness of these measures and to estimate the residual risk. If this is not possible or if the risk still remains unacceptable, can expert on psychosocial aspects of work is needed and the study must be continued at the fourth level.

Level 4: 'Expertise'

With the assistance of the expert, measurements might be performed to identify specific problems, to find the optimal solutions or to quantify the residual risk.

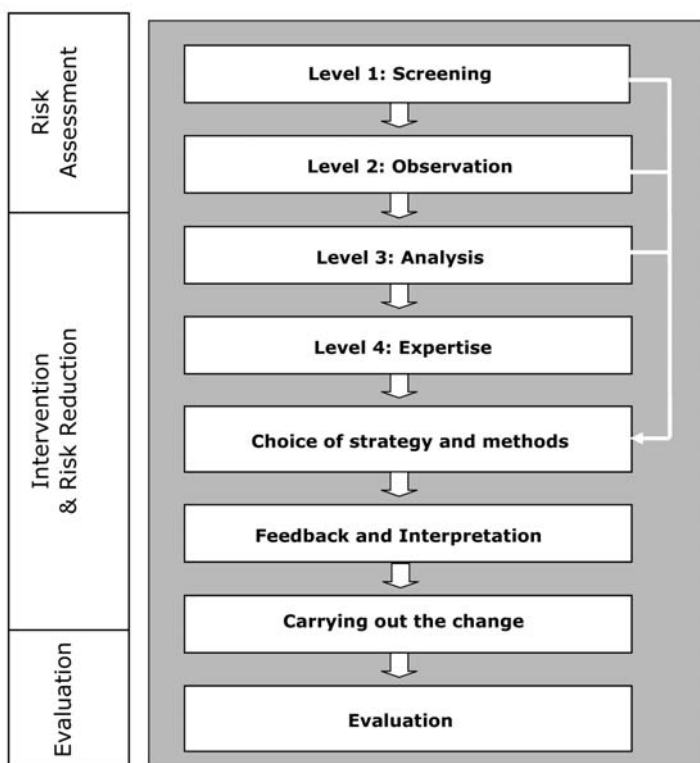


Figure 5.10: Levels of the SOBANE strategy

The SOBANE strategy applied to the psychosocial aspects presents tools of anticipation of the problems. These tools can broadly be classified into three categories:

- Diagnostic tools based using questionnaires
- Discussion guides
- Tools of intervention at the intervention level.

The intervention on the analysis level can be completely different from what these tools consider. They should be undertaken to reform, optimise and improve the deficiencies highlighted at the observation level. These are more specific and more specialised interventions are those, which in accordance with the philosophy of the SOBANE strategy, one would recommend to level 4, Expertise.

In the case of psychosocial risks, it appears justified to gather levels 3 and 4 of Analysis and Expertise (Malchaire et al., 2008).

5.8.4. Practical applications and evaluation

The SOBANE strategy has been recently adapted so that it can be applied for the management of psychosocial risks. Evaluation work is ongoing.

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5.9. Conclusion

The approaches reviewed have some common principles, which are in line with the concepts discussed in the previous chapters.

- They propose participative methods to develop interventions to tackle psychosocial factors at work. The role of a steering group formed by representatives of the employer and employees is central to all tools.
- Although with varied emphasis, they all follow a process of assessment, design of actions, implementation and evaluation.
- The expected outcomes are similar; they mostly relate to health, both individual and organisational.
- The actions to reduce stress are tailored to the needs of each organisation. Also each of the methods that were reviewed provides a process approach and not a solution applicable to all cases.

Based upon the information gathered from the review, success factors in European psychosocial risk management initiatives, based on the risk management paradigm, include an adequate analysis of risks, a combination of methods, opportunities for tailoring and the choice of methods according to the competencies of those in charge of the process and thorough planning of interventions. All of these areas should be considered when planning actions to manage psychosocial risks at work. However, the review also highlights that each of the different approaches to psychosocial risk management places varying emphasis on the various stages of the risk management paradigm. As such, many of these best practice approaches are specific to the country/culture of origin, size of enterprise, and level of expertise available.

To overcome these limitations, it can be concluded that a broader unified approach (at the EU level) for psychosocial risk management at the workplace is needed. Such an approach will allow for guiding principles in this area to be established and clarity to be provided in relation to managing psychosocial risks, and tackle issues such as work-related stress, violence and harassment at work. In addition,

such a framework can also be used to develop guidelines and recommendations for best practice for different stakeholders. The final chapter explores the key principles of such an approach and proposes its development.

Chapter 6

The way forward: a European framework for psychosocial risk management (PRIMA-EF)

Throughout Europe, researchers, practitioners, government bodies, social partners and organisations differ in awareness and understanding of new types of challenges in working life such as psychosocial risks and work-related stress. Although in some member states there appears to be widespread awareness of the nature and impact of these issues as well as agreement among stakeholders on their prioritization for the promotion of health, productivity and quality of working life, this situation is not reflected across the enlarged EU. However, even though in some member states systems and methods have been developed to deal with these challenges at different levels, a unifying framework that recognises their commonalities and principles of best practice that can be used across the EU has been lacking.

Particular challenges in relation to psychosocial risks and their management exist both at the enterprise level and at the macro level. On the enterprise level there is a need for systematic and effective policies to prevent and control the various psychosocial risks at work, clearly linked to companies' management practices. On the national and the EU levels, the main challenge is to translate existing policies into effective practice through the provision of tools that will stimulate and support organisations to undertake that challenge, thereby preventing and controlling psychosocial risks in our

workplaces and societies alike. At both levels, these challenges require a comprehensive framework to address psychosocial risks.

This chapter proposes the development of such a comprehensive framework derived from the risk management process. It identifies the key elements and philosophy of such an approach based on which a model of a unified European framework for psychosocial risk management is proposed. Such a model is expected to help inform decisions on the development of new and existing approaches concerning policies and practical applications of the psychosocial risk management process.

6.1. Key elements, concepts and the philosophy underlying a unified European framework for psychosocial risk

In reviewing best practice models for psychosocial risk management key elements that should be incorporated in a comprehensive European framework for psychosocial risk management can be identified. These include:

1. *Convergence*: A comprehensive framework should be based on a review, critical assessment, reconciliation and harmonisation of what exists and has proved valid in the management of psychosocial risks and the promotion of (mental) health, and safety at the workplace and beyond it.
2. *Equivalence*: The concept of equivalence, and allowing diversity, should continue throughout the life of such a framework. Equivalence allows the overall approach to be tailored to the context in which it is used without losing the opportunity to compare across situations, at one level, and to draw general conclusions at another.
3. *Minimum standards*: Another key concept is that of minimum standards for psychosocial risk management that can and must be met across EU countries and irrespective of workplace contexts. Here management refers to the management process and its direct outputs (measures taken). Such standards must be

rooted in legal requirements and the policy context and best practice principles.

In addition to the above key elements a number of key concepts would underpin a European framework for psychosocial risk management.

6.1.1. Relevance for broader policy agendas

Psychosocial risk management is relevant not only to occupational health and safety policy and practice but also to broader agendas that aim to promote workers' health, quality of working life and innovation and competitiveness across the EU. It is relevant to the Lisbon agenda that aims to promote quality of work and innovation and enhance economic performance and competitiveness of EU enterprises. Psychosocial risk management can contribute to the creation of positive work environments where commitment, motivation, learning and development play an important role and sustain organisational development.

6.1.2. Good psychosocial risk management is good business

In essence, psychosocial risk management is synonymous to best business practice. As such, best practice in relation to psychosocial risk management essentially reflects best practice in terms of organisational management, learning and development, social responsibility and the promotion of quality of working life and good work.

6.1.3. Evidence informed practice

Risk management in health and safety is a systematic, evidence-informed practical problem solving strategy. The adaptation of the traditional risk management paradigm to deal with psychosocial hazards does not have to aim at an exhaustive, precisely measured account of all possible hazards for all individuals and all health outcomes. The over-riding objective is to produce a reasoned account of the most important work organisation factors associated

with ill-health (broadly defined) for a specific working group and one grounded in evidence (Leka, Griffiths & Cox, 2005).

6.1.4. Ownership

Psychosocial risk management is an activity that is closely related to how work is organised and carried out. As a consequence, the main actors are always managers and workers that are responsible for the work to be done. They can, of course, be supported by internal or external experts or by external service providers. However, in the management process it is very important that managers and workers feel the 'ownership' of the psychosocial risk management process. Outsourcing ownership to service providers is a failure factor, even when, e.g. in the case of a rehabilitation programme, most of the activities can be done by external agents. In relation to ownership by managers it is very important to emphasize the link with good business, e.g. by assessing business benefits besides health benefits, or by developing business cases.

6.1.5. Contextualisation and tailoring

There has long been a debate over the adequacy or otherwise of contrasting approaches to the assessment and management of psychosocial risks. Contextualisation, tailoring the approach to its situation, is a necessary part and facilitates its practical impact in workplaces. Because national and workplace contexts differ, contextualization is always needed to optimize the design of the risk management activities, to guide the process and maximize the validity and benefit of the outcome.

In order for comprehensive strategies to be effective, it is suggested that psychosocial risk prevention and management programmes should be developed and modified to meet the needs of the organisation and tailored to the context of the organisation's occupational sector (Giga et al., 2003). Tailoring aims to improve the focus, reliability and validity of the risk management process. It also improves the utilisation of the results of the risk assessment. It improves the feasibility of the results and helps in planning the assessment process in such a way that scientific evidence is also

taken into account. The fundamental platform of best practice in stress prevention and management is an accurate diagnosis prior to the intervention and the overall objective is prevention, rather than cure (Cox, 1993). A tailored approach using a systematic risk assessment is a critical component of this best practice platform.

Areas that should be considered in the tailoring process include: what the process covers (in terms of hazards, target and data collection), who implements the project and the specific aims of the process. Some options in this respect are presented in Table 6.1.

Table 6.1: Tailoring the psychosocial risk management process

Coverage of the risk management process	
<i>Hazards:</i>	– only psychological factors – both psychological factors and social interaction
<i>Target:</i>	- task - individual - group
<i>Data collection techniques:</i>	– observation – interview – questionnaire – a combination of various methods
Who implements the management project	– OHS personnel, occupational safety personnel – employer and employees together – psychologist or a person specialized in psychosocial matters
Specific aims of the management process	
	– general risk management based on safety and health regulations – focused psychosocial risk assessment of work processes, or work groups – assessment of an individual's psychosocial risk – assessment of possible harmful effects

6.1.6. Participative approach and social dialogue

Inclusion of all parties in prevention efforts can reduce barriers to change and increase their effectiveness. Including all actors can also help increase participation and provide the first steps for prevention. Access to all the required information is also facilitated with a participative approach. It is clear that each member of an organisation, and other social actors which surround it, have expert knowledge of their environment (needed for successful tailoring) and the best way to access this is through inclusion. In good risk management models, the validity of the expertise that working people have in relation to their jobs is recognised. A successful risk management programme will always be led and managed by the workers themselves (Cox, Griffiths & Randall, 2003).

At the policy level, participation is also relevant for the effectiveness and ownership of workers' representatives. Therefore, synergy can be created between good risk management approaches for psychosocial risks on the one hand and social dialogue and dialogue with external stakeholders on the other hand. These dialogues are also important because psychosocial risk management is part of responsible business practices in any organisational context (and transparency and communication are key in any responsible business policy).

6.1.7. Multi causality and identification of key factors

In every day practice, psychosocial risks have many causes. Typically, factors like characteristics of work organisation, work processes, workplace, work-life balance, team and organisational culture, and societal arrangements (e.g. the provision of occupational health services and social security arrangements) all play a role. Some of these may be very apparent; others may require a good analysis to identify them as underlying causal factors. As a consequence there are usually no quick fix solutions at hand; a continuous management process is usually required. To be effective it is important to understand the most important underlying causal factors before solutions are selected.

6.1.8. Solutions that are fit for purpose

Psychosocial risk management is not rocket science. Scientific evidence is important to inform the psychosocial risk management process. However, in its purest form (scientific evidence from randomized clinical trials) this requires research on standardized items, in controlled situations, and involvement of large populations. Knowledge from this kind of research is usually not very practical, especially not for SMEs. Risk management for psychosocial hazards is not a research exercise: it is focused clearly on intervening to reduce harm caused by exposure to these risks (Cox & Rial-Gonzalez, 2000). It is an action-led programme. It is therefore more important to make the problems in SME practice, for example, the starting point for research, and to develop knowledge and solutions that are “fit for purpose”.

6.1.9. Different levels of interventions with focus on measures at source

The emphasis here, and in European legislation on health and safety, is on primary risk prevention targeted at the organisation as the generator of risk. However specific actions targeted at the individual level (secondary and tertiary interventions) can also play an important role depending on the magnitude and severity of the problem within organisations and its effect on employee health. Developing continuous and sustainable initiatives to promote employee and organisational health and well-being through psychosocial risk prevention and management, involves the development of strategies that comprehensively address psychosocial risks and their associated health effects (Giga et al., 2003). This requires practitioners and organisations to move beyond uni-model interventions (either individual or organisational approaches; or primary, secondary, or tertiary-level programmes) to multi-model interventions (using a combination of such approaches; Sutherland & Cooper, 2001; LaMontagne et al, 2004).

6.1.10. Ethics

The management of psychosocial risk is about people, their (mental) health status and business and societal interests. Protecting the psychosocial health of people is not only a legal obligation, but also an ethical issue. As interests between various agents involved differ, their sphere of influence is not always clear. Shifting of consequences from enterprises to individuals or society at large may occur (externalisation). Frequently there are ethical dilemmas that are easily overlooked or that (often implicitly) underlie a seemingly fully rational discussion.

6.1.11. Capabilities required

Policies for psychosocial risk management require capabilities, respectively at the macro level and at company level. The capabilities required comprise:

- adequate knowledge of the key agents (management and workers, policy makers),
- relevant and reliable information to support decision-making,
- availability of effective and user friendly methods and tools,
- availability of competent supportive structures (experts, consultants, services and institutions, research and development).

Within the EU there are great differences in existing capabilities. In those countries where only minor capabilities are available, this is a major limitative factor for successful psychosocial risk management practice as this is linked to lack of awareness and assessment of the impact of psychosocial risks on employee health and the healthiness of their organisations. It is also linked to inadequate inspection of company practices in relation to these issues. It is important here to refer to the role and influence of cultural aspects such as risk sensitivity and risk tolerance (both at the company and societal levels). These aspects are important and need to be considered as they can facilitate or hinder the effectiveness of psychosocial risk management. These are often relevant to awareness, education and

training and availability of expertise and appropriate infrastructures at the organisational and national levels.

Figure 6.1 proposes a model of a unified European framework for psychosocial risk management.

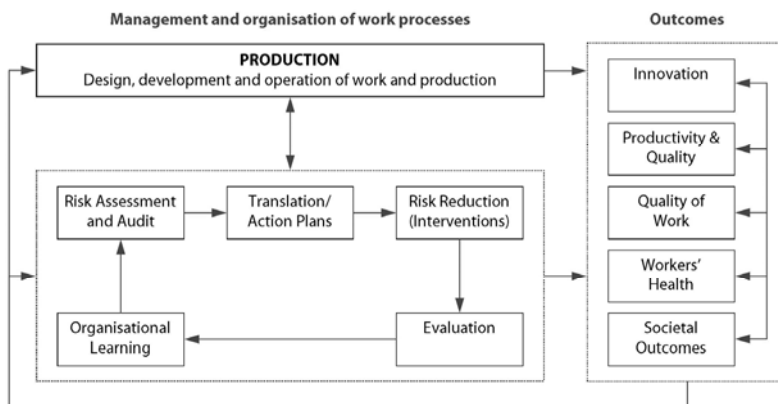


Figure 6.1: The framework model for the management of psychosocial risks – enterprise level

6.2. Conclusion – the need for a European framework for psychosocial risk management

As the pace of change in Europe increases and encompasses more and more member states across multi-various sectors, and the rate of change of technology and workplaces in general gathers momentum, the need for companies to be pro-active rather than reactive becomes more important. Companies vary on so many fronts: size, sector, skill base, financial stability. New developments need to be simple in application whilst effective in use. A European framework for psychosocial risk management will help inform decisions on the development of new and existing approaches concerning policies and practical applications of the psychosocial risk management process.

A European framework would help address the challenges of work-related stress and violence and harassment issues at work. It would provide a comprehensive point of reference for European companies, employers, employees, trade unions, policy makers, occupational health and safety experts and services. Through this point of reference, standards of best practice and practical avenues and tools to achieve them will be provided can be developed. These will be built upon the principles of risk management, social dialogue and corporate social responsibility, all of which would be incorporated in such a European framework for psychosocial risk management.

Currently there are three complementary European approaches to psychosocial hazards particularly, work stress and related ill health which have been outlined in three recent European documents: a. the European Commission's (CEC) Guidance on Work-Related Stress (2000); b. the European Standard (EN ISO 10075- 1&2) on Ergonomic Principles Related to Mental Work Load (European Committee for Standardization, 2000); and c. the European Commission's Green Paper on Promoting a European Framework for Corporate Social Responsibility (2001). These three approaches are based on different but related paradigms, which might lead to confusion and misinterpretation. The European framework for psychosocial risk management would address this issue by unifying these approaches, which could then form the basis for developing European standards for psychosocial risk management focusing on work-related stress, and workplace violence.

Further, an integrative European Framework for psychosocial risk management is also expected to help foster collaborative research in this important area by bringing together representatives from the many different disciplines in conjunction with the broad range of methods and personnel. The major advantage of developing a European framework under the risk management paradigm is its substantial history in the health and safety field to date. This allows for wide-spread dissemination into the workplace across Europe. A primary benefit is the applicability of such a framework into any business: from an olive grower in Greece to an oil rig in the North Sea or a car manufacturer in Germany to a restaurant in France. As every business is unique in some aspects it is also generic in others, the

mere employment of people at the European level places responsibility, but as such Europe's response can provide added-value. This is why it is particularly important for such a European framework to be defined.

The use of this framework which would be based on principles such as social dialogue and participation, treating the worker as an 'expert' in relation to their own job; this has the advantage that although the framework is not context specific once applied it would become so due to its ownership of the organisation. The framework will be adaptable to account for change which as mentioned earlier is extremely important when considering the modern workplace. In the European context, this is important as it will allow uniformity whilst encouraging individuality. This benefit of the framework again helps to encourage dissemination as does the use of evidenced based best practice.

Both the moral and legal imperative to make workplaces more pleasant and healthier environments necessitate the development of a psychosocial risk management framework at the European level. For it is only by a positive drive by Europe that companies can be encouraged across the membership to adopt uniform practices, important as the mobility of workers increases and the needs of special groups become paramount.

A comprehensive European framework for psychosocial risk management will offer a scientific, legal and managerial framework to deal successfully with such issues at work and improve the health of the workforce, the competitiveness of European enterprises and the advancement of living standards in the EU. It will provide clarity and bring together in a comprehensive manner the state of the art in the area of psychosocial risk management, work-related stress and violence and harassment issues at work. It will also improve the current state of the art by linking aspects as diverse as policies and legislation, social bargaining and social dialogue, corporate social responsibility, measurement tools and indicators, best practice evidence-based interventions, and guidance and recommendations for different stakeholders.

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The report considers new work-related challenges to the health of working people in Europe that are associated with the changing landscape of work. It describes what many agree are the appropriate concepts and framework, approaches and tools for dealing with those challenges through the extension of the generic risk management paradigm to focus on work-related psychosocial hazards and work-related stress. In discussing the nature of the generic risk management approach, the report identifies its key features. It then illustrates the generic approach by presenting a small number of particular European methodologies for protecting and promoting the health of working people by tackling work design and management and work-related stress. Finally, the report describes how a common European framework might be developed for managing work-related psychosocial hazards and associated challenges to the health of working people through the risk management approach.

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